AFRICAN COUNCIL FOR DISTANCE EDUCATION (ACDE)

PROCEEDINGS OF THE 2\textsuperscript{ND} ACDE CONFERENCE AND GENERAL ASSEMBLY
HOSTED BY
THE NATIONAL OPEN UNIVERSITY OF NIGERIA, AND
HELD AT EKO HOTELS, LAGOS
8 – 11\textsuperscript{TH} JULY 2008
FOREWORD

It was indeed a privilege for the National Open University of Nigeria to host the 2nd African Council for Distance Education Conference and General Assembly (ACDE) in Lagos Nigeria, from July 8 to 11 2008. As the first single mode open and distance learning institution in West Africa, we are fast becoming a significant and major hub for open and distance learning. Let me present to you and invite you to read the proceedings of the conference.

The theme of the conference, Open and Distance Learning for Sustainable Development, afforded participants the opportunity to address the major concerns of our world as exposed in the MDG and EFA goals and to proffer solutions. The event attracted over 350 participants from 29 countries across five continents comprising experts, directors, ODL practitioners, representatives from other universities and institutions with stakeholders involved in promoting sustainable development on the continent and beyond. There is no doubt in my mind that the objectives of the conference were fully achieved as the 15 lead presentations, and over 130 presentations through the pre-conference virtual forum, pre-conference workshops and parallel sessions covered a wide range of perspectives including National development, Information technology, Capacity building, Quality assurance, Teacher development, and contribution to realizing the MDG and EFA goals. The conference provided a platform to share and expand knowledge, collaborate, build partnerships, develop methodologies and thus encourage the formulation, elaboration and implementation of strategies that will enhance development within our continent for now and the future. The outcomes of the conference confirmed that the open and distance education has come of age and is indeed taking a centre stage in Africa; laying the foundation for open and distance learning to be used as a veritable tool in meeting the MDGs, EFA goals, eradicating poverty, bridging gender and digital gaps through providing mass access to education.

This publication captures the proceedings of the conference and provides access to all full submissions for the benefit of the ODL community around the globe. The materials represent research, practice and current thoughts with regards to how sustainable development can be achieved through open and distance learning particularly in Africa. My appreciation goes to the ACDE for granting the National Open University of Nigeria the singular privilege to host the memorable event, and immense gratitude to the Government of Nigeria, the Honourable Minister of Education and the Federal Ministry of Education, Commonwealth of Learning, UNESCO, supporting organizations, and our sponsors, the local organizing committee, and everyone who contributed to the recorded success.

Professor Olugbemiro Jegede

Vice-Chancellor and Host,

National Open University of Nigeria
CONTENTS

KEYNOTE ADDRESSES

Rethinking Open and Distance Learning for Development in Africa
Professor Michael Omolewa FCOL, OON
Nigeria’s Ambassador/Permanent Delegate to UNESCO, Paris, France 1 – 6

E-learning on the far side of the Digital Divide
Sir John Daniel and Dr Wayne Mackintosh
Commonwealth of Learning, Vancouver Canada. 7 – 13

LEAD PAPERS

Inclusiveness – Community, Distance Education and Producusage
Terry Anderson, Professor and Canada Research Chair
Athabasca University, Canada 14 – 24

Meeting the Challenge of the Millennium Development Goals: Role, Potential and Impact of Open and Distance Learning
Denise, Kirkpatrick, Pro Vice Chancellor, Open University, United Kingdom 25 – 31

Open and Distance Learning for Sustainable Development: The Southeast Asian Experience
Anuwar Ali - President/Vice Chancellor, Open University of Malaysia 32 – 45

Teacher Education through Distance Education – Meeting the Challenge
Jennie Glennie, SAIDE & Tony Mays, SAIDE, South Africa. 46 – 67

Language and Linguistic Factors in Higher Education: Francophone African Perspective
Beban Sammy Chumbow, University of Yaounde I, Cameroon 68 – 82

Sustainable Development from International Perspectives: How do Developing Countries fit the Matrix?
Prof. U. Joy Ogwu, OFR, Ambassador/Permanent Representative of Nigeria to the United Nations. 83 – 91

Open and Distance Learning in Teacher Development
Prof. Mzobz Mboya, Advisor, Education and Training Youth, NEPAD Secretariat, Midrand, Johannesburg, South Africa 92 – 108
## SUB THEME I

### OPEN & DISTANCE LEARNING FOR TEACHER DEVELOPMENT

<table>
<thead>
<tr>
<th>Title</th>
<th>Authors/Institutions</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>“The Missing Piece”, Social-Emotional Readiness Skills of Pre-School Children from Three Selected Provinces in Kenya</td>
<td>Mary W. Kariuki, Department of Psychology, Egerton University, Kenya</td>
<td>109</td>
</tr>
<tr>
<td>Quality Assurance in Open and Distance Learning in National Open University of Nigeria: Concepts, Challenges, Prospects and Foundations</td>
<td>R.O. Olubor and Mrs. B.O. Ogonor, University of Benin Benin City, Nigeria</td>
<td>110-120</td>
</tr>
<tr>
<td>An appraisal of the Implementation of Distance Learning Programmes in Nigeria Higher Education: Science and Language Teacher Preparation</td>
<td>K. A. Adegboye, Anthonia Maduekwe, and Dr. Gladys Esiobu – University of Lagos</td>
<td>121-128</td>
</tr>
<tr>
<td>Strategies for Preventing HIV/AIDS from Students in Tertiary Institutions and its Impact on Work Place: Implications for Counselling</td>
<td>Mrs. M.C. Okonkwo, Anambra State University, Uli, Nigeria</td>
<td>129-147</td>
</tr>
<tr>
<td>Teacher Education in Open and distance Learning for Sustainable Development</td>
<td>Dr. Ayanniyi B. Alhassan, School of Education, National Open University of Nigeria</td>
<td>156-164</td>
</tr>
<tr>
<td>Open and Distance Learning (ODL) and Teacher Development: The Case of the University of Zambia.</td>
<td>Stephen Simukanga and Dickson C. Nkosha – University of Zambia</td>
<td>165-170</td>
</tr>
<tr>
<td>The Use of an Online Learning System for a College Teaching Course.</td>
<td>Wilton A. Barham, Grambling State University, U.S.A.</td>
<td>171-178</td>
</tr>
<tr>
<td>Open and Distance Learning for Sustainable Development: Reflections on Strategies for the Development of Teachers</td>
<td>Amadi Martha Nkechinyere - Regional Training &amp; Research Institute for Open and Distance Learning, National Open University of Nigeria</td>
<td>184-191</td>
</tr>
<tr>
<td>Sustainability Indices as Measures of Service Delivery in Open and Distance Learning Institutions in Nigeria</td>
<td>Salawu, I.O. and Adeoye, F.A- School of Education, National Open University of Nigeria</td>
<td>192-205</td>
</tr>
<tr>
<td>Empowerment of Women through Distance Education in Pakistan</td>
<td>Qadir Bukhsh, Department of Education, The Islamia University, Bahawalpur, Pakistan.</td>
<td>206-219</td>
</tr>
</tbody>
</table>
Increasing Teacher Quantity and Quality using school-based ODL Instructional Delivery Mode: A Case Study of Teacher Training at Egerton University.
Francis N. Wegulo, College of Open & Distance Learning, Egerton University, Njoro, Kenya. 220 – 227

An Appraisal of ODL Model for preparing Science and Language Teachers in Nigeria.
K A Adegoke, Distance Learning Institute, University of Lagos
Anthonia Maduekwe, Department of Arts & Social Sciences Education
Faculty of Education, University of Lagos.
Gladys Esiobu, Department of Science and Technology Education
Faculty of Education, University of Lagos. 82246

Psychological Preparedness of Distance Learners: Implications on Achievement among School-based Undergraduate Students in Kenya
Owen Ngumi, Department of Psychology Counselling and Education
Egerton University, Kenya; and
Tabitha Mwaniki, Centre for Disaster Management and Humanitarian Assistance
Masinde Muliro University of Science and Technology, Kenya. 247 – 253

Training of Developers of Distance Education Study Materials in Kenya:
Challenges facing Institutions of Higher Learning: The Case of Masinde Muliro University.
Isaac Ipara Odeo, Masinde Muliro University of Science and Technology, Kenya. 254 – 262

Using Authentic Texts to Accelerate Literacy Development
Uche Mercy Okonkwo, National Open University of Nigeria, Lagos, Nigeria 263 – 268

SUB THEME II

MEETING THE CHALLENGES OF THE MILLENNIUM DEVELOPMENT GOALS: THE ROLE, POTENTIALS AND IMPACT OF OPEN AND DISTANCE LEARNING 269

Agriculture and the Millennium Development Goals
The Role of Open and Distance Learning.
Adams Abiodun Emmanuel, National Open University of Nigeria, Lagos. 27875

Reconstructing Masculinity and Power in Africa Through Open Distance Learning for Sustainable Development: A Critical Analysis of Wole Soyinka’s Climate Fear
Barhi Adunje, and Aderonke Adunje Adesida. 276 – 289

Innovative Method of HIV/AIDS Education and Management through ODL:
Contributions from National Open University of Nigeria
Afolabi Adebajjo, and Jane-Frances Agbu
School of Science and Technology, National Open University of Nigeria, Lagos. 290 – 296
Exploring Open and Distance Learning in meeting the learning needs of Almajirai of Northern Nigeria.
Nasir M. Baba, Dept. of Curriculum & Instruction, Federal College of Education (Tech), Gusau – Nigeria. 297 – 303

From Empowerment to Transformation: A Capacity Building Model for Academics in Distance Higher Education Institutions in Africa
Dele Braimoh, UNESCO Chair of ODL & Director, Institute for Open Distance Learning University of South Africa, Pretoria, South Africa.
Osiki, J.O. Faculty of Humanities, National University of Lesotho, Southern Africa and
Mpine Makoe, University of South Africa, Pretoria, South Africa. 304 – 315

Incorporating Relationship Marketing as a Learner Support Measure in the Quality Assurance Policy for Distance Learning at Makerere University, Uganda.
Richard Kajumbula, and Anthony Tibaingana Department of Distance Education, Makerere University, Kampala, Uganda. 316 – 325

Increasing number of Older Persons – Exploring Opportunities of Distance Education
Omotayo Olatubosun Tope Dept of Sociological Studies, Tai Solarin University of Education, Ogun State Nigeria. 326 - 331

Open and Distance Learning: Successful Implementation in Nigeria.
Nwaocha, V.O, and Inyiama, H.C. University of Nigeria, Nsukka 332 – 338

Open Flexible Learning as a Strategy for Enhancing Human Security in Nigeria
Terhemba Nom Ambe-Uva, National Open University of Nigeria, Lagos, Nigeria 339 – 346

Impact of Socio-Cultural Elements on the Design of Instructional Materials for Open and Distance Learning Programmes.
Felix Gbenoba, National Open University of Nigeria, Lagos, Nigeria 347 – 352

Open and Distance LEARNING AS A Strategy for Training Extension Agents for Small Scale Farmers: Issues and Challenges.
R. V. A. Tenebe, and N. E. Mundi, School of Science and Technology, National Open University of Nigeria, Lagos, Nigeria 353 – 366

Provision of Agricultural Extension Services for the Rehabilitation of Physically Challenged Children through Open and Distance Learning in Nigeria
N. E. Mundi, School of Science and Technology, National Open University of Nigeria, Lagos, Nigeria 367 – 372

Reforms in Nursing Education: The National Open University of Nigeria Experience.
Afolabi Adebanjo and Kayode Olubiyo School of Science and Technology National Open University of Nigeria, Lagos, Nigeria. 373 – 377

The Role of National Open University of Nigeria as an Ancillary to Entrepreneurial Development in Nigeria.
Roseline E. Tawo, Arikpo B. Arikpo, Marcellus Ojuah, Department of Adult and Continuing Education, University of Calabar, Cross River State, and Chris C. Chukwurah, Department of Vocational and Special Education, University of Calabar, Cross River State, Nigeria. 389 – 397

Role of Open and Distance Learning in Providing Quality Education for Teachers: Implications for Universal Basic Education (UBE) Programme
Roseline E. Tawo, Arikpo B. Arikpo, Marcellus U. Ojuah, Department of Adult and Continuing Education and Augustine O. Oshiomu, Department of Educational Foundations and Administration, Cross River State University of Technology, Cross River State, Nigeria. 398 – 416

Sustainable Human Development through Open and Distance Learning: tool for HIV/AIDS Awareness and Promoting Healthy Environment for Children
Mary Felicia Opara and I. O. Emmy-Egbe, Anambra State University PMB 02, Uli, Anambra State, Nigeria. 417 – 422

Changing Role of Higher Education Learner: Reasons for Establishment of ODL at Moi University.
Joyce Agalo, Directorate of Open and Distance Learning, Moi University, Eldoret, Kenya 423 – 431

Women Empowerment and Open Learning: A Selection of Case Studies from Bangladesh
Zobaida Akhter, Bangladesh Open University. 432 – 440

Women in Purdah: The Challenges of Open and Distance Education in Nigeria
Ajadi T. O. School of Education and Ige-Ogunniyi A.E., School of Law, National Open University of Nigeria, Lagos. 441 – 451

SUB THEME III
CAPACITY BUILDING IN OPEN AND DISTANCE LEARNING 452

Training of Untrained Teachers by Open and Distance Education System in the State of Bihar (India)
Ram Chandra, IGNOU Regional Centre, 2nd Floor, Biscomaun Tower, West Gandhi Maidan Patna 800001, Bihar, India 453 – 457

Blogging at University as a Case Study in Instructional Design: Challenges and Suggestions towards Professional Development.
Muwanga-Zake Johnnie W. F., Parkes Mitchell, and Gregory Sue, School of Education, University of New England, Armidale, Australia 458 – 468

Re-thinking the Internal Quality Assurance Process of Distance Learning Systems
Sunday A. Reju and Felix Kayode Olakulehin Regional Training & Research Institute for Open Distance Learning National Open University of Nigeria, Lagos 946476
Capacity Building Rehabilitation of Prison Inmates
Crime Control through ODL
Ifidon Oyakhilomen, School of Law, National Open University of Nigeria, Lagos 477 – 487

Open Distance Learning (ODL) as Strategy for Empowering Prison Inmates in Nigeria.
Owolabi, Jacob Awoju, School of Arts and Social Sciences, National Open University of Nigeria, Lagos. 488 – 492

Issues in the Management of Academic Staff in Distance Education Institutions: A Case Study of the National Open University of Nigeria
Olufemi Peters and Felix Kayode Olakulehin National Open University of Nigeria, Lagos 493 – 500

Training needs of Tutorial/Instructional Facilitators of Masters in Business Administration Programmes of National Open University of Nigeria
E. A. Adegbola and A. A. Hamza, School of Business and Human Resources Management, National Open University of Nigeria 501 – 507

SUB THEME IV
QUALITY ASSURANCE IN OPEN AND DISTANCE LEARNING 508

A Proposed Open Distance Learning Module for Promoting Vocational Skills Acquisition.
E.B Sonaiya, E.R. Adagunodo Centre for Distance Learning
I.K. Adegbola and O.A. Koya, Department of Civil Engineering and Obafemi Awolowo University, Ile-Ife. 509 – 514

Assessing the Difficulty Index of Course Materials in National Open University of Nigeria
Inegbedion, Juliet O., National Open University of Nigeria, Lagos 515 – 526

Challenges of Quality Assurance in the Integration of ICT in Open and Distance Learning in Africa.
Harriet J. Kidombo, School of Continuing and Distance Education University of Nairobi. 526 – 528

Collaboration with the Peoples-Uni for Online Education in Public Health.
Richard F. Heller, Peoples-Uni. 529 – 531

Counselling as a Communication Strategy in Open Distance Education: The NOUN Experience.
Fidel O. Okopi, Learners Support Services, National Open University of Nigeria, Lagos. 532 – 538

Enhancing Quality in Open and Distance Education through Effective Utilisation of Information and Communication Technology (ICT) in Nigeria
Charles P. Akpan, Department of Educational Administration and Planning, Faculty of Education, University of Calabar, Calabar, Nigeria 539 – 549
Facilitating the Learning of Wildlife Management Ethics through Online Forum Debate
Cilla Margaret Kinross, Charles Stuart University, Australia 550 – 561

Personnel Management in Open and Distance Learning: A Case Study of the National Open University of Nigeria.
Grace Iyabo Osuman, Abuja Liaison Manager Abuja, National Open University of Nigeria 562 – 572

Processes of Examination and Assessment in Open and Distance Learning: Challenges and Prospects for Capacity Building

Incorporating Relationship Marketing as a Learner Support Measure in the Quality Assurance Policy for Distance Learning at Makerere University, Uganda.
Richard Kajumbula, and Anthony Tibaingana, Department of Distance Education Makerere University, Box 7062, Kampala, Uganda 579 – 588

Solving the Problem of Attrition in an Open and Distance Learning Institution
Olubiyi Adeniyi Adewale, and Juliet O. Inegbedion National Open University of Nigeria, Lagos 58997

Strengthening African Capacity in Nuclear Science and Technology through ICT-Based Training
Mohammed Adams Mundu, Nigeria Atomic Energy Commission Asokoro, Abuja Nigeria. 598- 602

Students’ Rating of Academic Facilitators as a Correlate for Quality Assurance in Open and Distance Learning
Olugbenga Ojo, Examination and Assessment Unit National Open University of Nigeria, Lagos, Nigeria 603 – 607

Open and Distance Education: A Strategy for Training Industrial Workers in Nigeria
Olowola Temitayo R. Regional Training & Research Institute for Open and Distance Learning (RETRIDAL), National Open University of Nigeria Lagos, Nigeria 608 – 610

The Policy Challenges of Open and Distance Education in Kenya’s Higher Education
Anyona Jackline K., Gravenir Frederick Q. and Mse Godfrey S Department of Education Administration, Planning & Curriculum Development Kenyatta University, Nairobi, Kenya. 611 – 617

The Role of the National Open University of Nigeria in Providing Enhanced Quality Education for the Work and Learn Student.
Ogidan Rotimi Joshua, National Open University of Nigeria, Lagos Nigeria. 618 - 625
SUB THEME V

COLLABORATION AND PARTNERSHIP IN ODL: MODELS, CHALLENGES AND RESPONSES

Collaboration between Open and Distance Learning Institutions and Conventional Institutions: Needs, Challenges and Benefits
Ikpe, Adakole, and Okonkwo, Charity Akuadi
School of Science and Technology
National Open University of Nigeria, Lagos

Beyond Bricks, Mortar and University Towers: Retooling Delivery Systems in African Higher Education
Narend Baijnath, University of South Africa, Boshra M. Awad, Aim Shams University, Egypt
Peliwe Lofwana, Umalusi, South Africa
Felix K. Olakulehin, National Open University of Nigeria

Enhance Cohesive Strength and EXTEND Collaboration Capacity Building in China’s Radio & TV Universities
Zhang Hui, Li Yawan and Liang Xiaoqing
China Central Radio & TV University, Republic of China

Guide Association: A Model of Excellence for Academic Cooperation
Laura Ricci and Arturo Lavelle
GUIDE Association Operative Office
Rome

ICT and Quality Assurance in ODL
Kamalika Banerjee, SOS, IGNOU, New Delhi, India.

Opportunities for Knowledge Transfer through Open and Distance Learning in Sub-Saharan Africa
Elfas T.N. Bisanda, The Open University of Tanzania, Tanzania

How Open and Distance Education supports the Disadvantaged
Li Yawan and Wang Yini, China Central Radio & TV University, Republic of China.

SUB THEME VI

Education, ICT and the Use of Mobile Study Centers
Mrunal Chavda, India.

Facing the Challenges in Design & Implementation of E-learning in the Asia Pacific Region
Kawsar Ahmed, and Mr. Md. Saiful Islam
IICT, Bangladesh University of Engineering & Technology

Education, ICT and the Use of Mobile Study Centers
Mrunal Chavda, India.

Facing the Challenges in Design & Implementation of E-learning in the Asia Pacific Region
Kawsar Ahmed, and Mr. Md. Saiful Islam
IICT, Bangladesh University of Engineering & Technology
Ibadan Open Digital Village (IODIV) Bridging the Digital Divide by Building a Network of Digital Community Information and Training Centre
Olaposi Olakunmi Isaiah Abiola, oneVillage Foundation, Nigeria
New Bodija, Ibadan, Oyo State, Nigeria
687 – 691

Instructional Scaffolding: an Experiment in Using Text Messaging to Support Distance Education in the Developing World
Erasmus Addae, Collin College, Plano TX, U.S.A.
692 – 697

Internet Virtual Classrooms in Developing Nations: Challenges and Opportunities towards Mass Literacy
Ndubuisi Ekekwe
Dept. of Electrical & Computer Engineering, Johns Hopkins University
Baltimore, USA.
698 – 701

M-Learning: an Emerging Trend in E-Learning and Application in Nigeria.
Adedoja, Gloria Olusola, Teacher Education Department, Faculty of Education
University of Ibadan. Ibadan and Ayodekola Ayodele Hezekiah Centre for Educational Technology, Federal College of Education (Technology), Ibadan, Nigeria.
702 – 707

The Concept of “Learning-Fields” in Economic Vocational Education. the Case of Germany
Bjoern Willi Paape, RWTH Aachen University, Faculty of Business and Economics
52056 Aachen, Templergraben 64, Germany.
708 – 719

Technological and Pedagogical Issues Surrounding Production of Multimedia Learning Content
C. Peat, D. Patel, S. Barikzai
London South Bank University
United Kingdom.
720 – 729

Teaching Technical Courses through Distance Learning in Nigerian Universities: Problems and Prospects
Akinboade Adejimi, Department of Architecture, College of Engineering and Technology, Olabisi Onabanjo University
Ibogun Campus, Ogun State, Nigeria
730 – 740

Videoconferencing as a Veritable Instrument for Effective Open and Distance Learning (ODL) System—The National Open University of Nigeria (NOUN) Perspective.
741 – 744

Visibility Implementation Strategies for Tacit Knowledge in Open Educational Resources (OER) and Distance Instruction Management
Sunday A. Reju, Regional Training & Research Institute for Open & Distance Learning (RETRIDAL), National Open University of Nigeria, Lagos.
Comfort O. Reju, Distance Learning Institute (DLI), University of Lagos, Akoka
745 - 752
Education Policy Implementation in the Context of Open and Distance Learning in Nigeria
Henry S. Osindeinde, West African Examination Council, Yaba, Lagos, Nigeria 753 – 761

Barriers to the Use of Information Communication Technologies (ICTs) among Distance Learners: A Case Study of Nigeria
Christine I. Ofulue, Olugbenga Ojo, and Adewale Adesina
National Open University of Nigeria, Lagos, Nigeria 762 – 772

ANNEXURE: LEAD PRESENTATIONS IN POWER POINT
Prof. Olugbemiro Jegede, Vice Chancellor, National Open University of Nigeria, Nigeria.

Open and Distance Learning in Developing Nations.
Prof. Abdul Waheed Khan, Assistant Director-General for Communication and Information, UNESCO, France.

Repositioning Open and Distance Learning vis-à-vis the Post-Industrial challenge
Prof. Kai-Ming Cheng, Chair of Education and Senior Advisor to the Vice Chancellor, University of Hong Kong, Hong Kong.
I want to thank the Vice Chancellor of the National Open University of Nigeria, the Local Organising Committee, the entire executive members of the 2nd African Council of Distance Education, and all those who have given me this honour to deliver the Keynote address at this 2nd ACDE Conference and General Assembly. I am particularly grateful to the authorities who planned this programme for giving me an open cheque to choose a topic for my presentation. My choice was influenced by a desire to challenge the minds of the participants, all of whom are celebrated experts and specialists in the ever-expanding field of Open and Distance Learning (ODL).

Open and distance learning (ODL) has been correctly identified as a panacea for the myriad of problems in educational systems in Africa. One thing, it is inclusive and free of restrictions imposed by distance and space. Moreover, it creates opportunities for those excluded from formal education because of their gender or status. ODL makes education accessible to those who are unable to study due to their social responsibilities and commitments.

Open and distance learning is most relevant in places where access to learning is limited at various levels. And, perhaps, no other region in the world needs more urgent access to training, retraining and further training than Africa. Indeed all reports currently indicate that Africa is far behind all other regions of the world at all levels of educational development. This situation will continue to adversely affect the continent’s human resource development, and make it less competitive, less resourceful and ill-equipped to assert itself in the global community. All these issues demand that education in Africa must be stepped up if the continent is to realise its potentials. Presently, Africa is behind in a number of areas, for example, it is not on target to meet many of the development goals set up by the international community.

The challenges of the Education for All (EFA) and the Millennium Development Goals (MDGs) underscore the need to tackle the problems of poverty, gender discrimination, poor governance, economic and social insecurity, fuelled by inter-ethnic and inter-religious strife, poor working conditions and the continuing exploitation of the natural and human resources of Africa.

The Millennium Declaration and the Millennium Development Goals (MDGs), identify human development as a key to social and economic progress. In acknowledgment of this, international organisations, governments and private sector groups have all coordinated their development work around the MDGs. The eight MDGs aim to cut extreme poverty by half, ensure every child has the chance to go to school, live a long and healthy life, bring discrimination against women to an end, reduce the risks of dying, control deadly diseases, manage the environment better and share the benefits of progress more equally among all the nations of the world. The deadline for these is 2015 but from all indications, Africa is not on target on any of these goals. Consequently, it is imperative that the continent wakes up and exploits the opportunities that ODL offers. But to do so, Africa must confront a number of issues decisively.
To start with, Africa has to fully recognise that open and distance learning is technology-driven, and that the delivery mode has always been guided by literacy skills, communication technologies such as radio and television, and increasingly now by the internet. How can Africa cope with the issue of access to relevant information and communication technologies? How can the continent deal with the high cost of computers, which makes its ownership almost impossible, the frustrating slow speed of access to the internet, and the lack of a conducive learning environment in cybercafés?

Another critical issue in ODL is the role of instructors and facilitators. It is important for the staff at the Open and Distance Learning institutions to win the respect of the traditional teaching establishments through a rigorous system of recruitment. The staff of the institutions must not be seen to be manipulating or choosing because they have been rejected by the conventional institutions. Rather, they must be those who are committed to defend open and distance learning, with self-confidence and conviction. They must ensure that their products are outstanding and able to contribute to the wider community that will appreciate their value. This means that the ODL must build a quality assurance strategy in the management and administration of ODL into its system. It also means that student support must be provided to encourage the learner to remain on the programmes.

The issue of student population must also be carefully examined, especially as the number of learners is on the increase. It is, perhaps, necessary to point out that size should not be a driving force as small can be beautiful. What is important is that the learner must be equipped with resources and high quality teaching materials. This is particularly critical for the face to face component of ODL. I am sure that some of us will recall the days when university libraries provided students carrel in the library, and reading rooms in halls of residence. At the time, also, there was an almost inflexible policy of careful staff and student recruitment to guarantee that only the best personnel was made available for the learning community. It is true of course that such a policy applied to the ODL may be self-defeating and that the process may restrict the open nature of ODL. Furthermore, it may lead to the limitation of access to those who see the ODL as the last hope for those struggling against exclusion, and segregation in provision of education. Indeed, the issue of exclusion in education has become topical, and even some activists see access to learning as a fundamental human right. Thus, the No Child Left Behind Act of 2001 in the United States has been commended (Osgood, 2005).

In view of these issues, it is imperative that ODL in Africa is designed to focus on the preparation, evaluation and delivery of courses and programmes that meet the goals of development in the region.

I would recommend that those in the ODL business never look back, or doubt their relevance, vision and mission. They must always remember that all good things face stiff opposition, discouragement and sometimes even temptation to quit. Those who have triumphed over the test, trial and tribulation often have a success story to tell. I would also recommend that ODL should learn from the past experiences of its uses. For example, it must include access to the learners in prison, and learn from the lessons provided by the education received in prison by Nelson Mandela, his prison mates at the Robin Island and similar experiences throughout the world.

The point has to be made that ODL programmes do not necessarily have to lead to the award of degrees. We should remind ourselves that traditional education in Africa did not provide for the “one-shot” achievement through examinations but made provision for life-long learning. This was why as Head of the Department of Adult Education at the University of Ibadan in 1988 I had to change the nomenclature of the programme which I was
inaugurating at the time from external degree to external studies to reflect its emphasis on lifelong learning.

Within the context of lifelong learning, one can mount several programmes, develop courses and launch study programmes in subjects that are immediate and long-term interests of Africa. These should include the cultivation of a tolerance and respect for differences, cultural diversity, learning to live together, heritage conservation, promotion, and protection. All these courses and programmes within ODL relevant, exciting and refreshing. It will certainly also integrate ODL in social and economic development.

Key actors in ODL must not lose sight of its capacity to prepare the present and future generations to live an active and fulfilled life. Perhaps I need to illustrate this with concrete examples from the life of Josiah Soyemi Ogunlesi, a Nigerian and first university graduate of History in Africa. Although the number of products of the ODL was small at the time, the system was able to make an important and effective contribution to social and political development of Africa.

Ogunlesi was a classroom teacher from Sagamu, Ogun State of Nigeria, when he learnt that Emmanuel Odukoya Ajayi, a fellow Nigerian in St. Andrew’s College Oyo, was acquiring qualifications from the University of London by distance learning. At the time, distance learning took the form of correspondence course. Ogunlesi enrolled for tuition courses and began to study history which he passed at the London Matriculation and Intermediate degree levels. In 1930, he enrolled for the final degree examination in history which he passed. He thereafter was employed as a graduate teacher in history. He also served as a librarian at the Grammar School where he taught. He worked briefly as editor of the Daily Times of Nigeria. In 1946, he became a Mass Education Officer when the Mass Education programme was introduced in Nigeria. He was responsible for the promotion of mass education in the old Western Region of Nigeria, a task which he took with industry and diligence. At the same time, he was appointed an examiner for Yoruba by the University of London External Examinations Board. Ogunlesi was a prolific writer, a man of courage and sensitivity. He received several awards and commendations for excellence before he died in 1981 (Omolewa, 1989).

The point being made here is how ODL prepared and equipped him for a variety of roles and responsibilities. Ogunlesi’s last job was as an adult educator and that was when he was well over 40 years old and after he had tried his hand at all sorts of jobs. Yet today most people remember him as an adult educator and to many students of open and distance learning, Ogunlesi is the father of open and distance learning in Nigeria. The truth of the matter is that Ogunlesi was an adult educator throughout his working life.

Ogunlesi had shown the value of devotion to a cause, the attractions of zeal, commitment and dedication. Like the most successful adult educators in history, Moses Michael Coady (1882-1959) of Nova Scotia, Albert Mansbridge, (1876-1952) of England, and Nicolaj Fredrik Severin Grundtvig (1783-1972) of Denmark, Ogunlesi was chosen by open and distance learning. He simply stumbled on the job. He could thereafter declare like his colleagues, “Then, I, liking the work, chose open and distance learning”.

Ogunlesi’s work has informed the theory and practice of open and distance learning and has enriched the philosophy, psychology and history of the subject. Ogunlesi’s life has inspired open and distance learning educators and has been a manifestation of the potentials of vision and drive. Open and distance learning instructors confidently claim that their work has been made lighter and easier by the foundation laid by Josiah Soyemi Ogunlesi. What is now needed is to rekindle the spirit of Ogunlesi in open and distance learning work in Africa. Ogunlesi was firmly convinced that no meaningful development could take place in the absence of a vigorous open and distance learning work.
First, he believed in self-effort, initiative and sacrifice. He refused to succumb to disappointment or frustration. His self-education career began in 1928 when he became aware that his limited finances could not provide him with higher education after he had passed out of St. Andrew's College, Oyo in 1925. His uncle had also disappointed him when he failed to honour an earlier promise to send him to England to study law. Ogunlesi had responded to the disappointment by paying five guineas (which was a substantial proportion of his earnings) to the University Correspondence College on February 13, 1928 for a comprehensive home-study programme. In the process, he suspended his marriage plans, disciplined his mind, and made a judicious use of time and energy in the pursuit of excellence in learning. In June 1933, he became the first West African to pass the University of London's honours degree examination in history. His achievement was acknowledged as illustrated by a letter from Mr. E.M.E. Agbebi, a well-known legal practitioner: "It is a fine achievement and in history too which is my favourite subject. I hope you will not rest on your oars (or shall I say laurels?) but continue your studies and read up for the M.A. at the earlier convenience."

This was a demonstration of the possibilities of motivated adult, the use of distance education and the value of an external degree programme. Throughout the rest of his life, Ogunlesi sought to bring education to those denied access to the formal school system. Thus, he tried his hands at establishing the City Correspondence College in partnership with Mr. (later Justice) G.B.A. Coker. After his retirement, he continued to provide tuition to those who had failed the G.C.E. and the School Certificate examinations, in the firm belief that educational achievement was possible for anyone entitled to it. He did not waste his energy at criticizing government or apportioning blame. He simply acted, and filled the vacuum left by anybody or agency that failed to deliver.

It is clear that if the Ogunlesi spirit was sustained the National Open University would not have been suspended as it was in 1984; school fees would not have been introduced to rob children of the poor access to education in the areas where the tradition of free education had taken root; open and distance learning budget would have been increased and open and distance learning programmes expanded. The current unhealthy assumption that adult education is synonymous with literacy would not have been encouraged. Ogunlesi was convinced that literacy, vital as it is, is only the beginning of the long journey in education, and that further education is most vital in the educational ladder, because half education is as dangerous as no education.

The Ogunlesi spirit would have insisted on the implementation of the National Mass Literacy Campaign which is now stalled. For Ogunlesi consistently advised that, "Made literate and constantly supplied with suitable follow-up literature, the ordinary citizen will grow in mind, increase in efficiency in his work, produce more and consume more, take an active and intelligent interest in his country's affairs, and improve generally." Indeed, the Ogunlesi spirit was unequivocally in support of the education of the totality of the adult population. It was opposed to selective approach which ignored the poor and the women. In his own words, 'Nigeria belongs to the illiterate adult. It is he who pays the tax; who decides and provides for the town, who determines the type of house the family shall live in; who votes and elects who shall be the member of parliament. It is the illiterate wife who bears the child; she and her illiterate husband bring up the child who is likely to become prime minister, doctor, engineer, lawyer, technician, accountant, bishop, teacher, etc.'

Ogunlesi believed in both paid-for contribution and voluntarism in open and distance learning. Before he took up a paid job in adult education in 1947, he had been a volunteer for 24 years. He was firm in his conviction that 'A literate man who gives his services as an instructor is a nation builder' and that if we liberate this vast majority and encourage them to take an intelligent interest in the economic, social-cultural and political affairs of Nigeria, the
country would be changed for good as ‘corruption, disease and their other bedfellows will be dealt their death blow as they be attacked from all sides.’

Ogunlesi demonstrated his commitment to ODL in different roles he played in his life. He performed each creditably and distinguished himself. That was for this reason that he was in 1981 awarded the highest honour for excellent contribution to adult education by the Nigerian National Council for Adult Education and was listed in the International Biography for Adult Education.

Ogunlesi left behind an example of devotion to scholarship, an insatiable appetite for learning and an irresistible attachment to the principle of continuing and life-long education. He was a lifelong learner, an author, an avid reader, and an meticulous record keeper. He studied until his death. This open and distance learning educator was still working on his autobiography when he answered the call of his Master.

It is obvious that ODL is capable of preparing and equipping learners for a variety and multiplicity of employment and roles due to its emphasis on discipline of self-directed learning and independent thinking.

To build and expand on the foundation that Ogunlesi laid, the funding of ODL must be taken seriously as studies have established a correlation between the levels of funding and the quality and the effectiveness of an educational institution. ODL institutions can be capital intensive projects dealing with the installation of technological gadgets, selective policies in staff and student recruitment and retention and sustainable mechanism for students support. In order to preserve and protect the quality of products of ODL, adequate investment must be made to the institutions. The improvement of course materials calls for an increase in financial commitment and resource allocation. ODL also take advantage of the offerings of the New Technology in learning, and that would require a rethinking in the level of funding of programmes.

We have made the point that ODL remains a key to effective performance of the provision of education in Africa. We have also made the point that the ODL is an effective tool that can assist in the educational delivery in the region. We have drawn attention to the value of ODL, and used a case study to clearly illustrate the point that investment in ODL is a fruitful and most rewarding one. Finally, we have made the point that it is imperative for ODL process in Africa to carefully re-examine itself with respect to the quality of provision including the materials and students support, relevance and sustainability. ODL must therefore address all levels of the educational system and support human resource development. As Commission for Africa has recently said:

"The shortage of skilled professionals in Africa is a critical issue. It has its roots in a tertiary education system that is in a state of crisis. The emphasis in Africa in recent years has rightly been on the need for primary education. An unfortunate side-effect of this has been the neglect of secondary and tertiary education from which are produced the doctors, teachers, police officers, lawyers and government workers of tomorrow. Africa's universities ought to be the breeding ground for the skilled individuals whom the continent needs."

Currently, there is a considerable request for access to the open and distance learning space in Africa. There is therefore a vigorous advertisement in the region to the potential learners to enrol and earn degrees, studying at home. The population is told that it can have degrees within sometimes a ridiculous length of time for studies. There is also an increasing concern about cross border education, where the quality of education in Africa are not...
usually subject to the educational stipulation, and requirements of the nations. And yet no nation can afford to entrust the job market and human resource development to qualifications of products that have been fashioned without consideration for the human resource directives and quality enhancement measures.

It is suggested thereafter that ODL should be adequately funded and eminently recognized by all. This would represent our rethinking of the strategy of access to learning with its continued relevance and appropriateness for modern day practice.

I wish you well in your deliberations, and I am sure that the entire world would be looking forward to your recommendations and plan of action that will assist Africa move forward in this new millennium.

I thank you, and God bless you

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ELEARNING ON THE FAR SIDE OF THE DIGITAL DIVIDE
Closing Keynote Address

Sir John Daniel and Dr Wayne Mackintosh
Commonwealth of Learning

Introduction

It is a pleasure to be here for the second conference of the African Council for Distance Education. I have very good memories of the first, held in Pretoria in August 2005.

History seems to be repeating itself. First, you had the generosity to invite me to address you on both occasions. Second, on both occasions I was unable to be here for the beginning of the conference and you have accommodated me by asking me to speak towards the end.

Third, it was a pleasure to congratulate our hosts in Pretoria, UNISA on their tremendous achievements in recent years under the leadership of Professor Barney Pityana. Today I congratulate the National Open University of Nigeria and its Vice-Chancellor, Professor Olu Jegede, on what they have done to establish the university, not least by enrolling former president Olusegun Obasanjo as a star student.

Your first conference had the theme The Mobilisation of African Leadership and I gave a speech entitled Open and Distance Education for Africans and by Africans. It was prepared with my South African colleague Vis Naidoo, who returned home to run the Mindset organisation. He is now working for Microsoft. I have prepared this speech with Vis’ successor at COL, Dr Wayne Mackintosh, who is a native of South Africa but is unlikely ever to work for Microsoft because he is rooted in the open source culture. COL favours a diversity of approaches and attitudes among its staff.

Your theme at this conference is Open and Distance Learning for Sustainable Development. This time, we have taken the title e-learning on the Far Side of the Digital Divide

Our plan is to explore briefly the notion of the digital divide and argue that we cannot wait for it to be bridged before bringing some of the benefits of information and communications technology to those on the far side who are not now connected to the global internet. We shall then explore what is meant by e-learning and suggest it can make an important contribution to reducing educational deprivation.

With that as background, we shall then look at the practicalities of e-learning on the far side of the digital divide and address four obstacles in particular: connectivity, equipment, software and the training of people. In all this, we shall draw on the experience of COL.

Members of ACDE are in the forefront of the attack on the digital divide. We hope that our own experience and reflections can help you overcome some of the obstacles that face you.

The Digital Divide

First, let us reflect on the digital divide. The French term is fracture numérique, which sounds more dramatic.

The expression ‘digital divide’ appeared in the 1990s to refer to the lack of access to information and communications technologies (ICTs) by segments of the community. A first
The point is that digital divides run within countries as well as between them. Some people in the USA do not have good access to ICTs whereas here in Africa I imagine that most ACDE members are pretty well connected, even if that is not true of most of your compatriots.

There are various reasons for the digital divide and the persistence of the digital divide. In some countries, there are political obstacles because governments have not encouraged the spread of connectivity by liberalising their telecommunications markets.

The Commonwealth Telecommunications Organisation, led by the distinguished Ghanaian, Dr. Ekwow Spio-Garbrah, is one of the bodies working to encourage governments to bridge the divide. They are making good progress because the developmental benefits of expanding access to ICTs are now well documented, especially where mobile phones are concerned.

There are obvious economic reasons for digital divides. Computers are expensive relative to the incomes of most of humankind and communications costs are a factor too.

Another facet of the digital divide is geographical. Towns are better served than rural areas, although gradually, satellites and wireless are gradually levelling the playing field.

COL is working with the 32 small states of the Commonwealth to facilitate the creation of a network called the Virtual University for Small States of the Commonwealth. We shall return to this very exciting initiative that quickly taught us that there is a digital divide even in the smallest countries.

The digital divide includes social and linguistic barriers. Although the number of new web pages in English is now outnumbered by the pages produced in other languages, there is still a feeling that getting into the ICT world means jumping a cultural barrier as well. But of course, jumping out of the confines of a single culture into the global pool of information is part of the reason for bridging the digital divide anyway.

Authoritarian regimes are faced with the dilemma of trying to place a technical bridge across the digital divide without allowing the free flow of information over it. We believe that in the long term it will be impossible to resolve this dilemma and information will be freely available, but we are not there yet.

There is also a digital divide between teacher and student, or more generally, between institution and learner. Access to the Internet, however inadequate, is almost always better in the offices of academics on campus than in the homes of their students.

You are the African Council for Distance Education: this matters. You cannot simply tell distance learners to come and use the facilities on campus.

But we get ahead of ourselves. This ACDE conference is concerned with education. Bridging the digital divide produces general developmental benefits, but how does it help give people access to education of quality?

E-learning

Our interest today is in cultivating e-learning. If you look for a definition of e-learning on the web you will find it described as the delivery of learning, training or education programme by electronic means, involving the use of a computer or electronic device.
There is a major omission in that definition, which  goes a long way to explain why eLearning has a reputation for underperforming. The definition ought to refer to three 'D's, not simply the one 'D' of delivery. A proper definition should refer to the design, development and delivery of learning programmes by electronic means we read them, nearly all the discussions on the virtual conferences that preceded meeting focused on how you design and develop programmes to build in quality.

About ten years ago, during what was called the dot com frenzy, some enthusiasts argued that all education would quickly migrate to the computer screen, making traditional methods of education, including traditional methods of distance education, obsolete. However, many of those who tried to create 'pure' e-learning programmes by which we mean programmes relying entirely on the computer, either went broke or adopted a blended approach which mixed electronic learning with other forms.

Reflecting this experience, COL uses a broad definition of e-learning that embraces any distance learning programme that has an electronic component, even if most of the delivery is through the medium of print. For example, some African distance learning programmes use mass SMS on mobile phones to communicate with students about their print-based studies. We consider that a form of e-learning.

But all forms of e-learning bump up against the obstacle of the digital divide. Even if the electronic component - suppose it is a laboratory simulation on a CD-ROM or DVD - is only a small part of the course, the student who cannot access the equipment to play the simulation is disadvantaged. This is a fundamental challenge to the introduction of electronic media into distance education - and not just for Africa.

I well remember that when we were introducing more e-learning in the UK Open University in the early 1990s the powerful OU student association complained that we were penalising the many students who did not have computers at home. Many of them held the view that 'if everyone can't have it, one shall have it'. Such a stance effectively blocks the introduction of any new technology into distance education unless the institution is rich enough to provide all students with the technology. The fact is, that they are not, and in any case the whole point of distance education is to rely as much as possible on the students' own technologies.

But to return to the UK Open University, quite soon the student association did a U-turn and urged the University to expand online learning services more quickly.

Cynics would say the University bribed them to change their minds by providing the members of the student association's executive committee with connected computers at home so that they could experience the benefits.

That proved to be something of a boomerang, or at least a double-edged sword, because as more and more students became connected, with numbers reaching 150,000 by 2000, it became very easy for the student association to monitor student experience and make well documented complaints about any shortcomings in teaching and learning system. It was uncomfortable to have our noses rubbed in our weaknesses so effectively but it did help to make the UK Open University even more of a self-improving system.

We suggest that African distance education has to take a similar approach. You should be introducing electronic elements in your courses as fast as seems reasonable, while at the same time doing what you can to allow students on the side of the digital divide to take advantage of them. How do you do this? We shall look at four obstacles: connectivity, equipment, software, and training.
Connectivity

The first barrier to e-learning on the far side of the digital divide is connectivity. ACDE members have little opportunity to increase that directly, but you can influence political decisions on telecoms liberalisation and taxation by publicising the developmental benefits of connectivity. And you can make more efficient use of the connectivity that you have.

Two figures are particularly telling (The Economist, 2008). First, studies find that in a typical developing country an increase in penetration of mobile phones of 10% boosts GDP growth by around one percentage point. Second, on average, the mobile industry, which accounts for 4% of GDP, contributes 7% of tax revenue. We give these figures for mobile phones because the connectivity for other ICTs, such as laptops, will grow on the back of mobile telecommunications. What governments need to do is foster a lively and competitive telecommunications market and not to tax it too heavily because mobile-specific taxes reduce demand.

One calculation suggests that if governments did away with mobile-specific taxes and charged only value-added tax (VAT), total tax revenues from the mobile industry would be 3% higher by 2012 and the average penetration rate would increase from 33 to 41%, which, as we just mentioned, increase GDP growth by one per cent.

You can also do things to use more efficiently the limited connectivity that you have. COL has published advice on how to do this (see for example Daniel & West, 2005). One example of better use of bandwidth is provided by COL's WikEducator, a collaborative website for developing Open Education Resources (OER). It shows teachers how to use the open source software OpenOffice for authoring content offline. It can be exported into the wiki format and uploaded onto the site when teachers have the opportunity to connect to the Net at their place of work, community media centre or Internet café.

Equipment

E-learning on the far side of the digital divide obviously requires equipment. This is becoming more widely available: rapidly in the case of mobile phones, less rapidly in the case of computers. However, the cost of computers, in relation to their processing power, is dropping steadily and there are many schemes to recycle good used computers from richer countries. If sending organisations ensure that the equipment they donate is in good working condition it can be a godsend for local NGOs and other bodies. Responsible people on both sides of these deals should check that electronic waste is recycled properly in the rich country and only good working equipment is shipped to developing countries.

The Tuxlab project is an African innovation where computer laboratories running on the GNU/LINUX free software operating system are installed in schools. It is a smart project because it connects refurbished computers as dumb terminals to a new server, which is far cheaper than installing a new laboratory. Schools need only maintain one installation of software and teachers can be taught to wire and set up the lab themselves (http://www.tuxlabs.org.za). SchoolNet Namibia has widened access to ICTs using a similar model.

Another trend is the attempt to make a functional laptop for less than $100 and make it widely available in the schools under the One Laptop Per Child or OLPC programme. This initiative, launched by the Media Lab at the Massachusetts Institute of Technology, has spawned a brisk competition to create viable machines.
There are now close to a hundred of these in the market and COL is involved with UNESCO and the World Bank's Infodev in doing an assessment of them. The chances are that within a few years, equipment will be much less of a problem as costs continue to fall.

COL has also been instrumental in developing what could be called a virtual printing press. Technically speaking, this is software, but its potential impact in widening access to print-based learning materials could be compared to Gutenberg's invention of printing. Although an increasing number of teachers have access to the Internet at work, the majority of learners in the Commonwealth will not have connectivity in the foreseeable future. COL therefore made it a priority to develop an e-learning technology to produce customised print materials from any Mediawiki software installation.

We worked with the Wikimedia Foundation Inc., which oversees Wikipedia, the largest free content repository in the world, and a company called PediaPress to develop an open source technology that allows educators to build their own print collections from different pages to give them a unique print-based study guide.

The materials are produced in portable document format (pdf) which can easily be reproduced locally and mailed to learners through more conventional means. You can experiment with this technology on COL's WikiEducator. The potential impact is huge because at a technical level we now have the means to provide access to a free encyclopaedia in print format for every teacher and learner in the world. In this way COL is helping to connect the unconnected.

Software

Software is the enabler. It is the means to achieve our educational aims of designing teaching-learning interactions and developing content. Software should support what educators do best rather than constrain them. COL respects the freedom of educators to teach with the technologies, curricula and learning materials of their choice whether that involves proprietary or open source software. Teachers and institutions should choose the best tool for the job in the light of their own circumstances.

In any case, in this fast-changing world, educational institutions have more pressing challenges than personal software choices. One is the interoperability of digital content among different systems and the use of open standards. The reason that the Internet grew exponentially was because of interoperable technologies such as specifications, guidelines, software, and tools.

For example, the Hypertext Markup Language (HTML) is an open specification administered by the World Wide Web consortium that defines the basic building blocks of a web page. Open standards enable private software companies and open source developers to speak the same language, which leads to a wide choice of browsers, editors and authoring tools that produce interoperable content.

There is an encouraging trend towards greater openness for example in the area of word-processing with the introduction of the Open Packaging Convention. COL urges all concerned to work through the issues so that we can exchange documents more freely between systems. This is not a game of winner take all but rather of finding the best answers for all the world’s computer users. We believe there is enough maturity and technical skill to accomplish this.

Beware of claims that e-learning is cheap. Like distance education, the major cost is the time that teachers, learning designers, graphic artists and editors spend developing high...
quality learning materials. Having made that investment you want to ensure that it transfers between software.

Interoperability protects your investment by requiring content to be stored using open standards and open file formats. In COL's policy we advise governments and institutions to assess all the implications of their choices when making software procurement decisions. They should take a long-term view of flexibility, cost and vendor dependency.

Training

No combination of connectivity, equipment and software does any good unless people can use it. Although the teach-yourself approach suits ICTs because training is often built in, it is still helpful to seed that process with some formal training.

This is one major purpose of the Virtual University for Small States of the Commonwealth (COL 2008a, 2008b, West & Daniel, 2008) which COL is coordinating on behalf of the ministers of education of 30 small states, eight of them here in Africa.

The other main aim is to produce e-learning materials as Open Educational Resources on a variety of skills-based post-secondary topics chosen by the ministers in order to reinforce the offerings of the existing tertiary institutions in those states. The VUSSC, as we call it, is not a new tertiary institution but a way of networking existing ones so that they can raise their game in e-learning.

To launch the development of e-learning materials in each new subject, COL convenes a three-week workshop in one of the small states and asks the states who are interested in developing that subject send experts to the workshop. At the workshop, they get training in methods of distance education design and development, collaborative development strategies and tools, and a range of different technologies that are used in e-learning development. Participants acquire these skills while working on real courses.

COL has organised five of these workshops since 2006: Tourism & Entrepreneurship; Teacher Development; Life Skills; Disaster Management and Fisheries. Over this period, we have achieved a progressively better blend of training and course writing. An important requirement is that VUSSC workshop participants train their colleagues when they return home. Nearly 100 people have now attended VUSSC workshops and we estimate that they have trained another 400 colleagues between them. This is a significant increase in the pool of ICT-trained professionals in these small countries.

The natives of North America, called the “First Nations” in Canada, have a proverb: “Tell me and I’ll forget, show me and I may not remember, involve me and I’ll understand”. This inspired COL’s Learning4Content project. With funding support from the William and Flora Hewlett Foundation, COL is providing free training for lecturers, teachers and trainers in developing OER content on WikiEducator. Their contribution, in return, is to share their knowledge freely by making available as an OER, a lesson on a subject of their choice.

Learning4Content is a partnership. We aim to schedule at least two face to face workshops in each Commonwealth country. COL will identify and support a facilitator for each face to face workshop but participating ministries or institutions must provide access to a computer lab and underwrite all local country costs.

We also offer a free online version of the workshop every month and extend a warm invitation to educators in your countries to sign up for this training opportunity. To date COL has trained more than 870 people in this way and we are aiming to reach 2,500 by the end of
2008. We have already done face to face workshops in Ghana, India, Kenya, Papua New Guinea, the Solomon Islands and Zambia (COL, 2008c).

Conclusion

It is time to conclude. You will, of course, have noticed a glaring gap in this presentation. What about courseware?

At the heart of e-learning - as of all distance learning - is courseware, the learning materials which, together with student support and logistics, is central to successful learning. We have said little about this because it is a huge topic and has been a major focus of the conference already.

Courseware is expensive and throughout the four decades of modern, multi-media distance education there have been appeals for greater sharing of learning materials. So far, these appeals have had disappointing results partly because it was physically difficult to share and adapt materials until they were in digital formats.

The movement to create a global intellectual commons of Open Educational Resources therefore has great potential. But the movement is still in its early days and only time and experience will show us whether OERs will result in genuine multi-directional sharing and adaptation. However, some of the early signs are hopeful.

COL is committed to making the OER movement a success because we see it as key to getting the cost of distance learning within the reach of the four billion people at the bottom of the world economic pyramid. Only if we achieve this will we be able to claim success for the campaign to take e-learning to the far side of the digital divide.

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INCLUSIVENESS – COMMUNITY, DISTANCE EDUCATION AND PRODUSAGE

Terry Anderson
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I have been asked to focus this talk on inclusiveness in education. By coincidence (or good conference planning) this congress occurs on the 60th anniversary of the United Nations Declaration of Human Rights. Article 26 of that declaration states that ‘everyone has the right to education, and that technical and professional education shall be made generally available.’ I like that, and certainly it speaks to our primary role as distance educators that is to remove all types of barriers of education at all levels. But the declaration goes on to say that “Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms”. This challenges us educators and as human beings to think about what ‘full development means’ and our ideas about freedom and choice. I’m excited to be here besides enjoying being a tourist, I’m here to celebrate my own learning about Africa as fortunate enough to be invited, with five other Peer Reviewed Distance Education Journals to create a joint special issue commemorating the Declaration. Our Issue of IRRODL and the site of the combined special issue at Distance and Access to Education http://www.distanceandaccessstoeducation.org/ From that I read The Role of Open and Distance Learning in the Implementation of the Right to Education in Zambia by Richard Siaciwena and Foster Lubinda and learnt about Interactive Radio and I read of attempts to use OpenLearn OERS from the Open University in South Africa, along with many other articles. Second I participated in an engaging email “online conference” during the month and finally I met a number of you in Cambridge last year and have fond memories of that time together. So, again thank you for your kind invitation to talk to you today and for the barriers of ignorance you have helped me remove about Africa and your education systems.

I confess at the outset that inclusive education is a particular strength of mine or one in which I have done much research. So, like many of us, I went to Wikipedia and found that inclusive implies that:

* Every student has an inherent right to education on the basis of equality of opportunity.
* No student is excluded from, or discriminated against within education on grounds of race, colour, sex, language, religion, political or other opinion, national, ethnic or social origin, disability, birth, poverty or other status.
* All students can learn and benefit from education.
* Schools adapt to the needs of students, rather than students adapting to the needs of the school.
* The students’ views are listened to and taken seriously.
* Individual differences between students are a source of richness and diversity, and not a problem.
* The diversity of needs and pace of development of students are addressed through a wide and flexible range of responses.

Wikipedia - en.wikipedia.org/wiki/Inclusive_classroom

I am sure that none of you would challenge the definitions or the value of inclusive at all levels of formal education. The problems arise when we try to develop systems that demonstrate these values in practice, work effectively and perhaps most importantly are
affordable by students, parents, governments, and communities.

Inclusive education is based upon notions of normal that every learner is entitled to a quality educational experience that approaches normal. This implies that individual characteristics including physical disabilities, intellectual gifts or impairments, or economic constraints should neither define the type nor the quality of the educational experience available to them. As Kisanji, (1998) said "It is the meeting of the needs of all learners in a given community, in formal and non-formal settings without sacrificing their uniqueness, that constitutes inclusive education" (Kisanji, 839, 66).

For the purpose of this talk, I want to talk about three paths or strategies for increasing educational inclusivity. The first looks at notions of community involvement in all levels of education. The second looks at the opportunity to increase access to education, employing many of the techniques for mass education that we have learned over the years as distance educators. The third looks a bit into the crystal ball and overviews a new model of production of education that engages learners and faculty to co-create their educational opportunities. A key component of this third alternative is the notion of working together, with educators around the globe in the production and use of Open Educational Resources. This last alternative offers a vision of expanding the notion of normality to include a global and networked context in which access to others, resources and to a host of personal learning technologies is the new normal.

Setting the Context

First, let me overview the challenges of access to education that face us in every nation of the world.

In a 2008 speech in Cambridge, Angela Kanwar, the president of Commonwealth of Learning, noted that “the majority of people in the developing Commonwealth are under the age of 20. By the year 2020, 40% of the global workforce will be knowledge workers, with a need for tertiary qualifications. Powerful global regulators such as The World Bank, are of the view that for countries to achieve sustainable economic development, the Age Participation Rates (APR’s) in Higher Education (HE) must be in the region of 40 to 50%, as they are in many developed countries” (Kanwar, 2008). In many countries in South Asia and Sub-Saharan Africa, these participation rates languish below 10% (Daniel, Kanwar & Uvalic-Trumbic, 2006, p. 39).

These low participation rates and the normalcy of having no alternative for the critically necessary social and intellectual skills offered through quality formal education is creating a new and unwelcome normalcy. Lest you think this is a problem only in Africa or in the developing world, I would like to tell you a bit about inclusiveness in North American education systems. In Canada the vast majority of 35 million citizens live in large urban cities within 100 kilometres of the United States. But Canada is the largest country in the world and there are vast territories across the North that are populated by very small number of indigenous, First Nations and resource extraction communities. Life in these communities is usually very challenging. High rates of addiction, inadequate housing and resulting poor health plague these communities. For example, First Nations citizen of Canada of First Nations ancestry is more likely to be placed in jail to graduate from high school (Alberta Justice, 1999). For these Canadians, the wealth of the south is unavailable. In these isolated and relatively poor areas of Canada, as in many areas of the developed and developing world, we are currently failing to meet the legitimate rights of local citizens.

There are many reasons for this failure and it is easy to place responsibility exclusively on the lack of resources necessary to support high quality educational systems. But there is more than funding at issue here. Expenditures on education First Nations generally are equal or greater than the average cost of all Canadian schools. Everyone in this room knows that
delivering education programming in isolated areas is expensive. But even if you spend equivalent amounts of funding as urban schools, you are not guaranteed of provision of a high quality learning experience for all students.

If it is not tolerable to continue to support a system from a system that cannot provide opportunities and access to its citizens, what do we do?

I am extremely hesitant to prescribe a list of activities with any promise of success at meeting the challenges in Africa, given my lack of knowledge and understanding of the African context. I will, however, provide some tentative suggestions from my background and experiences as a distance educator and as an educational technologist.

Fundamentally, we need new types of higher education models. The old model of providing expensive residential education for small elite numbers of the population has not worked in developed countries and is even less likely to work in developing countries. We need new models, new ideas, new technologies and new visions to allow learners to actively participate in the creation of their own education opportunities. In this presentation I want to talk about three alternatives to the status quo - two of which you are familiar with and probably practicing and the third provides an invitation to leapfrog concerns with institutional learning and begin to think of radically new models of lifelong learning production and provision.

Community-based education systems:

Education should grow from the interests of local people and the interests generated within those communities (Tett, Crowler and O’Hara, 2003)

John Dewey (1915) pointed out that engagement with geographic spaces that we inhabit as ‘place-based education’ is critically important for effective and engaged learning. He noted that “Experience [outside the school] has its geographical aspect, its artistic and its literary, its scientific and its historical sides. All studies arise from aspects of the one earth and the one life lived upon it” (p. 91). This means that we need to develop educational opportunity that does not focus on curricular needs imported from outside our communities. Every community on the earth faces a unique set of opportunities and constraints. By focusing our education on identifying and exploiting our opportunities and reducing our barriers, and most importantly allowing local communities of parents, learners and leaders to involve themselves directly in the provision of education, we endow education with authenticity and meaning that is crucial for engagement and relevance.

Joseph Kisanji (1998) moves definitions of inclusion beyond formal education to refer to “indigenous customary education” which he views as “social processes that goes on both within and outside of formal education system. He notes the aesthetic challenges of providing formal education in developing countries and the need to value the way that people learn – in the absence or in addition to the opportunity to attend formal education. Indigenous customary education takes learning away from individual content action to social opportunity to validate, test, reinforce and change each other. In the process social capital is gained by individuals and groups allowing them to define and create their own futures, rather than being controlled and constrained by the oppressive constraints of powerful elites and minorities. Indigenous education is undifferentiated in terms of time and space (like lifelong learning), is community-based, is relevant, functional and practical (Kisanji, 1998).

I have recently been involved in an evaluation of the KHIS school system that delivers online high school education to six remote communities in northern Ontario. These schools enroll learners who have not been successful at the disruptive experience of leaving their homes and boarding in ‘white’ communities hundreds of kilometers to the south. When these students fail in this model, due to a host of family, personal and academic reasons they are returned to
their communities with no vocational skills, little opportunity and exposure to huge problems related to substance abuse and suicide. KHIS operates from a community perspective. Local communities determine the teachers, the schedules, learning technologies employed and the schedule of study. But KHIS is challenged to provide a full curriculum for very small groups of students, thus they employ Internet technologies that allow a trained teacher, who lives in one of the communities, to reach out and instruct groups of students in each of the other six communities. In the process learners gain study mates in far off communities and begin to build a sense of themselves as members of larger and more powerful social communities. KHIS is an example of a First Nations education system that is appropriating information and communications technology as integral parts of the curriculum and of the tools of learning. Their use of the technology is rooted in traditional values that guide all components of the program. In Canada we use Internet technologies but the pioneering efforts throughout Africa using Interactive Radio (Siacwena & Lubinda, 2008), demonstrate that dedicated communities can work with funders and governments to provide community-based education.

Community schooling also recognises that knowledge is contextualised by the community in which it is developed and grown. A 2007 study of innovative and successful First Nations Schools across Canada, researchers noted two key characteristics of the approach to curriculum content studied. This curriculum must:

- encourage students to be aware of and feel responsible for the lands their ancestors have occupied and
- better prepare and encourage the students for employment opportunities that exist within Indigenous territories and beyond (O'Connor, 2007).

Community schools are driven and energised by those with the most interest in their success – often the parents of the students.

Community-based schools are not only an artifact of developing countries. Rather in the UK, USA and Canada we are challenging ourselves to invent and find models of formal education and schooling to be inclusive of all learners – even those struggling with the challenges of poverty, addictions and poor family circumstances. We see examples of “alternative schools” that are driven by curriculum that stresses productive engagement with local land, fauna, communities and traditions. These translate into learning activities such as climate study and monitoring, field studies, cataloging, photo and video of natural flora and fauna, tours and reviews of local business, creation of web resources, preservation of native languages and many other locally relevant focuses for curriculum and learning. I have been impressed with Stephen Heppell’s NotSchool program that serves children who have been excluded through a computer-mediated learning environment. The UK’s Angela Ruskin University also offers a BA (Hons) Learning, Technology and Research that is entirely online, highly interactive but that focuses on learning about and action research in the workplace where one is employed. Thus, the first path forward involves re-energising communities to avail themselves of the resources available—whether plentiful or scarce they may be, is to create their own schools and in the process, generate, validate and grow their local indigenous understandings of today’s and tomorrow’s worlds.

Of particular relevance to this audience of distance educators is the need for us to recognise and support emerging (and often struggling) community schools.

Curan and Murphy’s now slightly dated 1992 assessment of community schools in Africa noted system’s strength capacity “to work with able students and being starved of resources, yet students do learn. p. 21”.

Their recommendations for effective community schools include:
Opportunity to meet daily in buildings equipped for education, study good quality printed materials, listen to instructional radio, benefit from the guidance of trained people, receive general supervision from a prestigious distance education institution, and benefit from significant community involvement. (Curran & Murphy, 1992)

These recommendations have been followed and Richard Siaciwena & Foster Lubinda 2008 report in 2008 that in Zambia alone there are over 1,000 IRI community-based schools, with many other schools using IRI programming to enhance teacher-led programs. They also note that distance education schools “enable learners to initiate and restart basic education, giving learners a second chance to pursue basic education” and that has long inspired distance educators and is a basic right.

Note the role of distance educators in training community leaders to manage and teach in these schools and to be the “prestigious distance education institutes” that not only supervise but support and encourage.

The next path takes us on more familiar ground as we view the accomplishments of many of you at this conference and of others around the world who are using the technology and the techniques of distance education to create affordable, thereby inclusive forms of learning and education.

The Economy and quality of distance education

The second solution builds on global experience and expertise of distance and open education over the past 50 years. It builds on proven collective models for mass production of education and adds an element of market and open source-driven reform that includes for new partnerships between private enterprise and public institutions so as to radically improve access and participation.

There has been much talk around the world about the provocative challenges of Harvard Business school professor C. K. Prahalad who argues that we should “stop thinking of the poor as victims or as a burden and start recognizing them as resilient and creative entrepreneurs and value-conscious consumers” (Prahalad, 2004). Prahalad’s data and conclusions have been criticized as simplistic, create and far too optimistic, but as Karnani (2007) notes there are two viable and acceptable solutions for reducing the burden of high costs of education (and other goods and services) to the poor.

The first of these is to reduce the cost of service while retaining quality. Open universities, using distance education technologies, have demonstrated over the past 40 years that this is an achievable goal (Daniel, 1996). Perraton (2000) lists costs of open universities around the globe that range from 15-40% of costs of traditional university (p. 132). This is especially true in Asia where the number of open universities has increased very dramatically with numbers of graduates (most of whom pay significant portion of the costs of that education) measured in the millions. These learners would not have achieved these education standards if governments had waited for funding necessary to expand traditional models of higher education. Distance education very significantly lowers the barriers to entry to formal education provision. Infrastructure costs including buildings, classroom, registrars and offices are greatly reduced. Moreover, the costs of production associated with first generation DE are also tumbling as evidenced by outsourcing of editing and printing by net-based services and through use and reuse of open educational resources (OERs).

In Canada, my own University, Athabasca University’s Open University received approximately $18 million, or about 34% of its total revenue, from provincial government
operating grants. A similarly sized traditional campus-based university, The University of Lethbridge, received about 54% of its total revenue from government grants during the same period. Moreover, even with nearly 40% less funding from the government, Lethbridge has experienced growth rates of 3% compared to Athabasca’s 20% compounded growth (Annand, 2006).

I would also like you to note the struggles and success of the Western Governors’ University that was established on a competency model for higher education. Each course and program has detailed competencies that must be acquired - they care little for time in residency, mode or model in which the learner acquired these competencies. Furthermore, “WGU receives no state support yet is able to dramatically with one of the lowest tuitions among online universities (approximately $5,000 per year for most undergraduate and graduate programs). (WGU Web site, 2008)

Thus, African educators are invited to continue harnessing the enhanced production tools of the industrial age to create and distribute educational content and to support student-student and student-teacher interaction. We know this is possible and we know that using techniques of mass production, expanding markets, advertising produce economies of scale and specialisation of labour, can reduce the cost of formal education to levels not possible under cottage production models associated with traditional education.

I commend you for your efforts in increasing inclusion through effective use of distance education. But rather than be compliant, always remember that we must do things differently tomorrow than we have done today as our expanding knowledge base of more effective pedagogy, new tools for production and distribution of educational content and increasing demands and expectations from learners does not allow us the luxury of complacency.

I am mindful of the existing challenges that distance educators face when considering the use of high tech digital and networked-based learning. I appreciated very much the opportunity to engage with African distance educators in the preconference that was held prior to this conference and distributed on an email list. My one (and only) claim to Networking fame is that I believe I organised the first international virtual conference, held in support of the International Council for Distance Education in 1992 (Anderson & Mason, 1993). Virtual or online conferences have now become mainstream and with increasing transportation cost and ecological awareness, continue to evolve as extremely cost effective means of building capacity amongst professionals in all fields. Siemens (Siemens, Tittenberger & Anderson, 2008). I hope that ACDE will continue to sponsor virtual conferences so that your collaborative work and sense of community can continue to grow, even when opportunities for face to face interaction become expensive.

However, online conferences and distance education rely on Internet technology may not be the most appropriate way for the immediate future in expanding access to learners in Africa. Leary and Berge (2007) point out that:

“the most successful DE programs take advantage of many of the external resources as possible, often meaning that the key to their success is that they are able to overcome cost barriers by serving the large population. Small DE programs, especially those that are ICT-intensive, struggle to succeed because of the existing barriers, especially those concerning cost and connectivity” (Leary & Z Berge, 2007)

However, I fear that embracing industrial models of production in distance education at the end of the industrial age will once again, confine Africa to subservience as new models of production and consumption evolve. Thus, we need to develop transitional strategies that
allow us to use, exploit, develop expertise and effective use of these technologies. By doing so we become critical consumers, able to effectively assess innovations and we become role models, mentors and champions for change. This brings us to the second of Karnani's solutions – that being to engage both rich and poor producers as well as consumers of services.

Produsage and peer-to-peer production/consumption

“You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete” - Buckminster Fuller, 1981

“Imagine a world in which every single person is free access to the sum of all human knowledge. That's what we're doing.” - Terry Foote, Wikipedia

The third pathway I want to discuss is to create opportunities that empower each of us, including the poor, to create skills, products, education and employment for themselves. These strategies challenge us to think outside the box of either cottage or industrial models. I know that for many these ideas will seem at best utopian and out of touch with the realities of life in Africa. Also realize that much of this third solution is dependent upon access to digital tools and networks.

To these critics my response is to acknowledge that Africa is behind the rest of the world in terms of connectivity to the Net, (connectivity averages 5.3% of the population versus a world average of 21.1% Internet World Stats, 2007) but the falling cost of both wireless networks and personal access machines, compels us to begin exploring the world of networked production and training ourselves to exploit a networked world, as it is created. Canada's famous hockey player Wayne Gretzky replied when asked how he manages to score so many goals: "I go to where the puck is going to be." Bootstrapping network use is challenging, but is it realistic to think that technologies that are being used to transform economies and societies in other regions of the world, will not impact life in Africa? Network connectivity is already available in urban areas and I believe it will be available in increasing speed throughout Africa in the next 10-20 years. Africa will develop its own techniques for exploiting technologies likely based initially on cell phones and very low cost portable computers. The New York Times reports “Seventy-five per cent of all phones in the least-developed African nations are cell-phones -- and usage in many places is increasing by 30 or 40 per cent per year.” (Jan 13 2008).

In this final section, I first argue for the role that distance educators can play in leading the development of networked forms of learning in Africa. The Intelligent Community Forum (2007) uses five Intelligent Community indicators as a conceptual framework for understanding the factors that determine how competitive a community will be in the emerging Digital Age:

- Broadband Infrastructure: Provision of broadband is opening (at least in urban areas) in Africa and there are significant projects underway such as the ESSAy fibre optic project. But let us, as educators, make an assumption that connectivity will be in place in Africa and it will likely occur within the working lives of most of us in this room.

- Knowledge Workforce: The second indicator is a knowledge workforce. Are we providing training, challenge and opportunity so that our employees become effective knowledge workers and most importantly leaders able to enable ourselves, other educators and communities to exploit the technologies they become accessible. The Distance Education Universities have an opportunity to lead not only in social and commercial learning applications of technologies, but as models for other tertiary and secondary education systems.
- Innovation: In North America universities the latest innovation is so called “blended learning” where traditional universities use the techniques and the tools of distance education to enhance campus-based learning. We can offer experience and advice to our colleagues at more traditional universities by demonstrating innovation solutions to common educational challenges. By doing so, we meet a secondary goal that all distance educators and graduates of distance education institutions struggle with—namely attaining respect and recognition among our traditional colleagues.

- Digital Democracy: No one is doing really well in engaging citizens in active and democratic control of our complex governments and economies. I see no reason why Africa cannot pioneer new methods of “intelligent community democracy” that we all can benefit from.

- Marketing: Nigeria has shown tremendous capacity to market globally using the Internet—though too often these are scams! Distance educators are challenged to think of new and cost effective ways to market their products and knowledge industries in general so as to take lead roles in the creation of intelligent communities. Fortunately, we have a great deal of experience marketing our courses and packages in ways that are accessible, affordable and inclusive. These skills be brought to bear as we take new technologies and mold them to meet our unique needs.

As educators we have both opportunity and responsibility to become role models for new modes of production. Thus, we begin to see ourselves as a new model of university organisation—not one built upon the individual discovery of new knowledge but rather as developers of resources that empower our communities through peer-to-peer production models. Bauwens (2005) describes peer-to-peer production as a new form of “human network-based organisation which rests upon the free participation of equipotent partners, engaged in the production of common resources, with the cost of production as key motivating factor, and not organised according to hierarchical methods of command and control”.

Axel Bruns (2008) has termed this type of distributed production, enabled by the Net as “produsage”.

“In produsage projects, the object of the communal effort is almost always as much the development of social structures to support and sustain the shared project as it is the development of that project itself.” And “content creation is an act of maintenance and construction (of both content and the social relationships among participants) at least as much as it is one of production” (Bruns, 2008).

Bauwens argues that these forms of peer production are a new and potentially revolutionary “mode of production”, neither profit-driven nor centrally planned, but as a decentralized cooperative way of producing software (free software and open source movements) and other immaterial products, based on the free cooperation of “equipotent” participants “(Bauwens, 2005). Von Hippel (2005) notes the economically revolutionary capacity of this type of production. “It offers great advantages over the manufacturer-centric innovation development systems that have been the mainstay of commerce for hundreds of years.”

Thus far, the success of produsage models has been most vividly in tools such as Wikipedia, the production of Open Source software and the emergence of entertainment and journalist products via blogs, and other social software-based communities. From an educational perspective, our expertise can be applied to produsage models based on the creation of Open Educational Resources (OERs).
Much has been written about and discussed at this conference in regard to OERs. Let me state categorically that this model of collaborative production is extremely important and one of the major sources of effective and inclusive knowledge production and exchange yet invented. Many authors have written about the potential of OER (Hylen, 2006), and few less about the challenges and especially about sustainability (Downes, 2006). I know from my own experience that we need to develop communities to focus on and reward (through a variety of mechanisms) the production and contribution of OERs to accessible repositories. However, this is not an easy task. It is much easier to build a repository for OERs to fill it with quality work and see its effective use and reuse. My friend Stephen Downes echoes producer sentiments when he argues that “The use of a learning resource, through adaptation and repurposing, becomes the production of another resource. Though there is a steady stream of new resources input into the network by volunteers this represents, not the result of an OER sustainability project, but the beginning of… (Downes, 2006).

This user-centered innovation process engages educators and students in the collaborative production of OERs. Users can develop and redevelop resources knowing the context for application and the cultural norms expected in its application. Further they do not have to develop all content by themselves but can use contents developed by others from around the world. Blended learning provides opportunity for DE organisations to emerge as ‘lead-users’. The modifications to existing products by these users have a high probability of being adopted by others (von Hippel, 2005). In this case the others are the traditional universities whose clients themselves are expecting high quality online resources to supplement and enhance their campus-based delivery.

Modifying existing and building new OER resources has potential to meet other institutional goals. As OER resources become public accessible, the knowledge of faculty members that has been restricted to discourse in the classroom becomes easily accessible to all on the Internet. This obviously fits with the desire of distance and open educators, but also serves as very powerful tool for faculty development. Exposure leads to accountability, (a stick) but also allows excellence to be displayed and regarded (carrot). Finally, von Hippel argues, organisations may wish to develop their own content because they “may value the process of innovating because of the enjoyment or learning it brings them.” p. 7.

One of the participants in the preconference comments that “Even in e-learning products, Africa tends to be comfortable with just consumption rather than production.” But what is most liberating about OER production is that it is not a case of producing or not producing. Rather through use, for adaptation to local context through sharing of the resulting product, we become produsers. One of the challenges faced by early developers of OERs including the Open University is the lack of evidence of effective use, modification and re-use. We need more users, and note I am not saying must be paying users or consumers, to justify everyone’s continued investment in OERs. We need, not only to produce learning content (as we have been trained as distance educators) but now we need to learn how to use, re-use and re-publish content so as to play our part in a responsible global learning environment.

Participating in OER as produsers does not mean “delivering everything on the net to our students”. It does mean being able to find and critically review OERs. To modify them so as to meet technical, cultural and educational needs of students and our communities. It means to repackage content in media formats that are affordable and accessible to students and as mentioned it requires from us the courage to repost these modified resources for the benefit of others.

Conclusion

The transformative potential of produsers and peer production herald a world that exploits the Net in much the same way that nescient banking systems, trading routes and
mercantile investment tools exploited the early stage of the industrial revolution. There is room, opportunity and desire to have Africa distance educators play a creative role in transforming and radically enhancing life on this continent and indeed throughout the world. We have a tradition and experience in supporting the development of community-based education. We have even more recent experience and considerable expertise at developing and delivering education, via distance that is accessible and affordable. We need to hone our skills at innovating and being open to pedagogical, technological and social forces at play in our distance education world. Our new challenge is to learn to use the emerging networks to create forms of production in which teachers and learners play active and integral roles as both consumers and producers. I trust and have faith that exploitation of all three of these pathways will lead to quality education and learning that is inclusive and available to every person on our spaceship Earth.

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THE CHALLENGE OF THE MILLENNIUM DEVELOPMENT GOALS: ROLE, POTENTIAL AND IMPACT OF OPEN AND DISTANCE LEARNING

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In 2008, we are now just over half way to the target date of 2015 set for the Millennium Declaration adopted by the UN in 2000. The Millennium Development Goals have become a universal framework for development, and a means for developing countries and their partners to work together in pursuit of a shared future for all. So, what progress have we made towards achieving these goals? At no other time has the world been so prosperous, our mortality rates been so low, and life expectancy so long. Never before have we achieved, on average, such levels of education. In contrast however, in absolute numbers, never before have so many people lived in such poverty, died from preventable diseases or needed and been denied access to education.

I have been asked to consider the role of Open Distance Learning in realising the Millennium Development Goals. Let us reconsider in broad terms, the challenges posed by the goals, which state that by 2015 we will:

- Eradicate extreme poverty and hunger;
- Achieve universal primary education;
- Promote gender equality and empower women;
- Reduce child mortality;
- Combat HIV/AIDS, malaria and other diseases;
- Improve maternal health;
- Ensure environmental sustainability; and
- Develop global partnerships for development.

The 2007 UN Millennium Development Goals Report suggests that we have achieved some gains, and that success is still possible in most of the world. However, this report also clearly identifies how much remains to be done. Case in some countries demonstrates that rapid and large-scale progress towards the MDGs is possible if it combines strong government leadership, good policies and practical strategies for scaling up public investments in vital areas that are supported by adequate financial and technical assistance from the international community.

Progress towards the Millennium Development Goals

The following are some measures of the progress that has been achieved:

- The proportion of people living in extreme poverty fell from nearly a third to less than one fifth between 1990 and 2004. If the trend is sustained, the MDG poverty reduction target will be met for the world as a whole and for most regions.
- The number of extremely poor people in sub-Saharan Africa has levelled off, and the poverty rate has declined by nearly six percentage points since 2000. Nevertheless, the region is not on track to reach the goal of halving poverty by half by 2015.
• Progress has been made in getting more children into school in the developing world. Enrolment in primary education grew from 80 per cent in 1991 to 88 per cent in 2005. Most of this progress has taken place since 1999.

• Women’s political participation has been growing but slowly. Even in countries where previously only men were allowed to stand for political election, women now have a seat in parliament.

• Child mortality has declined globally, and it is becoming clear that the right life-saving interventions are proving effective in reducing the number of deaths due to the main child killers – such as measles.

• Key interventions to control malaria have been expanded. The tuberculosis epidemic, finally, appears on the verge of decline, although progress is not fast enough to halve prevalence and death rates by 2015.

(United Nations Millennium Development Goals Report, 2007)

While much has been achieved, these results highlight how much remains to be done and how much more could be accomplished if all concerned honour their existing commitments. Currently, only one of the eight regional groups cited in the report is on track to achieve all the Millennium Development Goals. In contrast, projected shortfalls are most severe in sub-Saharan Africa.

However, impressive results have been achieved in sub-Saharan Africa in areas such as raising agricultural productivity (in Malawi, for example), boosting primary school enrolment (in Ghana, Kenya, Uganda and the United Republic of Tanzania), controlling malaria (in Niger, Togo, Zambia, Zanzibar), widening access to basic rural health services (in Zambia), reforesting areas on a large scale (in Niger), increasing access to water and sanitation (in Senegal and Uganda). The challenge lies in replicating and scaling up these successes.

The 2007 Millennium Development Goals Report highlights disparities within countries, where particular groups of the population – often living in rural areas, children of mothers with no formal education and the poorest households – are making insufficient progress to meet the targets, even in situations where the rest of the population is doing so. This is particularly evident in access to health services and education. In order to achieve the Millennium Development Goals, countries will need to mobilise additional resources and target public investments that benefit the poor.

‘We will have time to reach the Millennium Development Goals worldwide and in most, or even all, individual countries – but only if we break with business as usual.

We cannot win overnight. Success will require sustained action across the entire decade between now and the deadline. It takes time to train teachers, nurses and engineers; to build the roads, schools and hospitals; to grow small and large businesses able to create the jobs and income needed. So we must start now to double global development assistance over the next few years and ensure that this will help to achieve the Goals.’

United Nations Secretary-General

The role and contribution of Open and Distance Learning

What contribution has ODL made to these achievements and how else may ODL assist countries in rapid and scalable development?
Quite clearly ODL practices have a clear and substantial contribution to make to achieving universal primary education. ODL techniques can be used effectively and at scale to provide education to distributed communities in a cost-effective and efficient way. Similarly, there are clear contributions that can be made by ODL in educating communities about hygiene and health, in matters of agricultural sustainability, environmental development practices and disease prevention. And of course, by using ODL approaches the number of teachers and health workers, agricultural and environmental experts who can be educated and trained can be increased significantly above the numbers who could be trained using conventional educational methods. ODL can ramp up the numbers of trained professionals in areas of need without the need for expensive investment in bricks and mortar institutions. For example if you consider that only 63% of children who enrol, complete their primary schooling, the scale of the challenge of upskilling, training and educating the professionals who will contribute to progress is daunting.

The Open University was a pioneer in the field of open and distance learning. Since its inception nearly forty years ago it has opened doors to more than 2 million people achieving more than 300,000 degrees. Throughout the time it has led technological advances that support learning and education and currently 200,000 people study with the OU. The OU has helped to establish other ‘open’ universities around the world and these have grown at a remarkable rate.

When the OU was first established in 1969 its original mission was explicitly one of democratising education. At the time there was a huge pool of UK adults who had been unable to access higher education and these were identified by the government of time as an underdeveloped national resource. Advocates for open distance learning, a new kind of ‘university of the air’, argued that such an approach could open up the benefits of university education to a much wider range of the population. Distance education and its predecessor, correspondence education have provided many women with their only chance to learn when other educational opportunities were inaccessible.

Some examples
Education and Teacher Training

There is a long standing and widely supported recognition that teachers are a vital part of society. However, the situation of teachers in many parts of sub-Saharan Africa has suffered significantly from the economic and social problems that have affected the continent. The scale of need for teachers is daunting. Successive reports have identified the large numbers of unqualified teachers and the difficulties associated with attracting new recruits. Specifically, two factors appear to be impacting on the teaching profession in sub-Saharan Africa countries. The decline in teachers’ salaries relative to other comparable professions is well documented. Emergent knowledge economies offer alternative employment for those who provide the traditional pool of primary teachers. In addition, HIV/AIDS is impacting on the existing and potential teaching workforce. In 2000, UNICEF estimated that nearly one million children a year lose their teacher to AIDS. In Zambia, HIV/AIDS claims the lives of 2000 teachers a year – more than the output of teacher training colleges. The teacher shortage is so great that it has been declared a national emergency and people are recruited from across public sectors to fill immediate gaps. The most recent UNESCO monitoring report published this year reports that an additional 4 million teachers will be needed within the decade.

Teachers are a critical part of the global commitment to provide universal basic education by 2015. Millions of additional teachers are required. Qualified teachers currently comprise half of all primary teachers, and the quality of education is being compromised by the problems around teachers. The TESSA program was designed to address these challenges and focuses on access to, and the quality of education and training for teachers. In doing this, it exploits the new technologies that Nelson Mandela acknowledged more than a decade ago.
TESSA currently involves 9 countries in Africa, comprises 13 universities and 5 other international organisations.

TESSA’s key purpose is to create an Africa-wide consortium to improve access to, and raise the quality of, all aspects of teacher education. To achieve this, the TESSA consortium has developed an extensive range of high quality, multilingual open educational resources (OERs) and systems. The resources are designed for all teachers, including those teachers who have little or no formal training. The program includes an extensive range of audio and text materials (online and print) covering the core areas of primary, basic education teaching; these open educational resources are free to adapt and share with TESSA community, extend to 750 sections of study and include 2250 classroom-based activities for teachers.

The Digital Education Enhancement Project (DEEP) worked with teachers for more than five years to improve the teaching of literacy, numeracy and science through the use of mobile communication technologies. DEEP investigated the use of new technologies in primary schools in the Eastern Cape Province of South Africa and in Cairo, Egypt. Many of the schools involved serve greatly disadvantaged communities. Where technical support was scarce, teachers adopted communities of support to collaboratively solve problems, a fact the researchers have attributed largely to the high levels of motivation felt by the teachers.

Health Care and Education

Generally, across sub-Saharan Africa, health delivery systems are characterised by shortage, inadequate distribution and lack of necessary skills in its human resources for health. HIV/AIDS is threatening the workforce across various dimensions, increasing the workload and skill demands on health workers as health facilities are overwhelmed by patients and health professionals are themselves affected by the virus. There is an urgent need for improvements in the performance of the health system, including significant strengthening of human resources for health.

Many of the health problems faced by people living in rural areas are related to lack of adequate health education and prevention services. Health extension workers can be trained to deliver immunisation and basic health education on hygiene and safe disposal of waste, reproductive health and HIV prevention and containment in training traditional birth attendants to enhance their skills in assisting in deliveries and extend their education to take on other responsibilities could make a significant impact on the high infant, child and maternal mortality rates.

The Health Education and Training (HEAT) in Africa program builds on the TESSA model to deliver student-focused health-care education and training for a range of different health care professionals across Africa – particularly those in shortage specialities and under-resourced rural areas. It is designed to maximise learning in the workplace for pre and in-service practitioners.

The Christian Medical College in Vellore, South India runs a highly successful ODL course that trains rural physicians to manage patients with HIV/AIDS and to establish new services. This has supported a shift towards clinical care and treatment to the on-going focus on prevention of HIV/AIDS. The course aims to improve the skills and knowledge of physicians in HIV care and improve availability, accessibility and quality of such care at the secondary hospital level. A distance learning centre has been set up in Vellore that runs courses in family medicine. This provides an effective means of delivering ODL to healthcare capacity building and the provision of treatment and service. This course has now been extended to Delhi and Kolkata. In Bangladesh, the OU has contributed to distance learning courses developed by the Diabetes Association of Bangladesh that educate and train physicians in remote areas in treatment and care of diabetes.
Distance learning methods can be used to teach clinical problem solving in a distributed learning environment. To date we have only limited examples of proven, sustainable and generalisable models of ethical, cost-effective and context-relevant upscaling in health care education in Africa. A proposed distance learning medical school in Ethiopia seeks to provide a mechanism for cost effective and quality assured scaling up in the production of doctors for the local health care system.

Economics
Microfinance is recognised as an effective development intervention in enhancing access to financial services for low-income and poverty-level individuals. While there is great demand for microfinance services, the main constraint to a lack of funds but a lack of capacity in operating a sustainable institution. The Training of Trainers on Microfinance course developed by The Asian Development Bank Institute (ADBI), the World Bank Tokyo Development Learning Centre (TDLC), and the United Nations Capital Development Fund, launched in 2005 offers localised capacity building program in microfinance. This is an area that has already had a positive impact on household budgets and quality of life for millions of people in developing countries. This program is an attempt to address the gap between the large demand and limited supply of microfinance services and expertise. Courses have been carried out at distance learning centres in more than thirteen Asian countries and made available to distributed participants around the world including Africa. Using a blended approach, combining self-paced study using interactive digital materials, online tutoring, some face to face activities where expertise is available, videoconference sessions at a local GDLN (Global Development Learning Network) centre or live webcast, and an e-discussion forum moderated by experts.

Challenges
- Issues of scalability and sustainability require us to develop smarter systems for working at scale, open learning can assist but not be attempting to replicate campus-based courses. What is needed are new forms of curriculum, and different pedagogies.
- We need to be more clever and creative about the ways in which we embed new technologies. This should be done progressively, rather than thinking of it as a process of adding more, it should be one of changing and adapting, integrating new technologies where they allow us to do something better or in ways that were not previously possible.
- We need to develop and prove generalisable models of education and training delivery. It is not sustainable to develop customised models for each environment whether geographic or professional. By looking at the context and what has worked it is possible to develop simple generalisable models that can be replicated and applied in a variety of contexts.
- Cost-effectiveness is a key criterion affecting sustainability and uptake of any approach and we should be willing to build on models that have demonstrated proven success.
- There is substantial evidence that one of the key factors in ensuring sustainability relates to policy – small-scale, ‘owned’ innovation at community level may be more agile and responsive and appear to engender more ownership but well designed national projects that seek to embed change have been remarkably successful at generating change at scale. It seems that what is needed is a blend of approach allowing local ownership and decision making within a centrally designed and supported framework.
Where many divides and disparities already exist, what is the role for new technologies where they may further isolate and exclude those living in remote and isolated communities? Serious questions of equity arise.

Open and Distance Learning and the future

What is critical are issues of scalability and sustainability of any ODL initiatives. ODL can provide a realistic strategy for addressing issues of education, capacity building, and health care but it is not the only solution and will not address the challenges on its own. Distance Learning can be an ideal educational approach in situations where practitioners are committed to existing heavy workloads, live in geographically distributed areas and are unable to travel to study centres or take time off work to attend training courses. There are real advantages that can accrue from embedding learning in the workplace, whether it’s for in-service training or practitioners or the initial education and training of health care and education professionals.

If we are to successfully scale up, taking successful programs or policies and adapt and sustain them across different locations and time, we need to have a solid evidence base. We need to know what does and doesn’t work, and what conditions. We have to recognise that we need different approaches to curriculum design where we begin with practice and allow theory to follow. Designers of open learning have serious responsibility for curriculum design that recognises the realities of situations in which learners are living and working and the urgency of the need for training in what matters now.

Existing bricks and mortar universities will not be able to meet the educational needs of the 21st century. Professional education and training for teachers, healthcare workers and other professionals will increasingly occur in the workplace. Workplace-based education and training will need to be practice-based and focused on improving the day-to-day work of the learner involved, it cannot mimic the slow pace of a conventional on-campus university degree.

It is not my intention to argue a case for either print-based ODL or the increasing use of new technologies. Certainly a print-based approach has the capacity for greater reach at potentially lower costs but we should not ignore the possibilities offered by ICT and the critical role that these play in building the skill and capabilities necessary to operate successfully in a global environment. The increasing availability of Open Education Resources (OER) provides abundance of course and subject materials on which ODL programs can be based. We must develop approaches to exploit these resources.

New technologies and new forms of communication offer more than a glimmer of hope, they have the potential to transform professional learning and there is a need for a greater recognition of the urgency of this by policy makers. Science, our ingenuity, imagination have brought us to a place where we have other means to deliver and support education. Cyber mules in Venezuela take laptops and projectors into remote mountain schools while the Digital Study Hall project in India distributes DVD via motorbike. We must learn to share our knowledge, technology and insights into learning to ensure that we do reach the people who need an education that is relevant to their needs and the world of today. For it is education that powers sustainable development, assists in preventing and treating disease, and is fundamental to the continuation of our planet.

In developing countries, but also increasingly in developed countries, technology has undoubtedly been a major cause of the dramatic change in the education landscape. The Internet on its own has been dramatic, but as technologies have developed we now live in a world where merchants in Zambia use mobile phones for banking; farmers in Senegal use them to monitor processes; health workers in South Africa use them to update health records while visiting patients. We realise that it is the mobile phone that now seems most likely to carry the dream of the personal computer to its conclusion. (The Economist July 29, 2006)
We should not forget the strength of the human spirit and will to improve the human condition. Open and Distance Learning approaches provide clear direction and strategies that we can employ to deliver the education and training that will empower people to improve their condition. Government social policies play a critical role in the eradication of poverty - we need to maintain the pressure on governments to implement policies of social investment that support greater access to education and change contexts to support more training and education in areas of need. But we need more than an increase in investment – we must be sure that we are improving the quality of performance – of teaching, of health care and all forms of professional practice across the board, and pockets of exclusion are eradicated.

Bibliography


Abstract

In the light of ever-changing social and economic demands, education is now perceived as a critical force in contributing toward human capital development. In Southeast Asia, the ever-increasing demand for higher education, coupled with numerous educational reforms in a number of countries, has resulted in the establishment of several open and distance learning (ODL) institutions. Through ODL, higher education in Southeast Asia is expected to experience new advancements with the collective aim of increasing the capacity for human capital development. This paper provides a snapshot of the Southeast Asian economic scenario and how higher education and ODL will shape and influence the region's ability to compete at a global level. The paper also discusses the prospects for South-South collaboration between Southeast Asian and African ODL institutions.
Introduction

It is indeed a great pleasure and honour for me to be given the opportunity to be a lead speaker at this august conference. Let me therefore thank the organisers, especially Professor Olugbemiro Jegede, the Vice Chancellor of the National Open University of Nigeria for making this possible. The topic I am to discuss is “Open and Distance Learning for Sustainable Development: the Southeast Asian Experience.” I will present an overview of the role of open and distance learning or ODL institutions in enhancing the economic development of the ten nations that make up the Southeast Asian Region.

I would like to begin by citing the three pillars of human development as proposed by the United Nations Development Programme (UNDP). These are economic growth, social development and environmental protection. Among the rights and privileges safeguarded under the UN and UNDP specifically, such as peace, poverty alleviation and cultural diversity, these three pillars also encompass education as a means of forging and bolstering economic progress in the era of globalisation. At this point in time, we all know that ODL institutions have made great strides in contributing towards regional and global human capital development. Education, the hallmark of a nation’s progress and prosperity, when given the right focus and appropriate policies by the government, will certainly alleviate poverty and uplift the quality of life in any given society. In this context, we certainly believe that ODL has a very significant role to play in reaching the masses.

The Southeast Asian region

Southeast Asia (SEA) consists of ten countries as reflected by the member states in the Association of Southeast Asian Nations (ASEAN) – Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam.

Figure 1: The Ten Southeast Asian Countries
With a total land area of almost 4.5 million square kilometres or 3.3% of the total world land area, SEA has a combined population of 565 million or 8.6% of the world’s population. In terms of output, the combined gross domestic product (GDP), at current prices of the Southeast Asian countries in 2006 is almost USD1.1 trillion or 2.2% of the world’s total (Table 1). Except for Singapore and Brunei Darussalam which are categorised as developed economies (based on their respective GDPs per capita), the rest of the countries in the region are considered developing nations. Notwithstanding that, one of the distinguishing characteristics of this region is its fast growing economies. In 2006, the growth rate in GDP at constant prices ranged from 5.1% (Brunei Darussalam) to 10.8% (Cambodia), giving an average regional growth rate of 6.0% (Table 1).

Table 1: Gross Domestic Product by Country

<table>
<thead>
<tr>
<th>Country</th>
<th>Gross Domestic Product (GDP) in 2006</th>
<th>Growth Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brunei Darussalam</td>
<td>11,551.0</td>
<td>5.1</td>
</tr>
<tr>
<td>Cambodia</td>
<td>7,256.5</td>
<td>10.8</td>
</tr>
<tr>
<td>Indonesia</td>
<td>364,400.1</td>
<td>5.5</td>
</tr>
<tr>
<td>Laos</td>
<td>3,521.8</td>
<td>8.3</td>
</tr>
<tr>
<td>Malaysia</td>
<td>156,924.2</td>
<td>5.9</td>
</tr>
<tr>
<td>Myanmar</td>
<td>11,950.3</td>
<td>7.0</td>
</tr>
<tr>
<td>The Philippines</td>
<td>118,083.0</td>
<td>5.3</td>
</tr>
<tr>
<td>Singapore</td>
<td>132,273.4</td>
<td>7.9</td>
</tr>
<tr>
<td>Thailand</td>
<td>206,645.1</td>
<td>5.0</td>
</tr>
<tr>
<td>Vietnam</td>
<td>60,965.2</td>
<td>8.2</td>
</tr>
<tr>
<td>Combined value in SEA(USD in million)</td>
<td>1,073,570.5</td>
<td>(2.2% of world total)</td>
</tr>
<tr>
<td>Average value in SEA(%)</td>
<td></td>
<td>6.0</td>
</tr>
<tr>
<td>Combined value in World (USD in million)</td>
<td>48,244,879.0</td>
<td></td>
</tr>
</tbody>
</table>

Sources:
Selected basic ASEAN indicators, as of 25 February 2008;
Selected key ASEAN macroeconomic indicators, 25 February 2008; and
World Development Indicators database, World Bank, as of 1 July 2007.

As indicated earlier, one of the pillars of socioeconomic development of any region is its human capital development. Closely related to this is the development of higher education and its perceived role in the overall development of a nation. Higher education as we know it is critical in providing the necessary human intellectual input to transform a nation or region into a knowledge-based and innovation-led society. In this regard, the Southeast Asian region is no exception. In 2006, the region spent 3.5% of its combined GDP on education (Table 2).

Despite the diversity in higher education systems across the region, almost all Southeast Asian countries face similar constraints and challenges. Higher education in these countries generally continues to be under-funded despite the increasing demand for access as the result of expanding youth population and rising expectations. The quality of university education and graduate unemployment have also become important issues in a number of countries. A decade after the 1997 Asian economic crisis, the higher education sector in SEA is still experiencing reforms in areas of state funding, private sector involvement, academic leadership, governance and curriculum development. We can only hope that these
Restructuring efforts will be geared towards a higher level of human capital development to be harnessed within a sustainable and equitable framework.

Table 2: GDP Expenditure on Education by Country in 2006

<table>
<thead>
<tr>
<th>Country</th>
<th>Education Budget (USD in million)</th>
<th>Percent of GDP (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brunei Darussalam</td>
<td>346.8</td>
<td>5.9</td>
</tr>
<tr>
<td>Cambodia</td>
<td>110.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Indonesia</td>
<td>418.0</td>
<td>1.3</td>
</tr>
<tr>
<td>Laos</td>
<td>69.9</td>
<td>2.5</td>
</tr>
<tr>
<td>Malaysia</td>
<td>7,088.4</td>
<td>5.4</td>
</tr>
<tr>
<td>Myanmar</td>
<td>97.0</td>
<td>1.3</td>
</tr>
<tr>
<td>The Philippines</td>
<td>2,203.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Singapore</td>
<td>4,553.7</td>
<td>3.9</td>
</tr>
<tr>
<td>Thailand</td>
<td>6,423.7</td>
<td>3.9</td>
</tr>
<tr>
<td>Vietnam</td>
<td>2,602.0</td>
<td>5.9</td>
</tr>
<tr>
<td>Average value</td>
<td>2,391.3</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Source: Southeast Asian Education Data, SEAMEO, as of 26 March 2007.

Higher education and ODL in SEA

Although highly diverse in history, politics, culture, and socio-economic development, SEA countries nevertheless share a common aspiration as education and human capital development are concerned. It is only in the past several decades, and after obtaining independence, that Southeast Asian countries have witnessed a rapid expansion of higher education (Lee, 2006). Each country in the region actively reforming its higher education system to expedite its own respective economic development. And the good news for us is that many countries have targeted ODL as an important instrument to achieve this goal.

Thailand was the very first nation to establish an open admissions university, Ramkhamhaeng University, in 1971 (Jung and Latchem, 2007). Since the 1980s, ODL institutions in the region have grown in numbers and stature, some of which have attained “mega university” status as indicated in Table 3. Asian countries boast the highest number of ODL institutions and learners than any other region in the world (Jung and Latchem, 2007).

Table 3: Open Universities in Southeast Asia by Country

<table>
<thead>
<tr>
<th>Country</th>
<th>Open University</th>
<th>Year of Establishment</th>
<th>Learner Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>Universitas Terbuka Indonesia</td>
<td>1984</td>
<td>400,000 (1)</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1. Open University Malaysia</td>
<td>2000</td>
<td>67,000 (2)</td>
</tr>
<tr>
<td></td>
<td>2. Wawasan Open University</td>
<td>2007</td>
<td>2,000 (3)</td>
</tr>
<tr>
<td>Myanmar</td>
<td>University of Distance Education</td>
<td>1992</td>
<td>200,000 (4)</td>
</tr>
<tr>
<td>Philippines</td>
<td>The University of Philippines Open University</td>
<td>1995</td>
<td>n/a (5)</td>
</tr>
<tr>
<td>Thailand</td>
<td>1. Ramkhamhaeng University</td>
<td>1971</td>
<td>600,000 (6)</td>
</tr>
<tr>
<td></td>
<td>2. Sukhothai Thammathirat Open University</td>
<td>1978</td>
<td>192,000 (7)</td>
</tr>
<tr>
<td>Vietnam</td>
<td>1. Ho Chi Minh City Open University</td>
<td>1993</td>
<td>10,500 (8)</td>
</tr>
<tr>
<td></td>
<td>2. Hanoi Open University</td>
<td>1993</td>
<td>46,000 (9)</td>
</tr>
</tbody>
</table>

(1) 2007; (2) 2008; (3) 2008 (Estimated); (4) 1998-99; n/a; (6) 2007; (7) 2007; (8) 2006; (9) 2007
The evolution of ODL in the region varies; based on the domestic conditions of each country, such as geography, size, demography, economic development and national policies on higher education. I shall now look into several aspects of ODL approaches in SEA, i.e. operating models; pedagogy and modes of delivery; technologies for ODL; academic-related matters; target groups; and quality assurance.

Operating Models

ODL institutions or open universities in SEA generally operate as public or private entities, though the involvement of the private sector is a relatively new phenomenon for countries like Singapore, Malaysia, Thailand and Vietnam (Lee, 2006). The most pronounced difference between public and private education providers, including ODL-based, is in terms of governance and financial management. Public-owned institutions, such as the University of the Philippines Open University, Thailand’s Sukhothai Thammathirat Open University (STOU) and Indonesia’s Universitas Terbuka (UT), are established and operated with state funding. On the other hand, private institutions, such as OUM and Wawasan Open University in Malaysia, may receive initial federal grants and subsidies, but are otherwise self-sustaining in terms of revenue generation. Common trends in private institutions include a preference for full-fee paying students, seeking research grants and consultancy, franchising programmes and also investing in other business ventures (cited in Lee, 2006). Tuition fees in private ODL institutions are generally higher than those of public institutions given that the latter are sufficiently subsidised.

In terms of governance and management, public universities operate under rules and regulations which are applicable to government departments or agencies. Hence, processes which relate to student admissions, delivery modes, research activities, accreditation and programme approval will be subject to the relevant Ministry’s approval. However, under the prevailing changes in the higher education sector, some governments are accepting the need for greater empowerment for university management while at the same time emphasising accountability.

Pedagogy and Modes of Delivery

Most ODL institutions in SEA use a combination of online learning, face to face tutorials and self-managed learning. However, the usage may significantly, depending on the levels of technology available in a particular country. A simple illustration of this fact is internet penetration. By the end of 2007, Malaysia and Singapore are in the lead at 60.0% and 53.2% respectively, whereas Indonesia and Myanmar were behind at 8.5% and 0.6% respectively (Table 4). Clearly, the internet and complementing technologies are a key element in ODL. Where technology is lacking, these institutions will have little choice but to utilise other modes of learning. For instance, due to restricted internet access and usage in Indonesia, UT resorts to print materials as their teaching and learning medium. Recorded and broadcast materials are also higher on the list as compared to internet-based material. On the other hand, in Malaysia, where internet access is relatively better, OUM learners for instance rely mainly on the online learning aspect of its blended pedagogy.
Table 4: Internet Penetration in Southeast Asia in 2007

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of Users</th>
<th>Penetration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brunei Darussalam</td>
<td>176,029</td>
<td>47.0</td>
</tr>
<tr>
<td>Cambodia</td>
<td>44,000</td>
<td>0.3</td>
</tr>
<tr>
<td>Indonesia</td>
<td>20,000,000</td>
<td>8.5</td>
</tr>
<tr>
<td>Laos</td>
<td>25,000</td>
<td>0.4</td>
</tr>
<tr>
<td>Malaysia</td>
<td>14,904,000</td>
<td>60.0</td>
</tr>
<tr>
<td>Myanmar</td>
<td>300,000</td>
<td>0.6</td>
</tr>
<tr>
<td>The Philippines</td>
<td>14,000,000</td>
<td>15.4</td>
</tr>
<tr>
<td>Singapore</td>
<td>2,421,800</td>
<td>53.2</td>
</tr>
<tr>
<td>Thailand</td>
<td>8,465,800</td>
<td>13.0</td>
</tr>
<tr>
<td>Vietnam</td>
<td>18,226,701</td>
<td>21.4</td>
</tr>
</tbody>
</table>

Source: Internet World Stats

Technologies for ODL

As asserted by Louw and Engelbrecht (2006), the selection of information and communication technology (ICT) media for ODL is influenced by four indicators, i.e. cost, accessibility, pedagogy and ICT-related issues. Under these circumstances, the availability and use of the said technologies again vary in different Southeast Asian countries. Due to the expansive geography of the Indonesian archipelago, UT places high importance on the use of audio and video cassettes, radio and television programmes to deliver its content. As a comparison, STOU relies on textbooks and workbooks as its main media, and supplements these with radio, television and satellite programmes, computer-assisted learning, audio and video on demand, online learning and tutorials. Other technologies being used and explored in SEA also include audio and video conferencing (synchronous communication) and mobile telephony (for asynchronous delivery).

An important technological component in ODL is the use of a Learning Management System (LMS). OUM operates an internally-developed system called myLMS that serves as a virtual classroom allowing learners to download learning materials and participate in synchronous (i.e. chat) and asynchronous forums. E-testing is also another technological application being explored. At UT, online examination as a form of e-testing was first piloted in 2005 for seventy of its courses. Its use is expected to expand as UT has found that this form of assessment can be conducted without compromising the credibility and integrity of the examination process. E-testing has also been implemented at Ramkhamhaeng University (Jung, 2005).

Academic-related Matters

The general academic components in different ODL institutions in Southeast Asia are also quite variable. To illustrate this, I shall offer an insight into the practices of UT and OUM.

UT, for example, currently offers nearly 900 courses from their five faculties. The number of credit hours per programme averages at approximately 140. The academic calendar is spread out over two yearly semesters, each lasting approximately 16 weeks. However, UT welcomes registration at any point in a particular year. Most other Southeast Asian ODL institutions also operate on a two-semester system. UT caters to an average of 250,000 students every semester, spread out over 37 learning centres throughout Indonesia as well as those outside the country. While tutorials are not compulsory, students have the freedom to choose from four types of tutorials; namely face-to-face tutorials, tutorials via radio, television and
mass media, online tutorials and online counselling. In terms of assessment, UT students are graded based on their assignments and final examination results.

At OUM, 51 programmes are offered by five faculties and the Centre of Graduate Studies. OUM’s academic year is spread out over three semesters beginning in January, May and September. With a total enrolment of over 67,000, each semester is made up of about 30,000 learners. OUM has 61 learning centres in Malaysia as well as three outside the country, i.e. in Yemen, Bahrain and Indonesia. The blended pedagogy practised at OUM applies to all programmes. All learners are required to participate in online learning, face-to-face tutorials that are held once every two weeks, and self-managed learning using the many different types of modules and learning materials. Learners are evaluated based on continuous assessment (online participation, tests, assignments and mid-term examinations) and final examinations.

Of course, there are other variations as well. For instance, Ramkhamhaeng University also operates on a two-semester system, but includes a compulsory summer session from April to May every year. Where in OUM there is an average requirement of three subjects per semester, Ramkhamhaeng University students have a minimum limit whatsoever. These differences clearly indicate that the operations of ODL institutions in SEA are influenced by common practices and local conditions in a particular country.

Target Groups

Southeast Asian ODL institutions share a common objective which provides greater access to university education to working adults, senior citizens, the disabled and those who may not have had the opportunity to pursue such education due to various social or financial setbacks. ODL also offers a different, flexible avenue for those who wish to advance their personal lives and careers through higher education.

OUM’s learner population is composed of 95% working adults. A significant portion of this includes teachers (almost 30,000 learners and about 44% of the cumulative intake). In collaboration with the Ministry of Education, the number of in-service graduate teachers in the country is expected to increase by means of ODL. This is somewhat similar to UT, where 95% of its students are working adults and teachers as well (roughly 380,000 in total). 50% of the in-service teachers are sponsored by their employers, such as district and provincial governments, federal departments and educational foundations. Over 70% of OUM’s learners are also sponsored, most by the above mentioned entities and including various foundations and banks.

In Cambodia, which still lacks an authentic open university, ODL first took shape in 1955 in the form of a teacher training programme, whereby over 47,000 primary school teachers were coached through distance education to strengthen their basic abilities and pedagogical knowledge. We can therefore infer that one of the main responsibilities of ODL institutions in SEA is providing tertiary education and training to in-service teachers. The professional development of teachers as direct frontliners in education is thus an integral effort in human capital development.

Quality Assurance

Governance and quality assurance initiatives vary between countries, some with almost complete autonomy (e.g. the Philippines) whilst others are anchored to national frameworks (e.g. Malaysia). Some, such as in Indonesia, acquire the sense that official regulation is applied to programmes offered, rather than the institutions themselves. Conversely, the more nascent ODL institutions in Cambodia, Laos and Myanmar have yet to see any governmental or institutional QA implementation (Lee, 2006; Jung and Latchem, 2007).
Given that ODL is a relatively new development in SEA, the quality of higher education through ODL is a major concern. Quality is managed and operated in one of three ways, i.e. through designated national or institutional policies; through collective systems with various boards or councils; or dispersed through various units (Jung and Latchem, 2007). Several countries have resorted to legislation to regulate the development of higher education systems and establish quality assurance frameworks, though countries like Brunei, Laos and Myanmar still do not have any quality control mechanisms (Lee, 2006).

In general, the following is a snapshot of quality assurance initiatives in Southeast Asian higher education:

Table 5: Quality Assurance Bodies in Higher Education in SEA

<table>
<thead>
<tr>
<th>Country</th>
<th>Relevant Body(s)</th>
<th>Year of Establishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>The Accreditation Committee of Cambodia (ACC)</td>
<td>2000</td>
</tr>
<tr>
<td>Indonesia</td>
<td>The National Accreditation Board of Higher Education (BAN-PT)</td>
<td>1994</td>
</tr>
<tr>
<td>Malaysia</td>
<td>The National Accreditation Board (LAN)</td>
<td>1999</td>
</tr>
<tr>
<td>The Philippines</td>
<td>1. The Accrediting Agency of Chartered Colleges and Universities in the Philippines (AACCUP)</td>
<td>1989</td>
</tr>
<tr>
<td></td>
<td>2. The Philippines Accrediting Association of Schools, Colleges and Universities (PAASCU)</td>
<td>1957</td>
</tr>
<tr>
<td>Thailand</td>
<td>The National Educational Standards and Quality Assurance (NESQA)</td>
<td>2000</td>
</tr>
<tr>
<td>Vietnam</td>
<td>The Quality Assurance Unit</td>
<td>2002</td>
</tr>
</tbody>
</table>


Some institutions, such as OUM and UT, have also gone beyond the national stage. This is evident in the form of obtaining certification from the International Organisation for Standardisation (ISO) and other such bodies. At OUM, Tan Sri Dr Abdullah Sanusi Digital Library, Registry, the Centre for Instructional Design & Technology and the Centre for Student Management have all received the MS ISO 9001:2000 certification. UT has also sought the approval of the International Council for Open and Distance Education’s Standards Agency (ISA) to ascertain its ODL provisions comply with existing international benchmarks.

Educational globalisation and the contribution of ODL

Globalisation has been referred as “the monumental structural changes occurring in the processes of production and distribution in the global economy”. At the same time, globalisation also “affects all of the social, political and economic structures and processes that emerge from this global restructuring”. Central to this view is the role of knowledge, education and learning for the success of the global information society and global information economy (Cogburn, 1998).

The role of universities in human capital development can be seen in two ways; first, to supply the skills for national economies; and secondly, on the demand side, to increase the drive within the national population for a process of “upskilling” by opening doors to greater access in higher education. Human capital is also “labour power” and should be seen as “the learned capacity to create added value from an existing system”. Thus, human
capital, or rather knowledge capital, is becoming increasingly important for productivity growth and also national competitiveness (Arbo and Benneworth, 2007). From an educational perspective, globalisation is considered a critical factor behind many of the future challenges facing SEA (Lee, 2006). Globalisation is a theme that has gained considerable currency as education evolves during the last few decades. Not only is a country influenced by its own socio-economic and political dynamics, globalisation too has an impact on a country’s educational changes. Every facet of globalisation, be it economic, social, political or cultural, has a repercussive hand in education, particularly higher education in a globalised knowledge society (Lee, 2006).

I believe that higher education and ODL in Southeast Asian countries will be able to sustain a knowledge-based economy and reinforce it with a skilled workforce, capable of contributing to national and regional competitiveness. Given that higher education is perceived as an industry; with globalisation, the perception of higher education is now given a different perspective. It is now regarded as a marketable commodity, increasing trade in educational services and innovations related to information and communication technologies (Lee, 2006). Noting the unique historical and cultural resources as well as the economic priorities in each Southeast Asian country, ODL must evolve accordingly, bearing in mind the need to remain relevant and current in a global context. As open universities throughout the region strive to adapt with globalisation, there will be a sustained call for financial and institutional diversification, increased autonomy and quality control measures in order to cater to the different concerns of different social groups.

I also believe that open universities in SEA must be innovative to remain relevant. An important area requiring crucial attention is curriculum development. The curricula offered through open universities must be functional, flexible and adaptable to the distinctive changes in the society generally and the workplace in particular. If the region wished to become more competitive in a rapidly changing global environment, the advancement of ODL must also remain conscious of the changing demands of the workplace. ODL could be seen as a significant component in any policy initiative in producing a quality workforce through lifelong learning. Focussing on curriculum development also means that the institution is giving priority to the needs of the learners. Be learner-centred, complemented by the need to upgrade facilities including learning managements systems and internet access, upgrading assessment methods, tutor training, etcetera, at the end of the day bring forth quality education.

Sea and Sustainable Development: an educational perspective

During the last two decades, the higher education scenario in SEA experienced increasing pressure for capacity building and infrastructure provision, a deterioration in quality, under-funding, limited academic capability, as well as equitable access. As a result, a related feature in some Southeast Asian countries is increasing graduate unemployment, coupled with the inability of some economies to provide the needed economic growth impetus. Thus, one generally finds a mismatch between economic needs and university output, resulting in underemployment and brain drain (Lee, 2006). This has become a significant issue that needs to be addressed seriously.

In view of this economic pressure, a change or reform in higher education was deemed necessary. In the 1970s, Asian governments began to establish single-mode open universities to accommodate students who were unable to gain entry into conventional universities. Beginning with Ramkhamhaeng University in Thailand, and with ever-expanding demand, soaring access, sophistication and affordability of technological infrastructure, Southeast Asian governments became more inclined to adopt ODL practices to enhance student intake and capture new markets. As the region races towards economic participation in a
globalised and competitive world, higher education regimes and policies are experiencing reorganisation and restructuring, with ODL very much at the forefront.

In the light of increasing political and demographic demands, and the democratisation of secondary education, tertiary education in SEA had no choice but to undergo massive expansion. Access to a university is seen as an instrument for individual advancement, whilst at the national level, it is considered an instrument for human capital development, sustaining economic growth, social restructuring and poverty eradication. Widening access in SEA translated to higher education being made increasingly available to socially disadvantaged groups such as ethnic minorities, women, indigenous people and people with disabilities (Lee, 2006). This is, perhaps, most pronounced with ODL institutions, as barriers in time and space are broken to provide better opportunities to all sections of society.

Subsequent to the 1997 economic crisis in many countries of this region, the provision of higher education in SEA witnessed the establishment of private for-profit corporations, non-profit organisations establishing private universities and colleges; previously the domain of the public sector. The increasing diversity in higher education has been exemplified by the establishment of “corporatised universities” in Malaysia, “entrepreneurial universities” in Singapore and “autonomous universities” in Indonesia and Thailand (Lee, 2006). This has possibly eased the budgetary constraints faced by Southeast Asian governments. With privatisation, one can observe increased institutional autonomy and the emergence of self-sustaining enterprises capable of generating their revenue. In the light of sustaining economic growth, wider access to higher education through ODL is seen as a credible approach to provide the working population with the opportunity for self-development, career advancement and the creation of new jobs and trades. Higher education in SEA has indeed become an industry; and with ODL as an auxiliary force, this industry will continue to act as the fulcrum for sustainable development in the region.

Collaborations in SEA and beyond

We all can agree that institutional collaborations will contribute significantly towards the development of resource sharing, student and scholar exchange programmes, and bilingual educational programmes among countries that share common interests and aspirations. Although we are already witnessing the laying of groundwork for such an endeavour in the form of ODL and ODL-related organisations in the region, there is still room for improvement.

In SEA and Asia at large, there are several national and regional organisations concerned with the advancement of ODL. Examples of which are the Malaysian Association of Distance Education (MADE); the SEAMEO Regional Open Learning Centre (SEAMOLEC), under the care of the Southeast Asian Ministers of Education Organisation (SEAMEO); and the Asian Association of Open Universities (AAOU). The organisations mentioned above all seek to enhance partnerships and the sharing of knowledge in ODL throughout the region and beyond, alongside active involvement in quality assurance, policy-making, curriculum development, management and governance related to ODL institutions.

I believe that this sharing of common interests and expertise could be extended to include collaborations across continents, particularly the form of a South-South co-operation involving ODL institutions in SEA and the African continent. I therefore propose that such a collaboration be immediately established to promote ODL in the two regions.

A good start would be examining the current cross-region partnerships under international bodies such as the UN and the Commonwealth of Learning (COL). One significant example of an existing South-South collaboration is the partnership between the Indira Gandhi National...
Open University (IGNOU) in India and the United Nations Educational, Scientific and Cultural Organization (UNESCO) and COL. Perhaps Southeast Asian institutions could look at IGNOU as a touchstone and tailor our own endeavours specific to the needs and capacities of SEA itself.

With an international presence in 30 countries and together with the support of UNESCO and COL, IGNOU’s programmes are made available through the Pan-African Satellite Network; something that is being developed by the Government of India (Daniel et al., 2006). A significant aim behind this collaborative effort serving the ODL interests of developing countries (in this case, African countries) is to offer more appropriate and cheaper courses than those by more advanced countries.

In Malaysia, trans-border exchanges have been made through partnerships between private colleges and foreign universities to offer twinning programmes, credit transfer agreements, external degree programmes and the like (Lee, 2006). OUM has always made an effort to forge collaborations with other ODL institutions locally or abroad. Through the sharing of knowledge and expertise as well as technology, OUM believes that all its ODL counterparts will be able to benefit from our experiences and vice-versa.

Despite the absence of formal collaborations, OUM and other ODL institutions in SEA have been watching and observing our partner institutions here in Africa. We are very much aware of the successes and good practices of institutions such as the Zimbabwe Open University, the National Open University of Nigeria and the University of South Africa (UNISA). From the viewpoint of a developing nation, I believe there is ample opportunity for us to learn and benefit from each other. Perhaps anchored to the efforts of bodies such as the UN and COL, South-South collaborations between Southeast Asian and African ODL institutions can be vigorously pursued.

COL and UNESCO signed an agreement in 1994 with the collective aim of carrying out co-operative programmes for the benefit among member states of both organisations, which of course include the countries of SEA and the African continent. Within this workplan agreement, there are specific programmes to provide cross-regional support, knowledge bases and others (accessed from http://www.col.org/colweb/site/pid/4658).

As asserted by Daniel et al. (2006), COL has supported IGNOU’s efforts in three ways:

- Through the offering of COL Fellowships;
- Through the development of international postgraduate programmes; and
- Through the creation of a collaborative network in the form of the Virtual University for Small States of the Commonwealth.

It was also noted in the article that contemporary institutional co-operation should be based upon five essential principles; i.e.:

- Clarity of purpose and knowing that the wants of all partners are achievable through co-operation;
- The smaller the group of partners, the better chances for success;
- Everyone must contribute, and everyone must gain financially;
- There must be people committed to the collaborative venture in each partner institution; and
- The enterprise must be adequately funded from the start and with a credible strategy to generate sustained funding.

With a conscious effort to mirror local priorities and needs, and from the viewpoint of OUM and Malaysia, I foresee several areas for potential partnership between SEA and Africa, such as:
The sharing of experiences through mutual visits and staff exchange;
Joint research initiatives;
Exchange of content and learning materials;
Utilisation and sharing of new technologies;
Joint quality initiatives; and
Conference organisations and strengthening networks.

I would like to suggest the cross-border provision in higher education as a good starting point to initiate South-South collaborations. COL and UNESCO have been working together for over a decade to provide, among others, a Cross-Border Provision in Higher Education. Based on the UNESCO-OECD Guidelines for Quality Provision in Cross-Border Higher Education as an international framework, this particular programme focuses on research and capacity building to maximise the benefits of cross-border education in developing nations. Using this programme as an example and point of reference, SEA and Africa could perhaps launch trans-border co-operative programmes through practical and tangible partnerships.

Conclusion

I would like to end my address by sharing these two quotes with you.

The first is from The United Nations Development Agenda (2007) which clearly regards education as a vital part of the shared goals and visions in economic and social affairs:

Providing every individual with an education is an integral part of the ultimate goal of improving individual well-being and is an end in itself. In addition, as long recognized and emphasized once again by the 2005 World Summit, both formal and informal education are vital to developing productive human potential. Universal and equitable access to quality education is therefore an indispensable part of the effort to promote full and productive employment.

The second quote is from Sir John Daniel (2004), President and Chief Executive Officer of COL when he spoke of ODL for sustainable development in Canada over four years ago:

...the appropriate use of open and distance learning allows you to increase access, improve quality and cut cost at the same time. This is an educational revolution with the potential dramatically to accelerate the development that will enhance the freedom of the mass of humankind.

We must accept that ODL has become a viable alternative to the traditional mode of learning in developing countries, particularly in their human capital development efforts and consequently, raising their respective socio-economic status. This has been proven by the proliferation of ODL institutions around the world. Asia, including SEA, is proud to have some of the largest and well-established ODL institutions and open universities the world over and this clearly indicates that ODL has contributed immensely in providing equal opportunity in higher education to the masses.

In the same context, open universities have also proliferated in African countries; some prominent ones including the University of South Africa (UNISA), Zimbabwe Open University (ZOU) as well as our host, the National Open University of Nigeria. Much like their Asian counterparts, these ODL institutions have also contributed greatly to the socio-economic well-being of each respective nation.
I foresee the next step for SEA and Africa is to embark on the fostering of strategic relationships in and between both regions in the form of effective inter-regional, trans-border collaborations to promote the development of ODL. More than certain that if we combine our efforts in this arena, we will reap rewards and scale greater heights in ODL. Through this, we will be able to enhance our contribution to sustain a healthy socio-economic development in both SEA and Africa.
References


TEACHER EDUCATION THROUGH DISTANCE EDUCATION – RISING TO THE CHALLENGE

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Abstract
This paper explores the current and future potential of the use of distance education methods for teacher development drawing upon many years of engagement with Ministries of Education and Higher Education Institutions involved with teacher development in southern and central Africa. The paper argues that it is appropriate and desirable for distance education methods to be used in teacher development programmes but argues that current practices need to be questioned in light of postmodern perspectives and an increasingly globalised society. The use of distance education for teacher development should not be dictated by economic arguments alone but also, or perhaps rather, informed by concerns about the nature and quality of the education and training provided and how this manifests itself in improved quality of learning in classrooms.

Key Words: Distance education, teacher development, Africa

Introduction

In general, Africa is struggling to give effect to the Education for All (EFA) mandate and to achieve the educational Millennium Development Goals (MDGs). The 2005 EFA Global Monitoring Report emphasises the centrality of teacher development to this endeavour. Not surprisingly, the African Union has prioritised teacher education in its Second Decade of Education.

The NEPAD education desk (NEPAD c.2006:2) has identified the following challenges facing many Ministries of Education in Africa with respect to teacher education:

- Inadequate training facilities and funding for initial (pre-service) training;
- Inadequate or poor continuous (in-service) teacher development and teacher training facilities;
- Shortage of trained and qualified teachers;
- Lack of opportunities for continuous professional development;
- Disrupted teaching profession due to current or previous internal conflicts or wars;
- Shortage of reference and training materials for teachers;
- Underdevelopment and under-utilisation of Information Communication Technologies (ICTs) to benefit teacher training and development;
- Depletion of teachers due to HIV/AIDS and the decline in the number of people entering the teaching profession.

Moon (2006:iii-iv) in summarising research into policies and programmes for teacher education observes that acute shortages of teachers exist; large numbers of para-professionals and community volunteers have taken the place of teachers; the status of teachers is in sharp decline and across sub-Saharan Africa rural communities are the most challenged in recruiting and retaining qualified teachers. He reports that in some countries in sub-Saharan Africa, the shortage of teachers is formally acknowledged as a national crisis.
Well functioning teacher education systems are clearly central to the development of Africa. This is the appropriate time to reflect on the contribution that distance education does and could make to teacher education.

This paper explores this issue with respect to five key questions:

- What is the role of distance education in the context of teacher education?
- Why use distance education for teacher development?
- Does distance education deliver?
- What are the challenges for improving teaching practices?
- What is needed for effective teacher education through distance education in the future?

What is the role of distance education in the context of teacher education?

Extensive and increasing use is made of distance education for teacher development globally (Robinson & Latchem, 2003) and in Africa in particular in pursuit of EFA goals and a global shortage of teachers in general and primary level teachers in particular (ADEA 2002, 2004; Mattson 2004; Sayed 2006). Distance education is used in the

- initial professional education of teachers (IPET)
- the continuing professional development of teachers (CPET)
- IPET for teachers already in service
- development of education management.

In South Africa, in teacher education, distance education has long since played a far greater role – at least in respect of numbers enrolled and graduating than face to face education. This phenomenon may well be repeated in other African countries like Kenya, Nigeria and Malawi which have seen large scale development of distance education provision. Distance education may well be moving to the centre-stage in teacher education. We need to understand why.

Why use distance education for teacher development?

In responding to this question, we need to have a common understanding of what it is we mean by distance education. In the context of teacher education and particularly given the range of knowledge, skills and values outcomes associated with teacher education, we have found it useful to understand distance education not as a mode of delivery with one identity, but rather as a collection of methods, deployed in various combinations to support identified educational outcomes:

Distance Education needs to be conceived as a sophisticated collection of methods for the provision of structured learning in situations where students are unable primarily to attend fixed a centralised venue and in the physical presence of a teacher (SAIDE, 2003).

It is increasingly clear that the conventional system of full-time, contact-based Colleges of Education and Education Departments in Universities is unable to meet the growing need for teacher development. Some of the reasons for this include that the numbers required exceed
the physical capacity of institutions to accommodate them; that such institutions tend to be situated in the rural areas where the need is greatest; that curricula often do not speak to practice and, increasingly, that potential and current teachers need to be able to continue to work while they learn, especially in a context in which more of the cost burden for higher education has shifted to student fees in light of declining real state subsidies. Distance education methods, which facilitate learning that does not require students and teachers to necessarily be in the same place at the same time, can support the expansion of school-based teacher education programmes, are seen as a logical solution to this challenge.

However, of great concern in many distance education endeavours is the tendency to add distance education responsibilities to the workload of full-time academic staff in traditional contact-based institutions without relieving them of any of their responsibilities to existing full-time students or to the achievement of research outputs. This is usually a false economy and short-sighted as the inevitable result is poor quality work and staff burn-out.

Often a key motivation for the use of distance education methods is purely economic: a desire to make more efficient use of existing facilities coupled with an inability to replicate or expand these facilities. Research into the costs of educational delivery suggests that teacher education may be one of the more cost-effective uses of distance education able to achieve reasonable student success rates at unit costs that may be lower than in the conventional system. (Perraton, 2000; Oliveira & Orivel, 2003; ADEA, 2005) This is due in part to the often large and recurring numbers of teachers which can lead to economies of scale; and a consideration of the opportunity costs involved in removing practicing teachers from their classrooms and therefore not having to deploy an additional cadre of temporary replacements.

However, programmes need to be costed very carefully to ensure the necessary recurring investment in quality programmes, materials, assessment and decentralised support to ensure cost efficient and cost-effective delivery. There is little evidence of this happening with Creed (2001:15) asserting that good evaluations of the cost-effectiveness of distance education are hard to find, tending to be ‘strong on description but weak on evaluative data, both quantitative and qualitative, on which to make judgements about effectiveness, costs and impact’. Furthermore, there is a tendency to try to scale too quickly to meet urgent political (or funder) imperatives using models that are not ultimately sustainable (Mattson, 2004; ADEA, 2005; Mays, 2005; SAIDE, 2006). Of particular concern is the tendency to omit, or cut back on, any activities that relate to formative assessment and decentralised support of students.

It should be noted that distance education provision is especially difficult and costly in the rural areas where the need is greatest and requires problem-solving in particular contexts. Models need to be developed and tested and guidelines provided both for replication and for innovation.

Craig and Perraton (2003:91-111) note that distance education has been used extensively for the continuing professional development of teachers and seems to have the following advantages (which would presumably also be true for the initial training of unqualified teachers/para-professionals while in-service):

- An ability to reach teachers, who are often isolated and provide them with professional development without taking them away from their home or workplace
- Providing teachers with learning and teaching resources
- Providing a programme in which learning can immediately be integrated with day-to-day teaching
The possibility of achieving economies of scale.

Even traditional contact-based institutions involve teacher education need to engage with distance education issues, such as materials and support, for extended teaching practice and so interest in the use of distance education methods in teacher education has grown. This is part of a general trend towards more open practices in education provision in which distance education methods are seen to provide flexibility in learning options, especially in light of growing access to increasingly sophisticated and increasingly less costly information and communication technologies.

The discourse has therefore seen a move away from simplistic economic arguments based on increasingly discredited solely paper-based correspondence models towards a more quality oriented discourse that explores the various merits of a blend of different methods and strategies (Dladla and Moon, 2002; SAUVCA, 2003; Sharm, 2005; Welch and Reed, 2005).

However, economic and political considerations have nevertheless seen an expansion in the employment of less well trained or untrained para-professionals and limited or no follow-up support for these underprepared practitioners (Mattson, 2004; Moon, 2006; GCE, 2006). It is suggested that distance education methods, coupled with a reconceptualised curriculum, could help to address what some countries have begun to identify as a “crisis” in teacher supply and development.

Does distance education deliver?

Research suggests that distance education programmes have shown a positive impact on teachers’ general and subject specific knowledge, but that effecting improvements in classroom practice may require additional strategies.

Robinson (2003:195-6) notes the “limited evaluation data available” but suggests that “the following broad conclusions can be drawn (some more tentatively than others).

- Distance education programmes for teachers can provide acceptable courses and qualifications on a larger scale than conventional programmes and over a wider geographical area in countries with very differing infrastructure and for a wide range of purposes and learner levels.

- Successful completion rates for award-bearing programmes vary between 50-90 per cent. Examination pass rates tend, on the whole, similar to those in conventional programmes (though completion rates tend to be lower).

- In general, distance education programmes have demonstrated that they are effective in teaching academic subjects, though some subjects such as science, mathematics or music, need greater elements of face to face teaching interaction with tutors, coaching and practical work ...

- Teachers on distance education courses have achieved results equivalent to conventionally trained teachers, though with different profiles of strengths and weaknesses (Chale, 1983; Mählck and Temu, 1989; Sharm and Tatoo, 1993) ... This points to a need ... for programme designs which take full account of subject and learner differences.

- Unqualified serving teachers on distance learning courses for initial qualifications are often rated more highly on classroom teaching than highly qualified college equivalents. However, two studies found that differences disappeared after a few years, with the exception of science teaching, where college-trained teachers continued to perform better (Mählck and Temu, 1989; Chale, 1993).
Self-report data by teachers on distance education courses generally rate them useful and relevant to their teaching, especially where other options are available to them, and commonly report increases in teachers’ content knowledge and teaching skills.

There is relatively little evidence available on the transfer of teachers’ learning to their practice, as is also the case with traditional training programmes.

Where teachers in developing countries have low educational levels (such as incomplete secondary education) on entry to the distance education programme, they tend to achieve lower pass rates and require more learner support. This has implications for the cost and design of programmes.

In 2005, the DEOL Working Group of ADEA commissioned a comparative study of three distance education teacher development programmes in Mauritius, Tanzania and South Africa. All three programmes were primarily print-based with support offered through occasional face to face contact and, to a much limited extent, an array of information and communication technologies. While it is obvious possible to extrapolate from three case studies to general practices in the region, and remarkable similarity in findings among the three case studies (which were compiled separately but followed the same mixed method research strategy involving surveys, document analysis, classroom observations and interviews) and Robinson’s summary above supports the emerging argument that distance education has an important role to play in teacher development but that certain aspects require special attention. The study concluded, among other things, that:

- Teachers tend to overestimate the impact the courses had on their overall professional practice but there tends to be improvement in subject knowledge and in the self-confidence of teachers who complete programmes.
- Teachers struggle to carry theory over into practice in their classrooms and in addressing real classroom problems, although this is more of a problem in Mauritius and South Africa than in Tanzania. (Jeerkhan, Muganda, Mays, Posthuma and Holomisa, 2006:5).

To sharpen the discussion on how distance education can deliver on its promises, it is useful to remind ourselves of the central purpose of teacher education: more, sometimes dramatically more and better teachers able to demonstrate improved classroom practice to ensure that learners learn effectively.

This may seem obvious, but, given the desultory way in which teaching practice is often organised and assessed and the few credits it attracts, it would appear that the purpose of many teacher education programmes is graduate rather than to become a competent or more competent teacher. As Robinson (2003:208) notes:...

Teacher education involves a complex integration of at least three components (Lewin, 2004: 7-11)
- Subject content knowledge – the knowledge and understanding of the school subjects or learning areas to be taught (or WHAT to teach)
- Pedagogic content knowledge and skills – the knowledge and skills to teach subjects effectively including creating the conditions under which learning can take place (or HOW to teach – in pre-service programmes this usually includes the teaching practice)
Education or professional studies – understanding how children learn, locating the school in society, awareness of educational history and legislation, and the acquisition of professional identity (including addressing questions about WHY we teach).

Increasing emphasis is being placed on pedagogic content knowledge and skills. This is the area where distance education has often demonstrated success. In fact, developing the practice of teaching has been labelled by some as distance education’s Achilles’ heel. This seems a rather harsh judgement. However, when one considers that where research into classroom practice has taken place, it has not always been possible to make such a clear-cut distinction between teachers trained through distance education and those trained through more conventional approaches (e.g. Taylor & Vinjevold, 1998). It would seem, rather, that improving classroom practices is difficult and requires special attention even in situations where a substantial amount of teacher development happens in a face to face context (Adler & Reed, 2002; Mattson, 2004). This means that we need to think about broad teacher curriculum issues, and in particular, the kinds of practices that are modelled as well as distance education issues.

What are the challenges of changing practices?

Novice teachers are often expected to engage in practices which have not been modelled in their own experiences as learners; and experienced teachers often find that the “new” practices being encouraged contradict and undermine their assumptions and values about the nature of teaching. This can lead to paralysis and even a decline in performance. The rapid pace of technological change and increasing globalisation means that teachers can no longer be seen as the sole repositories of a fixed body of knowledge that merely needs to be transmitted into the empty heads of learners (probably this should never have been so). Slattery (2006:48-9), a curriculum specialist, observes:

Teachers often agree that their students do not know the factual information required for passing through the school system and passing standardized tests, but they throw up their hands in desperation, blaming uninterested students, boring textbooks, overcrowded classrooms, drugs, self-esteem programs, television, poor preparation, and ineffective previous teachers, or any other convenient target. However, these teachers continue to use the same methods of teaching and evaluation that have dominated curriculum development for over one hundred years ... Is the problem that educators have not perfected the modern methods? Or is the problem that the modern methods and strategies are no longer appropriate in a postmodern era?

Slattery (2006:111) argues the need for a more active learning and teaching environment, an interdisciplinary school curriculum, seminar-style classes “where circles and centres replace rows of desks”, discovery laboratories, multisensory projects, biographical narratives, oral history projects, engaging seminars, aesthetic awareness, and provocative field experiences involving groups of students, teachers, and other community members will become the norm rather than the exception. Regular dialogue that seeks understanding, respect, and synthesis rather than predetermined answers will be the hallmark...

Below, we have identified some key challenges to changing practices.

Pedagogical Content Knowledge

Teaching and learning approaches may be changing dramatically, but teachers’ subject knowledge remains important in all curriculum approaches. Buckingham (2005:4) and
Woolfolk (2006:88) point to US research which suggests that the only significant predictors of teacher quality are strength of subject matter knowledge (especially for secondary teachers) and teachers’ own level of literacy. The US research suggests that pre-service teacher education courses and advanced education degrees are apparently unrelated to teacher effectiveness, and teaching experience is only significant for the first four or five years, after which there is little growth in effectiveness each year in the classroom.

So while teachers’ own mastery of their subject matter area is essential, this needs to be unpacked a little more. In an extensive study in South Africa (Taylor and Vinjevold, 1999) which involved observation of many teachers in different classrooms, it was discovered that many teachers were making basic errors in the curriculum they were required to teach. Often, these were teachers who had passed subject modules in a teacher development programme at a much higher level than that of the classroom curriculum they were required to mediate. How can we address this disparity?

In concluding a detailed study of an in-service programme in an evaluation process that required detailed and multiple observations and interviews that explored both theoretical knowledge and classroom practice, Adler, Slonimsky and Reed (2002:149) observed that the teachers who successfully completed the programme:

- All expressed increased confidence in themselves as teachers, and in many cases such increased confidence was observed.
- Teachers with a sufficient base of subject knowledge were able to benefit from the subject focus in the programme, though not always directly on their teaching, with this impact being a function both of their present disposition and the context in which they worked.
- In contrast, teachers with a poor knowledge base struggled to rise to the demands of the programme and appeared to leave the programme with little added to their repertoire of subject teaching.
- This struggle appeared most acute where teachers working in very impoverished contexts.
- All teachers struggled with syllabus content covering their subject, with sequencing and grading of tasks and with new approaches to knowledge.

On the basis of these findings, they suggest:

We posit that the task that lies ahead is to characterise and articulate “subject knowledge for teaching” and to clarify how its acquisition by teachers lies in the coordination of subject, pedagogic and conceptual knowledge – or what can be renamed teachers’ conceptual knowledge-in-practice (Adler, Slonimsky and Reed, 2002:151).

In other words, we would argue that before teacher-students enter a classroom, and before we have them working on advanced theoretical physics, we need first to have them engage with the curriculum they will be required to teach. We would argue that although teachers may well have succeeded in their schooling at this level, this does not mean they have necessarily mastered the concepts that were covered, understood the conceptual progression across the phase in which they will specialise or will be able to mediate it in the classroom. It is possible, perhaps even probable, that school success was based on rote learning and a developed skill for answering test/exam type questions rather than deep conceptual learning. However, this should not be construed as an argument to simply rehash the school curriculum in the way that it was delivered in the classroom, rather, as Adle et al propose, it means...
getting teacher–students to engage with carefully scaffolded problem-based activities. An example of such an activity can be found in the annex.

Activities like this which focus on the expected practice in the classroom help to revise teacher-students’ own subject-specific conceptual understanding in ways that make a logical and integrated link with both methodology and understandings of learners and learning: the meaningful integration of theory and practice as opposed to the atomistic, decontextualised learning that characterises many teacher development programmes.

Fullan and Hargraves (1992, cited in Bertram, Fosham \& Harley, 2000:264,266) identify three common approaches to teacher development and changing practice:

- The development of a teacher’s knowledge and skills
- The development of a teacher’s self-understanding
- A focus on the context in which the teacher works.

They suggest that in practice, all three approaches need to be combined if we wish to effect real change.

As Mays (2004:58-61) notes, the most motivating module or the most enlightening contact session will not on its own bring about the necessary change in educators’ thinking and practice: personal experience suggests that the inspiration to change rarely outlasts the journey home from the workshop, and the pressures of day-to-day habits and routines tend to reassert themselves once educators are back in classrooms and schools.

In recognition of this, Hopkins (1996 in Bertram et al., 2000:183) suggests that ideally a workshop (or contact session) involving the facilitation of key ideas and principles, modelling and demonstration and practice in non-threatening situations needs to be followed up by school-based support, to facilitate immediate and sustained practice, collaboration and peer coaching, as well as reflection and action research.

Dladla and Moon (2002) take this school focus further, however, and argue for a greater emphasis on school-based training which would include the following six key elements:

- The need for a clear articulation of the expected outcomes of training with a clear focus on the improvement of classroom practice;
- School-based support from more experienced educationalists (school inspectors, teacher trainers, experienced teachers working in school clusters are just three examples of where the support can come from);
- Clear assessment and quality assurance structures so that the teachers know what they have to do and the system is self-monitoring in terms of effectiveness;
- Materials resource support that explicitly guides teachers in trying out and experimenting with improved strategies within the classroom;
- School and principal guidance to ensure that training contributes not just to individual performance but to school improvement as a whole.

Moon, (2006:23-24) subsequently argues for reforming the curriculum in ways which:

- Focus the curriculum more, particularly where education and training opportunities are constrained, on core classroom skills and particular pedagogies.
that are more effective in raising achievement: tea cher education programmes, therefore, need to be conceptualised in ways that incorporate the daily life and work of the teacher;

- Rethink the period of time for initial training by providing opportunity for continuing professional development in-service;

- Exploit technologies.

Changing practice involves questioning value systems

The growing emphasis on a classroom focus to influence practice, not only acknowledges the diverse contexts in which people work, but also acknowledges that what actually happens in the classroom is influenced by the teacher’s underlying beliefs about what constitutes good practice, and his/her personal value system. Influences are often innate rather than explicit and amount to what SAIDE’s study of education series refers to as the teacher’s ‘theory in practice’ or ‘theory as practice’.

This often unarticulated theory-in-practice can result in tension in trying to bring about change in practice, through conflict with existing ways of doing things. For example, a teacher (or teacher trainer) whose implicit assumption is that learners do not bring anything to the learning experience and have nothing worthwhile to say is likely to adopt a traditional, teacher-centred, content-based, summatively-assessed classroom (or DE materials or DE contact session) style and be uncomfortable with, even actively resist, a move towards the inter-disciplinary, activity-based, participative and collaborative learning and teaching strategies advocated by Slattery and required in some national policy documents such as South Africa’s National Curriculum Statement (www.education.gov.za).

Prabhu (1990 in Bertram et al., 2000:311-2) suggests that this internalised set of assumptions, beliefs and values built up over a period of time through classroom experience, training and other factors contributes to the development of a teacher’s ‘sense of plausibility’ about what amounts to good or bad practice. When faced with a new approach, method or activity, the educator will have a sense of whether or not this will work for him/her in his/her context, without necessarily being able to articulate or justify this position. Forced to implement the new approach, without the opportunity to try to understand the rationale for it and to reflect on his/her underlying assumptions, beliefs and values, the educator is likely to implement in an unmotivated and ill-thought-through way. This is likely to result in a negative experience and a self-fulfilling prophecy that will militate against any further attempts at innovation.

Lewin, in his overview of a multi-site study of six countries’ pre-service training (2004), highlights the well-developed images trainees have of good primary teachers. These often resonate with essentially transmission-based modes of teaching, hierarchical learning of knowledge and conventional teacher-centred classroom organisation. He observes that “these images can be contrasted with those found in recent curriculum literature which promotes more reflective and child-centred (rather than knowledge-centred) methods of teaching”.

As Tabulawa (1997) notes, educators may not be prepared to engage with changes in practice that would have a destabilising effect on their taken-for-granted classroom world, possibly leading to deskilling and cognitive dissonance ... [In addition, as] Dalin predicted (and experience has vindicated him) anym... would ... experience difficulties in implementing these very same innovations since their success or failure would be influenced by factors beyond the reach of the educational system – factors such as cultural traditions, traditional authority structures, parental expectation, etc (in Bertram et al., 2000:297-309)
Thus, if the intention is to prepare teachers adequately to embrace and implement changed practices in their classrooms, then it is necessary to help them explore not only their own underlying values and beliefs, but also those of the learners and the community and society of which the school forms a part. In short, as Tabu (ibid) says teaching is not just a technical activity whose solutions require technical solutions. A teacher development programme also needs to speak to the educators' beliefs and values and these are likely to reflect those of the broader society of which the teacher is a part (Mattson, 2004:33-37).

Sadly, it is SAIDE's experience that many teacher education programmes, materials, assessments and contact sessions are focused on delivering and testing content rather than grappling with these more complex issues. As noted in the ADEA report of 2004, investment in thorough curriculum design is limited in many institutions.

Modelling practice

Modelling practice in a teacher development programme offered by a higher education institution through distance education is two-fold: it requires modelling appropriate learning through distance education and modelling appropriate teaching practices that can be integrated into the classroom.

Moll (2003:21-2) argues:

In distance education, the central problem becomes of how best to create a situation in which learners are able to engage in a particular, unfamiliar activity – a knowledge practice – without having to be in the constant presence of practitioners of that activity ... Hence the texts, learning guides and structured activities of a distance programme, together with judiciously spaced and used contact sessions, must provide a practice-in-itself.

Unfortunately, it is SAIDE's experience that course assessment, materials and face to face contact often model inappropriate practice. Often assumed, incorrectly, that teacher-students have the necessary literacy skills to meaning from printed texts, especially ones that have been "designed" for distance education. No support is offered to bridge the transition from classroom-based and often teacher-centred approaches, to independent learning.

A move towards team planning, team assessment, teaching and team support advocated in course materials, required by course assignments, modelled in the ways in which the institution interacts with its teacher-students through observation, feedback and guided critical reflection, and the ways in which materials, assessment and support scaffold critical reflection should further help teachers to articulate and question some of their taken-for-granted assumptions (Beets & le Grange 2005; le Grange, 2005; Leibowitz, Booi, Daniels, Loots, Richards & van Deventer, 2005).

Acknowledging the diverse contexts of teaching and learning

According to Lewin (2004), nationally grounded pedagogic content knowledge is widely unavailable. So some key dimensions such as teaching large classes, multi-grade classes, code-switching, etc are often missing from teacher education courses.

Similarly, he notes that for education studies, reliance is placed on material from external sources. For example, the 'method books' used are those published internationally, and lecture notes are often drawn from overseas courses.

In a similar vein, teaching programmes will often advocate experimentation and innovation but trainee teachers end up doing their teaching in a school that is dysfunctional and actively resists any attempts at innovation. Identifying and managing a network of schools appropriate for teaching practice becomes extremely difficult: does one choose school for teaching practice that are functional and encouraging, knowing that trainee teachers
are likely to end up in authoritarian and possibly dysfunctional schools. This complex balancing task requires much ingenuity and time. Very often, institutions do not have the staff available to fulfill this role.

Emerging curriculum practices in Africa

There are a number of innovative programmes that are in operation in Africa from which we can derive inspiration. We will identify a few:

The University of Fort Hare in South Africa developed a distance education teacher development model based on partnership between the University (which provided academic development and support) and the Department of Education (which provided workplace-based support) which bears further examination (SAI DE, 2001) and seems to exemplify many of the new curriculum approaches advocated earlier in this paper. The Fort Hare programme developed materials that were built around practical classroom-based problems and challenges, offered regular in-school and out-of-school support in which the focus was on cooperative and collaborative learning rather than delivery of content and assessment practices that foregrounded issues such as self-assessment, commitment and evidence of improved practices in the classroom.

In a joint presentation to the Nadeosa 10-year anniversary conference in Pretoria in 2006, Sankale, Limozi and Welch report on a school-based teacher development initiative in Kenya. The move towards a school-based distance education approach was a deliberate choice on the part of the Ministry of Education, Science and Technology:

The intervention was as a result of:-

- **SPRED I (Strengthening Primary Education)**
  - Limited impact at the classroom level as a result of weaknesses in the cascade system of training
  - Pupil opportunity cost
  - Non-mainstream
  - National baseline survey
  - Limited pedagogic approaches
  - Low achievements in Science, Maths and English
  - Limited in-service training opportunities
    - Size of system
      - 6.2 million pupils, 17 500 schools, 180 000 teachers, GER of 87%
      - Steadily rising as a result of policy of Free Primary Education

The nature of the school-based initiative is summarised in the following slide:

**School-based Teacher Development Programme (SbTD)**
- Five month in-service programme for primary school teachers
- Focusing on key subjects: Maths, Science and English

**Aims**
- The main aim of the SbTD programme is to develop reflective primary school teachers who are willing to challenge their own ideas about teaching. The teacher is encouraged to try out different teaching strategies. These strategies should motivate and challenge all pupils.
- SbTD trained teachers will lead school-based professional development in their subject area in the school. This approach will facilitate the training and support of primary school teachers in the country.

The impressive achievements of this school-based distance education initiative were as follows:

**Achievements of the programme**
- Developed 54 000 key resource teachers (or 29% of teaching force)
over 3 three years
Trained 1,200 Teachers Advisory Centre Tutors (TACs) in DE support methods
Trained 1,000 zonal and national education school inspectors to undertake monitoring, evaluation, and quality assurance of the SbTD programme
Teacher reading rates increased
Teacher morale improved
Throughput rate of 87%

Moon (2006:22-23) identifies several other important initiatives in other parts of Africa including:

- The National Teachers Institute (NTI) in Nigeria which has introduced a 15-month long ODL-based preparation programme with a three-month internship to get new teachers into classrooms who are then encouraged to follow a school-based programme to achieve the National Certificate of Education (NCE) whilst in-service.

- The Open University of Sudan which has made use of growing connectivity in the country to provide an increasing array of online development opportunities.

What is needed for effective teacher education through distance education?

Based on the previous discussion, we suggest:

- A clear vision of the kind of teacher we want to develop
- A clear understanding of and support for the contexts which teachers work and commitment to developing appropriate T&L environments and providing ongoing support (HEIs AND DoE etc.)
- Purpose-driven programme design informed by postmodern perspectives and the reality of a globalised society and informed decisions about media and roles
- Programme delivery that models appropriate practice
- Ongoing evaluation and impact analysis to inform programme review that is budgeted for
- Greater collaboration.

A clear vision of the kind of teacher we want to develop

In most instances, it is expected that distance education will need to be introduced by staff who teach in full-time, contact-based programmes and institutions. The move to distance education necessarily means that, perhaps for the first time, the practices of such institutions will be captured in public documents open to public scrutiny. This suggests that a decision to move into distance education provision also represents a good point at which to take stock, to examine theoretical assumptions underpinning current practice and to re-examine the vision and mission to ensure they are sufficiently present-based and future directed.

This will involve academic staff in a process of imagining the kind of teacher they need to develop and reflecting upon the kind of teaching practices they themselves exemplify in the approaches they take in the materials they write, the assessment tasks they set and the ways in which they engage with teacher-students in person via technology. Are we transmitters of information or co-constructors of learning — maybe something in between?
After a lengthy process of national consultation, the South African Department of Education identified seven teacher “roles” that need to inform all teacher development programmes in South Africa: curriculum developer, assessor, mediator/teaching and learning specialist, manager and administrator, professional with pastoral/community role, scholar and subject learning area or phase specialist (RSA, 2000; RSA, 2007).

A clear understanding of and support for the contexts in which teachers work

The environments in which many teachers have to work and learners have to learn are often not optimal for learning. Some things can be addressed through an appropriately designed distance education intervention but a certain minimum level of school infrastructure needs also to be in place to make it possible for better teachers to perform better.

Often, classroom resources for teachers and learners are very limited. This is an area in which a well-designed distance education programme can be beneficial by making sure that the teacher, at least, has a copy of the syllabus as a resource to cover the school-based curriculum (even if suggested activities need to be written on a chalkboard for example because the school has no duplication facilities); perhaps most importantly, the teacher is helped to identify and adapt everyday resources available in the community.

Experience also suggests that teachers often work in isolation from one another instead of exploiting and sharing their joint strengths: a distance education programme that recruits students in pairs, school teams and/or clusters; which requires team work in in-text activities and assignments provides guidelines and support for student-led study groups and offers occasional face to face contact sessions at which cooperative and collaborative teaching and learning are modelled can go a long way towards breaking down the barriers between individual teachers, classrooms and schools.

Both pre- and in-service teacher-students often claim that authoritarian school leadership militates against innovation in the classroom; perhaps a large scale classroom teacher development programme should be complemented by a large-scale school- and district-leader development programme which will make clear the need for innovation and the desirability of distributed leadership practices.

In some instances, teacher development programmes offered by higher education institutions (HEI) are seen as separate, and occasionally conflicting, activities from those of the Ministry. For example, an HEI has to quickly reschedule a planned contact session because the Ministry has decided to run a workshop on the same day or the HEI has asked teacher-students to experiment with a new teaching approach which is roundly condemned by a visiting Ministry official who is not familiar with this practice. A common national vision and set of expectations captured in national policy and a Ministry developmental appraisal approach that reinforces what HEIs have taught, between school visits and contact sessions, could go a long way towards mitigating such conflicts and strengthening the take-up of new practices.

Innovations of this nature are usually not short term. Bloch (2008) suggests that education innovation of this nature requires a national vision and commitment and a thirty-year plan. However, as our colleagues in Kenya have shown, we can achieve some pretty amazing results in shorter-term initiatives as well.
Purpose-driven programme design informed by postmodern perspectives and the reality of a globalised society

As noted previously, the planned curriculum (often more often a planned ‘syllabus’) in many countries adopts a one-size-fits-all approach that sometimes seems to militate against improved classroom practices by over-emphasizing lesser issues such as the take-up of post-school content knowledge (which itself is sometimes assessed in ways that require conceptual mastery) or the production of some informal research report or dissertation. Apart from the loss of focus on the quality of classroom practice, such programmes also tend to be much longer to complete – requiring at least 4-5 years of full-time study and 8-10 years of part-time study while working. Not surprisingly, throughput in such programmes tends to be very low (if tracked at all) and of the few successful graduates, many will graduate only to leave the classroom and find a much better paid and much better working conditions elsewhere. Four to ten years of teacher development then becomes a very expensive way of training an economist or laboratory assistant or an entrepreneur. Better student counselling on registration could have resulted in more informed choices being made.

Other issues we need to address in designing curricula include:

- Is the programme for IPET (in which case we would expect students to reflect on their experiences as learners) or CPET (in which case we would expect students to reflect on their experiences as teachers and try out new things in the classroom immediately)?

- Is the programme targeted at primary school teachers (who usually teach an integrated school curriculum and would therefore probably benefit most from an integrated teacher development curriculum) or secondary school teachers (who teach a more subject-based curriculum and who would probably benefit most by completing a standard undergraduate BA, BSc, BCom and then having the option of an additional one year PGCE)?

- Are teachers working in well- or low-resourced learning environments? This would affect whether our emphasis is on adapting available resources or including more ready-made resources in the distance education course pack.

- What are the prior learning experiences of learners/teacher-students? What levels of literacy, numeracy and critically reflective thinking can be assumed, for example? How can we develop activities that start from where learners really are, making it possible for them to link new learning to existing schema and to work through Vygotsky’s ‘zone of proximal development’?

- What should be the language(s) of learning and teaching? Is code-switching acceptable practice?

- Does assessment value knowledge or practice? Or both equally or different measures?

- Is the purpose of the programme to develop the individual teacher or to improve the performance of school learners? Or both? Or something else? Does the focus change as teacher-students work through the programme?

- How much of the ‘what’ and ‘how’ of teaching do teacher-students need to have mastered before we could let them work in a class (and then possibly completed their studies while in-service)?
What technologies are best suited to the achievement of what kinds of learning outcomes e.g. text for content, video (on VCR or DVD) or face to face contact for modelling practice, mobile technology for administrative reminders and short academic inputs?

However we answer questions like the above, Moon (2006:iv) asserts that “... the coming decade will see the inevitable expansion of school-based teacher education programmes requiring new and innovative modes of delivery” (Morrison and Pitfield 2006:188, 192) argue for some flexibility in course entry and endpoints, for self-study modules with negotiated deadlines, flexible start dates, the possibility of extended time, recognition of prior learning and exploration of the implications for tutors’ teaching beliefs and workload factors.

Programme delivery that models appropriate practice

Ideally, we would suggest that a teacher development programme offered through distance education should ‘practise what it preaches’. If the programme argues for a blend of independent as well as cooperative and collaborative learning approaches in the classroom then this should be valued in the programme in the way that in-text activities and assessment tasks are set and in the ways in which face to face or technology-mediated contact is conducted.

Hopper and Sanford, (2004:61) comment on a particular approach which they describe as follows:

The curriculum of the course began to develop in response to the students’ own needs and interests, incorporating assignments that require the students to research, collaboratively plan and teach, explicitly recognize their learning through observing and acting, and share their knowledge in public fora.

Ibid 63

The inclusion of the school experiences within the diversity course created a recursive process for the students whereby the school context caused a “make you think” or cognizant effect that inspired and stimulated the student teachers into a sense of dissonance with their previous assumptions.

Ibid 71

School integrated teacher education courses contrast with many current teacher education programs based in a positivist tradition, where discrete courses are offered, fragmented between departments, with little connection to field experiences (Grimmett, 1998; McWilliam, 1994; Zeichner, 1999).

Other issues that need to be addressed are developing practices for meaningful resource-based learning, contextualized learning, the valuing of learners’ own knowledge and experience, exposure to multiple perspectives and the appropriate scaffolding of learning and teaching processes.

Ongoing evaluation and impact analysis to inform programme review that is budgeted for

Robinson notes that ongoing evaluation and impact analysis of teacher education programmes is generally weak and that these weaknesses are compounded by the complexities of distance education delivery: “Most reports are largely descriptive, only sometimes including detailed statistics and often lacking well-evidenced findings on outcomes ... However, some problems arise specifically from the nature of distance education: its scale, distribution of learners, tutors and schools, range of stakeholders and partners responsible for different tasks” (Robinson, 2003:196-7).
We would argue the need for site-based assessment and support (which may require decisions about sampling strategies in large-scale programmes), a focus on quality of teaching against agreed criteria, the dovetailing of programme assessment and Ministry developmental appraisal processes and the use of data from these processes that leads to revision of programme design and delivery that is catered for in the programme budget.

Greater collaboration

Apart from the practices modelled in the programme, we would make a strong plea for enrolment in school teams and school clusters, concerted efforts to guide and support student-led study groups and greater HEI/MoE collaboration than has been the case in the past – not just with programme design but also with programme support for improved practice. A detailed study of the use of distance education for primary teacher training in African schools notes that successful students can become a foundation for continued school-based professional development (Mattson, 2004:6), but also about the need to encourage practical problem-solving and professional socialisation and to guard against entrenching poor practices (Mattson, 2004:11). Although mentoring is gradually being accepted as a teacher role in this respect, some resistance is reported e.g. in Zambia, Malawi and Gambia, especially where “allowances” are involved (Mattson, 2004:12). Alternative ‘rewards’ could rather be in the form of reduced teaching loads. Clearly there is a need for monitoring of school-based support. The particular context needs to be borne in mind: in Malawi and Zambia, for example, “… schools function poorly as training sites because of the scarcity of basic resources and the lack of support from mentors and other teachers” (Mattson, 2004:12).

Mattson concludes that in sub-Saharan Africa, there is an emerging new pattern of teacher education reform that sees a number of common trends. Most importantly, these include:

- The gradual integration and rationalisation of teacher education systems linking ministry, universities, colleges, districts, resource centres, local support cadres, schools and communities in the provision of standardised, accredited training along a Preset-Inset continuum;
- The adoption of flexible ODL methods, creating new roles and responsibilities among existing providers and devolving training and support functions to district, zone and school levels;
- Reliance on print-based materials and, despite ambitions and rhetoric of some donors and ministries, very little use of ICT-enhanced programmes. (Mattson, 2004:15).

With so many role players increasingly involved in teacher development, there is need to guard against possible loss of coherence and cohesi

An additional area to be considered is a commitment to the development and use of Open Education Resources (OERs) as exemplified in the Teacher Education in Sub-Saharan Africa (TESSA) project.

The TESSA Materials are focused on classroom practice in the key areas of literacy, numeracy, primary science, social studies and skills. They are designed for teachers to use in the classroom, as part of the school-based learning ... Teachers, as pupils, are supported in this process by the Teacher Educators in institutions, so they are useful resources for Teacher Educators too.
Each section has a case study about a topic, and also an activity. The case study and the activity give you ideas about different ways you could deal with a topic, but they are not exactly lesson plans. You, or the teacher, have the freedom to implement the ideas in your own way. But of course they are promoting active learning in schools (TESSA c.2007).

However, we need to offer support and training on how to use existing resources. Adler, Reed, Lelliott and Setati (2002:69), having explored issues related to the availability and use of resources in an in-service teacher development programme on

the unsettling understanding ...: that contexts of greatest need teachers’ appropriation from their in-service experiences and recontextualisation of new or existing resources exacerbated inequality. There were teachers whose context and/or personal disposition appeared to work against pedagogical innovations, and in these cases an unintended consequence of innovation appeared to be both an undermining of the teacher’s resourcefulness, and consequently reduced learning opportunities for his or her learners. [italics as in original]

This echoes the concerns of Prabhu and Tabulawon earlier.

Adler, Lelliott and Setati argue that when discussing teachers’ access to and use of resources, it is useful to think in terms of issues related to transparency, recontextualisation and appropriation which they explain as follows:

- Access to any social practice ... entails access to resources of that practice. Such access hinges on the concept of transparency with its dual functions of visibility and invisibility (Lave & Wenger, 1991). Access to a resource in a practice requires that the resource be both visible (seen so that it can be used) and invisible (see through so that the practice is illuminated). For example, effective use of a geoboard in a mathematics class means seeing the nails, and then through the nails to the spatial relationships between them (ibid. 59).

- The difficulty with a resource like a sheet of paper that as it is drawn into the classroom, it is recontextualised. It is no longer a sheet of paper: within a mathematics lesson on fractions it could stand for a “whole”; in a science lesson it could represent the end product of a paper-making process ... The meanings of the resources emerge through their use in the context of classroom practices and the subject knowledge being learned (ibid. 68-9).

- Interrogations of learning, particularly from a socio-cultural perspective, have helped explain unevenness and heterogeneity by shifting from cognitive science notions of internalisation (a simple taking in of the external), to appropriation – where tools in the learners’ environment are understood being used adaptively (Kirshner & Whiston, 1997:5). There is an ongoing interrelation between the learners’ biographies, their learning in the programme, and the context in which they work (ibid. 69).

Conclusion

Distance education can and should be used for teacher development provided this is done in ways that add quality and result in improved learning in classrooms. Distance education decisions are first and foremost education decisions. Thus we should be asking:

- What is educationally the best way to bring about the desired learning outcome?

- Now how can we do this without necessarily requiring teacher-students and teacher trainers to be in the same place at the same time?
How will we know whether we have achieved our purpose and what will we do if we have not?

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Annexure

Activity 6  Problem-Solving: Number Pattern Activity

Reflect on the method and solution given in this activity to the following problem:
Ten cities in South Africa need to be directly connected to all other cities by a telephone line. How many direct connections are needed (Paling & Warde: 1985).

One approach would be to follow the three steps below – but you are at liberty to use any other problem-solving techniques. If you try this problem out with one of the classes that you are teaching, it will be interesting for you to observe the different strategies that your learners use. Remember not to guide them too closely, let them think the question through and think of how to go about drawing it up and finding the solution.

Step 1 Understand the Problem: e.g. three or more cities not situated in a straight line. What do we need to do about it? We need to make sure that every one of the ten cities is connected by a line, which we will use to represent a telephone connection.

Reflection: To carry out this step the learners need to have language skills to read and interpret the problem, they need to be able to visualise the problem, and then use their mathematical knowledge to move into the next step in which they represent the problem symbolically and numerically.

Step 2 Devise a Plan: Reduce the problem to simpler terms – start with one city, and then two cities, three cities and so on.

Reflection: To carry out this step the learners need to have mathematical knowledge to think about how to represent the problem symbolically and numerically. Here learners also need to use strategic reasoning. The idea to develop a pattern by building up the number of cities from one, to two, and then three, and so on is essential to the solution to this problem. This is where we see the pattern element of the problem coming through.

Step 3 Carry out the Plan: Use drawings and write down a sequence to establish a pattern, formulate conjectures, test conjectures and generalise.

Using drawings:

<table>
<thead>
<tr>
<th>Number of cities</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drawing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of connections</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Establishing a pattern (rule)</td>
<td>$\frac{1(1-1)}{2} = 0$</td>
<td>$\frac{2(2-1)}{2} = 1$</td>
<td>$\frac{3(3-1)}{2} = 3$</td>
<td>$\frac{4(4-1)}{2} = 6$</td>
<td>$\frac{5(5-1)}{2} = 10$</td>
</tr>
</tbody>
</table>

Reflection: To carry out this step, the learners need to have mathematical knowledge to represent the problem. Here, they will use procedures and skills that they have been taught, but they will need to reason about the way in which they apply this knowledge. They will think about doing drawings of the first few cases, as soon as they can see that there is a
pattern emerging, they need to analyse the nature of the pattern. They can base their final solution on the basis of this pattern, by using the same reasoning to find the total number of connections of 6 cities, 7 cities..., and finally 10 cities. (Use drawings and test your conjecture/rules). When they do this, they are moving onto the next step.

Step 4 Evaluate and Extend the Plan for n Cities: If there are n cities how many connections will there be?

Let us use a simpler example again.

For 5 cities
Each city will be connected to 4 other cities \((5-1) = 4\)

There will be five such cases i.e. from A, B, C, D and E.

From this we have 5 \((5-1)\) connections

The connection from A to C is the same as C to A.

This is the same for each case. So divide by 2.

We therefore get \(\frac{5(5-1)}{2} = 10\)

Now write down the number of connections for n cities.

This would give us \(\frac{n(n-1)}{2}\) as a formula to work out the number of connections between n cities.

For 10 cities we therefore get \(\frac{10(10-1)}{2} = 45\)

Reflection: The solution of this problem illustrates the idea that mathematics can be seen as the “science of pattern and order”. The pattern was established though drawings made of the connections between up to five cities. Using the drawings, a numeric pattern could be established, which could be used to work out how many connections there would be between ten cities. Learners will not all follow the same steps, or carry out the steps in the same order. As the teacher, you need to be flexible, and follow the learners’ thinking. You need to probe and guide, without leading too explicitly, so that learners are able to make connections and develop their mathematical understanding, and so that they can be involved in “doing mathematics” (from SAIDE 2008:18-19).
Introduction

Language is power because it can be used to achieve a wide variety of effects and results. Language can be used to cajole, to flatter, to deceive, it can also be used to slander, to vilify, to destroy and to kill; but it can also be used to motivate, to galvanise, to construct and to build.

Language is a powerful instrument because of what it can do. It is therefore an instrument of power, for the one who accepts and undertakes to be its master.

This paper examines the questions below, in the context of higher education:

1. What are the traditional objectives and functions of language in higher education?
2. How can these functions be adequately executed to obtain maximum results in the service of Higher Education and national development?
3. To what extent are these objectives achieved in the experience of francophone African high education?

The goal of higher education in Africa

The goal of Higher Education in Africa according to the Action Plan of the African Union 2006-2015 is “the revitalisation of high education in Africa with the emergence of strong and vibrant institutions profoundly engaged in fundamental and development-oriented research, teaching, community out-reach and enrichment services to the lower levels of education: and function in an environment of academic freedom and institutional autonomy within an overall framework of public accountability” (The Second Decade of Education in Africa 2006-2015, Plan of action: 8).

How is language in higher education institutions relevant to the attainment of this goal? It is important in this respect to observe that it is axiomatic that the most fundamental objectives and functions of universities and institutions of higher education are:

1. Teaching – learning
2. Research
3. Community outreach (support to development issues at the local and national levels)
4. Impact of higher education on primary and secondary education.

A key term in the goal set for higher education by the African Union as presented above is development. Indeed, the above core objectives of higher education must be development-oriented. What is development and how is language related to development? Toward this double barrel question, is a starting point to answer the earlier question, “How is language relevant to the attainment of goals of higher education.
Language and National Development

National development is a much sought-after ideal in the developing nations of Africa as evidenced by the pervasive periodic (five or seven-year) National Development Plans characteristic of African nations. Yet, despite over a century of planning for development, it cannot be said that the ideal of development, (the object of the search), has been achieved. In spite of evidence of growth, the essence of development has eluded all efforts and initiatives as well as all economic programs designed for development, from the Structural Adjustment Programme (SAP) to the New Partnership for African Development (NEPAD). The relative achievements of African nations since independence in relation to the evidence of extensive abject mass rural poverty is best described as growth without development. This sorry state of affairs is due, in part at least, to the fact that the language factor has not been fully and comprehensively addressed or has been addressed only haphazardly and half-heartedly (Chumbow, 2005).

It has been argued forcefully that the economic and social development of Africa depends crucially on the development and use of African languages in the enterprise of national development (Bamgbose, 1990 and 2003, Chumbow, 2005; among others). Thus, Chumbow, (2005) articulates this issue in the following terms:

"An evaluation of the efforts of African countries in the enterprise of national development shows that in most cases, there has been what we may call growth without development because despite visible signs of economic progress with considerable population explosion, African countries are characterised by massive presence of abject poverty in the rural communities (villages) and the outskirts of areas (where most city dwellers live) surrounding a few affluent villas capped by toky-scrapers in the city centres" (Chumbow, 2005:168).

National Development

While there is no universally acceptable and acceptable definition of national development, a situation where little evidence of conspicuous consumption in parts of the urban centres contrast sharply with the generalised poverty, misliteracy, ignorance and disease in most of the national territory is far from being a reasonable approximation of the national development ideal. The target of development should be the improvement of the welfare and social well-being of the entire citizenry.

We define national development (in Chumbow, 1990) as "the nation's human resources acting on its natural resources to produce goods (tangible and intangible) in order to improve the welfare and social well-being of citizens of the entire nation in terms of indicators of development predicated on minimum standards of living which include (among others) a reasonable standard of good housing facilities, food security, life expectancy (reduction of infant mortality and improvement of maternal and reproductive health), education and literacy, and employment."

The United Nation's Development Programme (UNDP) human development index mirrors the basic necessities of life that can guarantee a reasonable level of development of the human condition.

The United Nation's millennium development goals (MDGs) adopted by developing nations as development objectives for horizon 2015 includes basic (universal primary) education, Education and health have been found to be central to development initiatives (Menhrhota1, 999).
Education and National Development

Education in all its forms (formal, informal, and lifelong education and apprenticeship training schemes) is crucial for national development because only a human population possessing knowledge and skills acquired through education and training can serve as veritable agents of change to convert raw materials and the nation’s natural resources into finished products to satisfy consumption needs of the national economy. (Chumbow, 2005:169)

Language and Education

Language is the means by which knowledge, skills, and technological know-how are transferred from a source to a destination, from the one who possesses the knowledge and skills to the one who does not, but wants to. Thus, all forms of education (formal, informal, and lifelong) require the use of language (oral, written or signed). Effective communication via language determines the extent to which the knowledge or technology is transferred from the source to destination. The relation between language, education, and development should be obvious and self-evident from the foregoing. Education is relevant to national development because only educated, trained or skilled human resources are useful as agents of change capable to transforming raw material or generating the finished products, ideas and knowledge needed to improve the human condition.

This underscores the fact that the contribution of un-educated, untrained and unskilled to the development equation is relatively low.

Language in turn is crucially relevant to education because it is the primary means of human communication and no education (learning and teaching) can take place without effective communication.

Language and capacity building in higher education

The University or Institution of Higher Education has a unique responsibility in its role of capacity building for national development. Therefore a need to carry out a foresight analysis of the language industry in higher education with respect to the language function as a necessary condition for the attainment of the objectives of the University institution. The analysis has to be done with respect to the following dimensions:

Knowledge Acquisition
Knowledge Dissemination
Knowledge Production
Knowledge and Extension Services and Programmes

Independently of the general foresight analysis, there is a need to recognize two types of language activities. The first is the language programmes of the various language degree programmes of Academic Faculties where languages are undertaken for degrees (from BA to Ph.D) in Language and / or literature. These are programmes of language as a body of knowledge on the same level as History, Maths or Physics.

Secondly, there is Language as a skill and a tool for the acquisition of knowledge in any discipline which needs to be taken by all who seek to acquire knowledge, including those in Language degree Programmes (if such skills are not explicitly or implicitly taught in their programmes).
These programmes exist in many universities under different names with different stories to tell as far as their efficiency and efficacy is concerned. Some universities do not have them or have poorly conceptualised versions. These programmes, however, quite important and necessary.

The context of Distance and Open Education being considered here makes them an absolute necessity, particularly since independent learning requires considerable reading and writing skills.

This will be the focus of a number of considerations from our knowledge and experience within the francophone African context.

Language and skills programme and awareness

The first and fundamental challenge is that those who need the programme most, students (and staff) do not often realise their need for it. There is therefore a need to sensitise the entire university about the power of language and its role as a tool and facilitator of knowledge acquisition, dissemination and research. There are studies which indicate the correlation of success in students' language and skills programmes and success in academic and professional disciplines. It is important to use results of local studies in any awareness campaign. If they do not exist, the Language and Skills Institute or Department or Unit should undertake them.

Students’ resistance to this course is manifested in many ways – subtle and not so subtle. Teachers in the faculties need to be convinced and motivated where necessary for them in turn to motivate and encourage their students.

Students variable

Another major challenge faced by the language programme is the disparity of levels of undergraduate students in the language, despite the fact that there is a minimum requirement.

To obtain a minimum effect, the Language and Skills Department needs to have a Language Needs Assessment procedure in the form of diagnostic test for placement of students at various levels of the language and skills programme as determined by performance in the diagnostic test. Standardised tests may be used, but experience shows that it is advisable to use test with local norms test constructed locally. At any rate, if standardised test from abroad must be used, local norms should be established before they are widely used.

The teaching of learning skills

In the focus on the learner, there is a need to inform and survey learning styles and learning strategies. Relevant issues in this respect are:

i. Characteristics of good language learners
ii. A learner-centered approach to language teaching
iii. Learning strategies in and out of the classroom
iv. Learning strategy preferences.

Programme variable

The challenge here is the identification and organisation of skills needed to be taught in the programme. Here, experience and knowledge of principles of language syllabus and curriculum development are needed to ensure the assessment of discrete language skills are
articulated in appropriate doses at various levels of the programme. Elements of the syllabus include the four basis of language.

Grammar, Reading, Writing, Speaking along with teaching vocabulary, phonology etc. This should be envisaged along with methodological considerations concerning each skill. Thus, for instance, with respect to Grammar, the programme must have an attitude with respect to low grammatical information to be taught 'explicitly or implicitly etc. Hence the need emphasised earlier of competence and versatility issues.

Problems that arise from young teachers are ironed out in our experience, with periodic refresher courses and seminars (to be discussed below).

Language materials variable

Consideration of the appropriateness and suitability of materials is informed by the learner and programme variables and the level.

Problems arise in this respect because there are books in the market fuelled only by the profit motive. They are neither based on the application of any psycholinguistic theory of language learning nor do they take into consideration cognitive and sociolinguistic variables (learner variables). Also, the Language teaching method underlying the teaching may not be discernible.

The choice of language materials needs to be made on the basis of an insightful analytical evaluation (with checklist) that takes these factors into consideration. Materials selected or adopted must be adapted to specific situations by a careful comparative and differential analysis of needs and content.

Ultimately, it is recommended that each programme, after being taught and examined for a number of years, should design its own course book taking into consideration students performance over the years as relevant input in course design.

Language teaching methods variable

The challenge here is that language teaching methods are changing quite often in response to research findings in psycholinguistic and sociolinguistic of language learning. Methods used should often be congruent with the learners goals for language learning while it is important to update information and methods of teaching, care must be taken not to jump on the bandwagon of a train on its way to derailing because it is not solidly anchored. Any rate of eclectic principles requiring the use of time-honoured methods are useful. There is, however, a need for the programme to coordinate the choice and use of method to avoid unnecessary disparities.

Research activity

The language teacher who is not focused on research soon be irrelevant to the teaching-learning process as a reliable facilitator of learning experience.

The dynamics of the information on the teaching-learning process makes research by the teacher not only desirable but indispensable. Sandra Lee Mackay presents principles of language research in general with a section on Action Research which is collaborative research carried out by teachers with a view to changing things in the classroom to ensure participation of a team of colleagues (Mackay 2006: 29-39). Time-honoured techniques of
Survey Research; Introspection and Qualitative approaches may also be useful in getting material for effective teaching.

We recommend that these techniques should be taught to teachers in the programme during refresher courses and their work reviewed by peers as part of the quality assurance procedures.

Teacher variable

The language teacher, as the facilitator in the language learning enterprise, mediates and ensures the oversight of the maximal interactive correlation of the entire variable in the teaching-learning environment. The teacher variable is examined at three levels as follows:

Capacity building of language teachers to assume this function

Inadequacy of trained language teachers for Language Programmes

Problem: Most teachers recruited to do this job, end up defending a thesis in Linguistics or literature and moving away from language pedagogy per se to Literature and Language Departments so as to become Professors since this programme is run as a short time service programme.

Solution: Contractualisation as part of the recruitment deal

All teachers in the programme sign a binding contract on a minimum duration of service

- Build Action Research into a viable applied linguistics research domain whose results will inform issues in the area patterning to student programmes, language materials etc.

- Get university authorities to recognise service as language teacher, as a career option with an approved carrier profile for upward mobility similar to what obtains for laboratory technicians who can rise from Assistant laboratory technician to chief laboratory technician passing through the ranks of Laboratory technician, senior and principal laboratory technician.

Improving teachers morale and goals

Ensure that teachers are motivated by adequate conditions of service.

- Attitude engineering: Undertake principles that will ensure positive attitude, positive thinking and positive action

Action to be taken: (?)

- Training: (?)

Enhancing teacher competence

There is a need to ensure that language teachers in the programme are trained teachers from the outset or given a language teaching training by way of refresher courses or a series of seminars and hands-on tasks.

- Design periodrefresher courses based on new information relevant to good or best practice in pedagogy.

- Updating teachers’ language and knowledge in grammar …
- Updating teachers skills in the area of methodology
- Updating competence in evaluation and testing

Exploring new horizons

Objectives: There are a number of emerging trends or key issues in diverse areas of the language industry that need to be examined and appropriated for the effective implementation of strategic objectives of university language programmes. This will require interchange between scholars, practitioners (as teachers), psycholinguists engaged in language acquisition research, sociolinguists concerned with the learning environment etc.

Goal: To monitor emerging international research priorities and methodological best practices in language teaching and appropriate (adaptation and adaptation to our local situation).

Action: (Food for Thought: What specific actions need be envisaged that are compatible with these objectives and goal?)

Language and learning skills discussed above take the Acquisition and dissemination (learning – teaching) component of higher education

Language for outreach programmes

The Millennium Development Goals report of the United Nations 2006 indicates for all of the eight goals that progress has been made but sub-Saharan Africa lags behind considerably with respect to the targets and in some cases, unless something is done, it is unlikely that the 2015 targets will be met with respect to the eradication of poverty and hunger, universal primary education and maternal health. We have argued (Chumbow 2007) that this, in part, is because many of the activities geared towards solving problems are conceived and made available to the masses of the rural population only in French or English. The medium of education in most of Africa is still largely via an exoglossic foreign language of colonial heritage such as English, French, Portuguese, Spanish, etc. with the consequence that only an estimated 20 to 40 per cent of the African population is educated in these languages.

The fact that the sum total of the knowledge, skills and techniques relevant to, and required for national development are confined and transmitted in a foreign language used by a relatively small fraction of the population means that the majority (60 to 80%) who do not speak the official foreign language are literally marginalised and excluded from the development equation.

In order to democratise the access to knowledge necessary by the rural population who constitute 60 to 70% of the population we have to use a language they understand. There is therefore a need to accelerate the valorisation of African languages by enhancing their instrumentalisation, giving them orthographic and grammatical/norms etc. so that they can assume new functions in communicating new knowledge in science and technology.

University Departments of Linguistics and African Language and appropriate Language Institutes of the state where they exist, have to be empowered and enabled to assume responsibility with respect to the revitalisation valorisation, instrumentalisation and intellectualisation of African languages so that they can be used along with partner languages (English, French, Portuguese, Spanish) as languages of national development from the grassroots upward. This is not to say that African languages should be used only for outreach purposes. The advocacy is for them to be used in teaching and made to assume other valorising or economically valued functions.
The point made here is that universities cannot achieve their outreach goals at all with only the use of exoglossic or foreign languages.

Quality assurance framework

Quality assurance is indispensable in ensuring that objectives are achieved and targets met. For the Higher Education Language Programme, mechanisms put in place by the university for all disciplines should be adjusted if they are properly conceptualised. The francophone African universities until recently have been quite weak on quality assurance because they thrive on the authoritarian mode of delivery in university institutions that prevailed before 1968. With the advent of the decision to implement the Boulogne process called the ‘système LMD’ (Bachelors, Masters, Doctorate Programme) which implies the adoption of the North American system already adopted in Europe (including France), the university communities are bracing up to adopt rigorous quality assurance principles which should include the following (which exist some universities already):

i. Teacher self-Assessment via a detailed questionnaire that seeks to have a teacher reflect on what he has done for the course and what he thinks he has achieved determining strengths and areas that need improvement.

ii. Students' questionnaire on all aspects of each course, including an assessment of the teaching etc. This has sparked dissent among lecturers who cannot accept 'to be evaluated by students'. Explanations to the effect that the teacher is not being evaluated but the course and the teaching process and the teacher happens to be only one element in the process, do not seem to have solved the problem.

iii. Peer Review Process where colleagues give feedback to each other about work.

iv. Mentoring: The process where junior lecturers are attached to senior lecturers for advice and guidance seems to work well, in an informal situation.

Language in higher education: Francophone African perspective

Francophone African countries as a geopolitical unit, refers to all countries of Africa where French is the official or dominant language. Of the five regions of the African Union, Francophone African countries are found mainly in the North, West and Central Africa. The North African Francophone countries also have Arabic official or dominant language West and Central African Francophone countries numbering about 20 constitute the core of African Francophonie to which Madagascar and Mauritius were added.

French language as a colonial legacy

The language situation in Francophone African institutions of higher education, today, predictably mirrors the language policy of the French colonial master in the era of colonisation. French educational policy in its colonial era was one of cultural assimilation and the French language (as element of culture), was the instrument of assimilation as the sole medium of instruction in the school system of the colonial era (Chumbow 1980).

The direct method based on the use of the target language (French) to the exclusion of the African mother tongue, was introduced in French Equatorial Africa (most of present day Central Africa) by its Governor General, R. Antelion in 1925 and was generalised throughout French West Africa. It is this system of total immersion in French that produced the first generation of Francophone African Leaders (Senghor, Houphouet Boigny, Rabemanjara, the Diops etc).
Leopold S. Senghor, an exemplary product of the French assimilation machine was a master of the French language and this earned him the unusual distinction of being admitted to the highly prestigious and elitist (Academie Française) French Academy. He was, however, sufficiently lucid to proclaim his negritude. He romanticized with the French language in the following terms "French, this precious jewel, this wonderful instrument lifted from the ashes of Colonialism ..." (Senghor 1962).

As pointed out in Chumbow and Bobda 2000, the French assimilation policy was bound to produce what Frank Fanon dramatically called a "black-white masquerade". The policy was characterised by the belief in the superiority of the French language such that African languages were seen as mere "primitive patois", unfit to express the fruits of the rich French civilisation (Chumbow and Bobda 2000). The consequence was that French was deliberately, through a selective educational policy, made available only to a few privileged individuals, earmarked as collaborators in the service of the socio-economic goals of colonialism. This explains why out of a population of 119,573,000 only about 13,000000 or 29.5% have a functional knowledge of French, (Nkot and Paré 2001: 29). This means that more than 70% of the people in Francophone countries do not know French.

Language in Francophone Higher Education Institutions: An Overview

With respect to the language and linguistic situation the francophone African countries have slightly varying experiences in terms of details but they have a common denominator. The French language is prominently attested as a medium of instruction.

However, the advocacy for the use of the mother tongue in education over the years (ACCT, UNESCO, OAU, etc) has led to varying attempts to "integrate" national languages in adult literacy programmes and exceptionally in the primary school system with the impulsion coming from the University Departments of Linguistics and African Languages.

- Francophone North Africa

While French is waxing strong in francophone North African countries of Algeria, Morocco and Mauritania, Arabic is considered the official language. There are, however, two varieties of Arabic in a situation of diglossia: Classical Arabic used in schools at all levels and the local variety, used in non-formal situations, along with indigenous African languages like Berber, Amazigh. French is taught in the school system and especially used in the university as a language of instruction in many Faculties and Schools, but most importantly, a language of research and scientific discourse along with Arabic (Boufarra 2008, Rispail, 2005, Kahlouche, 2000).

- Sub-Saharan Francophone Africa

French is the sole language medium of instruction at all levels of education (primary, secondary and tertiary) in most countries of this geopolitical unit, with the exception of Cameroon and Mauritius which have a dual status belonging to both the Francophonie and Commonwealth of nations and English in addition to French as official languages and languages of the educational system as we shall see presently.

As observed by Nkot F. and J. Paré 2001, it is an illusion to think that francophone Africa is uniform and homogenous in terms of the languages and their relation to French. There are indeed, sub systems within Francophone Africa in particular.

- Francophonie in the ex-Belgian colonies is lived differently in the sense that French, the official language is dominant at the primary level but some indigenous African languages developed by the Belgian colonial authority to deliberately limit
access to French, the language of power, now enjoy the status of national vehicular languages or Lingua Franca. Thus, Kinyarwanda in Rwanda, Kirundi in Burundi and Lingala, Kikongo, Ciluba and Kiswahili in the Democratic Republic of Congo have a special de facto status as Lingua Franca, even if in recent years their role in education is predominantly in adult literacy.

Recently, Kiswahili has been introduced in schools of Burundi and Rwanda. While English has been adopted as official and national language along with French as a result of the massive return of Rwandan refugees from Anglophone countries (after the 1994 genocide) where they were acculturated as anglophones.

In the case of the Democratic Republic of Congo, the official language and the national vehicular languages interact with a hundred indigenous languages. At the level of higher education, French is the main medium of teaching and research with local languages used as a medium to develop literacy materials for adult literacy and basic education. Foreign languages are taught and used in the various foreign language departments.

Francophone Countries with Non-Francophone Heritage

Constrained by geographical contiguity with big francophone countries, propelled by the need to be members of regional economic communities (ECOWAS, CEMAC), some counties with a Portuguese or Spanish colonial heritage members of the Francophonie. This includes Cape Verde Island in West Africa, Guinée-Bissau, and São Thome and Príncipe Island (off the Coast of Gabon) which are of Portuguese origin and now use French along with Portuguese over a background of a local Creole and some African languages in the case of Guinea Bissau). There is also the Equatorial Guinea of Spanish colonial heritage which has now added French to Spanish, the official language.

To this category, must be added Djibuti (in the Horn of Africa, a neighbour of Somalia and Ethiopia) which although a former French colony has undergone extensive interaction with Ethiopia and Somalia and Arab nations of North Africa and the Middle East as a result of its isolation from other francophone territories and the outcome of its linguistic and cultural affinity with its neighbours. Arabic and French are official languages, de jure terms of the constitution, but Arabic has a de facto dominance as a result of the entry of Djibuti into the Arabic League in 1997 (Couvert 1986).

Francophone Countries with some Anglophone Heritage

Cameroon and Mauritius belong to both the Francophonie and the Commonwealth of nations as a result of a complex linguistic legacy that includes English as part of the colonial heritage. Thus, French and English are official languages and languages of education in the school system at all levels.

In Mauritius, English and French are used interchangeably as medium of instruction by the staff. Mauritian Creole is the Lingua Franca for non-formal discourse even at the university. Tirvassen 2008 indicates that there is Anglocentrism in higher education, particularly with respect to scientific discourse and scientific publications, as francophone lecturers trained in France, quite often publish in English while lecturing in French.

In Cameroon, English and French as official languages are used as media of instruction. The lecturer makes the choice and the students have the obligation to adjust to either language because in principle, the English-French bilingual system at the primary and secondary levels is supposed to have prepared them adequately. Here again, this is not always the case.
A compulsory university bilingual training programme is provided for all undergraduate programmes in English for Francophone students and in French for Anglophone students. Degree award may be withheld until a language proficiency requirement is satisfied. Students may respond to question in the language of their choice both in classroom interaction and examination. Teachers are expected to have competence enough to access students’ output in either language.

Other European languages such as Spanish, German and Italian are taught as subjects in a degree programme in the various languages Departments of the Faculties of Arts and Schools of Education.

African languages are the object and subject of linguistic studies (analysis at the level of phonology, morphology and syntax and semantic) in Departments of Linguistics and Africa languages. A few selected indigenous languages, Kiswahili, Fufu, Ewondo, Duala, Bassa, Fe’fe, are taught as proficiency courses. African languages are offered at the degree level. Research has been undertaken for production of language for teaching materials.

The recent decision by the Minister of Secondary Education to start teaching Cameroonian languages in schools as from September has led to the commitment of the Minister of Higher Education to request for the implementation of degree programmes in African Languages in addition to the well known powerful African language and linguistic programmes.

Francophonie in countries with a French language colonial heritage

French is the unrivaled and unqualified language of education at all levels in Senegal, Côte d’Ivoire, Burkina Faso, Mali, Guinea, Niger, Togo, Chad, Central African Republic, Congo and Gabon. Only the language Departments teach English, French, Spanish and German as media of instruction.

In the French language Departments, French is taught as first language with a first language methodology.

Some universities, (in Senegal and the Congo etc) have taught English as a foreign language (EFL) is voluntarily pursued under the impulse of its international impact in the context of globalisation. Because it is taught with an EFL methodology or as English for special purposes (ESP) it does not take root as it is used with hesitation and interference.

African languages which were totally neglected by French colonial policy perpetuated in the early years of independence have gradually been recognised.

In 1992, the Francophone Cultural and Co-operation Agency (ACCT) developed a ten-year-programme of language in the Francophonie countries of the South in which it asserted that “the future of French in Africa is inextricably linked to the development and use of indigenous African languages” (Chumbow and Bobda, 2000).

Departments of Linguistics and African Languages have been working hard on descriptive and applied aspects of language studies with evident productivity, more importantly in the development of mother tongue literacy programme.

The initiative was supported by the ACCT which spared regular training seminars in the École des Bordeaux in the 1980s and 1990s to empowering researchers and lecturers in applied language research (devising orthography, pedagogical grammars, lexicography or dictionary making etc).

At the status planning level, in virtually all Francophone countries of this category, French is the official language along with many official or unofficial vehicular languages including
vehicular cross border languages or mega languages of wider communication spread over several countries.

**Major Vehicular Cross Border Languages of Sub-Saharan Francophone Africa.**

<table>
<thead>
<tr>
<th>Language</th>
<th>Number of Speakers</th>
<th>Geographical Spread</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fulfulde (Peul)</td>
<td>@25 million</td>
<td>Cameroon, Tchad, Niger, Senegal, Mali, Burkina Faso, Guinea, Benin, Nigeria.</td>
</tr>
<tr>
<td>Kiswahili</td>
<td>@24 million</td>
<td>Congo, RDC, Burundi, Tanzania, Ouganda, Kenya, Zaire.</td>
</tr>
<tr>
<td>Sango (Ugbandi, Yakoma)</td>
<td>@12 million</td>
<td>RCA, Tchad, Congo, RDC, Cameroon.</td>
</tr>
<tr>
<td>Kirundi (Kwondo, Bulu)</td>
<td>@12 million</td>
<td>Rwanda, Tanzania.</td>
</tr>
<tr>
<td>Beti-Fang (Ewondo, Bulu)</td>
<td>@8 million</td>
<td>Cameroon, Gabon, Congo, Equatorial Guinea.</td>
</tr>
<tr>
<td>Haousa</td>
<td>@6 million</td>
<td>RCA, Tchad, Cameroon, Nigeria, Niger.</td>
</tr>
<tr>
<td>Arabic</td>
<td>@6 million</td>
<td>Cameroon, Tchad, Soudan.</td>
</tr>
<tr>
<td>Kikongo</td>
<td>@6 million</td>
<td>Congo, RDC.</td>
</tr>
<tr>
<td>Lingala</td>
<td>@6 million</td>
<td>Congo, RDC, RCA.</td>
</tr>
<tr>
<td>Yoruba</td>
<td>@6 million</td>
<td>Benin, Togo, Nigeria.</td>
</tr>
<tr>
<td>Wolof</td>
<td>@6 million</td>
<td>Senegal, Mauritania, Gambia.</td>
</tr>
<tr>
<td>Malinke-Manrique Bambara (Dioula)</td>
<td>@6 million</td>
<td>Burkina Faso, Ivory Coast, Guinea, Mali, Senegal, Guinea Bissau.</td>
</tr>
</tbody>
</table>

Source: Wamba 2008

NB: The figures are estimates.

While research is done in African languages, national degree programmes are available in African languages, comparable to what obtains in Anglophone African countries like Kiswahili in Tanzania and Hausa, Yoruba and Igbo in Nigeria. Two factors explain this situation: the nefarious impact of the colonial legacy which presents the development and use of African languages in the academic domain as a concession and favour, and the inadequate preparation with respect to the instrumentalisation of the national African language. Other reasons may be adduced as contributory factors.

**French as an African Language?**

Because of the evidence of appropriation of French by African as a result of the many phonological, morphological and lexical “particularisms” in the various varieties of African French which, for want of space, we cannot present (see Chumbow and Bobda, 2000 and Tabi Manga 2000), some scholars argue that French is an African language. Thus, Dumont 1990, published a book on the issue aptly titled "Le Français Langue Africaine”. Statement or question? This title provoked several reactions including Mendo Ze’s 1999, collection of views favourable to the assertion and Ngallasse 2008 who adduced cogent arguments to deny the status of African language for French. For Ngallasse, French is a language of Africa but not an African language.

**A lingua franca for science**

What is the language of scientific research in Francophonie in general and in Francophone in particular?
While English is rivaled considerably by other world-class languages as the main language of globalisation, it is virtually unrivaled as the language of science at the global level. A study by Professor Foued Laroussi of the University of Rouen, based on the number of publications and their impact calculated in terms of number of citations in scientific journals as contained in the citation index of the Institute for Scientific Information (ISI) in Philadelphia, USA and the Pascal and Francis of the National Institute of Science and Technology of the French National Centre for Scientific Research, was very eloquent in this respect.

A 2004 report shows the regression of publications relative terms despite increase in absolute terms, leading to what he calls "crises in French Scientific Research".

For the year 2001, French comes second to English with only 2,1779 publications or 2.1% of world total and far behind English with 95,5036 publications or 83.12% of total publications. The report also shows a regression of the French (language) publications from 2.1% in 2001, 1.7% in 2002 and 1.6% in 2003. The fields of Science, Medicine and Technology are more affected by this disparity than Social Sciences and Humanities. Publications in French constitute 10.21% of world total publications in Humanities and 4% in the Social Sciences in 2001 (Laroussi 2008).

What are the implications of this for the language of research in higher education in Francophone Africa?

When it is considered that some top French Scientific journals like "Les Annales de l'Institut Pasteur" and "La Nouvelle Revue Française d'Hématologie" maintain their French language title but publish almost exclusively in English; considering that others (like Fundamental and Clinical Pharmacology) use English titles for their journals and publish mostly in English; considering that most French researchers of different research fields endeavour to publish in English, Francophone African Universities will have to step up the teaching of English in the university in general and to the Faculties of Science in particular, if Africa is not to be marginalised.

The increasing use of English in scientific journals by Francophones despite appeals from the Francophonie to patronise French is rationalised by Philippe Van Parýs 2004 as follows:

"Publishing in French is a battle from the rear which prevents the scientist from sufficient exposure to readership and criticism."

Conclusion

Knowledge production in all African universities must be stepped up for Africa to remain competitive in the global market of science and technology but more importantly, for the university to contribute to the social and economic transformation needed for development.

In addition, Francophone Africa will need to address the language question in higher education by integrating the teaching and use of African languages and the ultimate medium for developing a base for science and technology stepping up English as a means of participating in scientific and intellectual debate at the global level.

Finally, a case has been made for the generalisation of Language and Skills Programmes in institutions of higher education and measures taken to ensure that they play their role in providing the language and learning skills that are indispensable as instruments of effective acquisition and dissemination of knowledge in the service of the nation and in the service of mankind.
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SUSTAINABLE DEVELOPMENT FROM INTERNATIONAL PERSPECTIVES: HOW DO DEVELOPING COUNTRIES FIT THE MATRIX?

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Ambassador Permanent Representative of Nigeria to the United Nations

Let me begin by expressing my profound gratitude to the Vice Chancellor, Prof. Olugbemiro Jegede and the Faculty of the National Open University of Nigeria for the invitation extended to me to share my thoughts on the topic: Sustainable Development From International Perspectives: How Do Developing Countries Fit The Matrix.

At the Earth Summit in Rio in 1992, the international community desperately sought to establish a new and equitable global partnership to protect the integrity of the global environment based on three pillars of sustainable development, namely: environmental protection, economic development and social development. The global community agreed that these three pillars must be balanced, integrated and mutually reinforcing based on the Rio principles. The United Nations Commission on Sustainable Development (UNCSD) was thereby established as an intergovernmental process with unhindered involvement of all countries in its decision making process, to ensure effective global implementation of the Earth Summit agreements, including the now famous Agenda 21, which is a blueprint containing the agenda for the implementation of sustainable development.

Agenda 21 covers the broad field of sustainable development. The action programme was envisaged as the tool for implementing the principles enunciated in the Rio Declaration. It offers clearly articulated objectives, strategies, activities, costing and an allocation of institutional roles. Agenda 21 has a preamble of importance in setting its contents. A key clause in the preamble states that Agenda 21 affirms global consensus and political commitment at the highest level on development and environment cooperation.” The preamble further notes the disparities between the rich and poor and urges nations to work together in a global partnership in order to achieve sustainable development. In order to assure a safer and more prosperous future, environment and development issues need to be dealt with in a balanced manner.

While recognising that the right to development must be fulfilled in order to equitably meet developmental and environmental needs of present and future generations, it also acknowledged that meeting the environmental objectives in Agenda 21, the blueprint for sustainable development, would place additional burdens on developing countries. A balance was forged between development and environmental imperatives, consequently creating a framework for assistance by the international community to complement and support the efforts of developing countries.

It could be stated that the United Nations Conference on Environment and Development (UNCED) changed, in a far-reaching way, the face of the environment and development landscape, and institutions. UNCED generated formal documents: treaties on climate change and biodiversity, a statement on non-binding forest principles, the Rio Declaration and the action programme, Agenda 21.

The Earth Summit further recommended the active participation of citizens along with governments in the implementation of the Rio agreements. Since then, many countries have established their own multi-stakeholder participatory body, referred to as National Council for Sustainable Development or its equivalent, to demand and implement sustainable development at the national level.

The form and functions of National Council for Sustainable Development vary, but its common roles are:
· Assist governments in decision-making and policy formulation;
· Facilitate the focused participation and cooperation of civil and economic society with governments for sustainable development;
· Integrate economic, social and environmental perspectives;
· Localise global agreements such as Agenda 21 and international conventions related to sustainable development; and
· Provide a systematic and informed participation of society in United Nations deliberations.

The National Councils for Sustainable Development (NCSD) can be seen as national level counterparts of the United Nations Commission on Sustainable Development at the international level. It facilitates countries’ follow-up of the implementation of Agenda 21 at the national level, and assists in preparation of national reports to be presented regularly to the United Nations Commission on Sustainable Development (UNCSD). While the UNCSD provides a forum to coordinate amongst countries’ interests and concerns to negotiate common global sustainable development objectives and targets, the NCSDs coordinate amongst plurality of national stakeholders’ interests and concerns to develop and carry out collaborative sustainable development strategies, policies, programmes and projects for common national good.

The UNCSD activities are coordinated by the Department of Economic and Social Affairs of the United Nations (UN DESA) which serves as its secretariat. The secretariat receives reports based on master set of data compiled by an Inter-Agency and Expert Group (25 UN bodies - Funds and Programmes, Commissions and Agencies, including the World Bank, United Nations Environment Programme, United Nations Conference on Trade and Development, World Trade Organizations, Economic Commissions, Conventions, etc) for periodic assessment of progress on sustainable development, including millennium development goals.

A number of countries, which established National Council on Sustainable development or its equivalent following the outcome of the Earth Summit in 1992, showed considerable progress in the implementation of Agenda 21 and other decisions on sustainable development during the review process in 2000. The rest, at best, including Nigeria without a national coordinating body, achieved little progress. It was in this light that the Institutional Framework for Sustainable Development of the Johannesburg Plan of Implementation of the World Summit on Sustainable Development recommended the establishment of national council for sustainable development or its equivalent to all countries to assist them in coordination at the national level. Nigeria only got Presidential approval to set up its National Sustainable Development Commission in 2007, fifteen years after the Earth Summit in Rio.

The sample of countries that established a national council for sustainable development or its equivalent customarily set them up as independent bodies. These countries include:

· United Kingdom – founded Sustainable Development Commission in October 2000 – advocates sustainable development across all sectors of the UK, review of progress towards it, and build consensus on the actions needed if further progress is to be achieved;
· Belgium – National Council for Sustainable Development functioned as from 1993 – an advisory body that advises the Belgium Federal authorities about the federal policy on sustainable development;
· Germany – German Council for Sustainable Development established in 2001;
· Finland – Finnish National Commission on Sustainable Development – established to coordinate the different measures on sustainable development at different levels;
· South Korea – Presidential Commission on Sustainable Development;
· Romania – National Centre for Sustainable Development responsible for advocating and coordinating all relevant initiatives pertaining to sustainable development in Romania;
· Philippines Council for Sustainable Development created to chart environment and sustainable development initiatives in the country.

In the UK as in many other European countries, a Board of Sustainable Development Commission was established, consisting of 19 Commissioners from a mix of academic, scientific, business and NGO background, chaired by a notable figure, and supported by 49 policy staff. Its work is divided into ten policy areas: climate change, consumption, economics, education, energy, engagement, health, regional and local government and transport. Each policy area is led by a steering group of Commissioners and SDC staff. Commissioners decide on which projects will be undertaken in each policy area, taking into account: knowledge gaps in government, new policy initiatives, contentious issues and technological innovations.

Assessment

After ten years of global implementation of Agenda 21, the international community through the outcomes (Johannesburg Plan of Implementation and Declaration) of the World Summit on Sustainable development (WSSD) expressed deep concern that, despite the many successful and continuing efforts of the international community since the United Nations Conference on Environment, held at Rio in 1992 and the fact that some progress has been achieved, the environment and the natural resource base that support life on earth continue to deteriorate at an alarming rate, particularly in developing countries.

The review of the implementations of Agenda 21 affects African countries showed that not much improvement have been made in their socio-economic and environmental development. The Nairobi Declaration stated that African economies have been on the decline and in some cases near collapse, both in quantitative and qualitative terms. The rate of economic growth in at least half of the region has stayed below 2% per annum-measured in terms of GDP while the human population has grown at an average of 3% per annum. It stated that Africa, unlike other regions of the world, continues to receive extremely low foreign private capital. It highlighted that despite the great opportunities globalisation offers, its benefits are unevenly distributed and yet its costs are borne by all, leading to marginalisation of the continent in the global economy. It thereby emphasised that increased regional integration/cooperation is essential for formation and development of African economic markets, to support economic growth and strengthening Africa's negotiating abilities with other regional groupings and transnational corporations.

In spite of the difficulties experienced in the implementation of Agenda 21, mainly due to weak financial constraints and insufficient technology transfer, reviews carried out within the framework of the African Preparatory Process have indicated that some of the major gains made by countries include:

· The formulation of policies and strategies for sustainable development.
· Inter-agency coordination mechanisms have been strengthened.
· Civil Society including NGOs, women's groups, youth groups and the private sector are getting more involved in the design and implementation of sustainable development strategies and action plans.
· Greater awareness on sustainable development issues has been built.
· The democratisation process has yielded some encouraging results and there is greater decentralisation of natural resources management.
- Life expectancy and access to education especially for girls have improved
- Sub-regional integration has increased and regional integration strengthened

It was against this background that the Commission on Sustainable Development, at its eleventh session at the United Nations Headquarters, decided that its multi-year programme of work beyond 2003 to implement the outcomes of the World Summit on Sustainable Development of 2000, would be organised on the basis of seven two-year cycles, with each cycle focusing on selected thematic clusters as set out in the table below.

<table>
<thead>
<tr>
<th>Cycle</th>
<th>Thematic cluster</th>
<th>Cross-cutting issues</th>
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<tbody>
<tr>
<td>2004/2005</td>
<td>- Water</td>
<td>Poverty eradication, changing unsustainable patterns of consumption and production, protecting and managing the natural resource base of economic and social development, sustainable development in a globalising world, health and sustainable development, sustainable development of SIDS, sustainable development for Africa, other regional initiatives, means of implementation, institutional framework for sustainable development, gender equality, and education.</td>
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<td>- Sanitation</td>
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<td>- Human Settlements</td>
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<td>- Industrial Development</td>
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<td>- Air Pollution / Atmosphere</td>
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<td>- Climate Change</td>
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<tr>
<td>2008/2009</td>
<td>- Agriculture</td>
<td>Poverty eradication, changing unsustainable patterns of consumption and production, protecting and managing the natural resource base of economic and social development, sustainable development in a globalising world, health and sustainable development, sustainable development of SIDS, sustainable development for Africa, other regional initiatives, means of implementation, institutional framework for sustainable development, gender equality, and education.</td>
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<td>- Rural Development</td>
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<td>- Desertification</td>
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<td>- Chemicals</td>
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<td>- Mining</td>
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<td>- A Ten-Year Framework of Programmes on Sustainable</td>
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<tr>
<td>Year</td>
<td>Themes</td>
<td>Additional Information</td>
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<tr>
<td>2012/2013*</td>
<td>Consumption and Production Patterns</td>
<td>sustainable development, gender equality, and education.</td>
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<td></td>
<td>- Forests</td>
<td>Poverty eradication, changing unsustainable patterns of consumption and production,</td>
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<td></td>
<td>- Biodiversity</td>
<td>protecting and managing the natural resource base of economic and social development,</td>
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<td></td>
<td>- Biotechnology</td>
<td>sustainable development in a globalising world, health and sustainable development,</td>
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<td></td>
<td>- Tourism</td>
<td>sustainable development of SIDS, sustainable development for Africa, other regional</td>
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<td></td>
<td>- Mountains</td>
<td>initiatives, means of implementation, institutional framework for sustainable</td>
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<td>development, gender equality, and education.</td>
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<td>2014/2015*</td>
<td>Oceans and Seas</td>
<td>Poverty eradication, changing unsustainable patterns of consumption and production,</td>
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<td>- Marine Resources</td>
<td>protecting and managing the natural resource base of economic and social development,</td>
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<td>- Small Island Developing States</td>
<td>sustainable development in a globalising world, health and sustainable development,</td>
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<td>- Disaster Management and Vulnerability</td>
<td>sustainable development of SIDS, sustainable development for Africa, other regional</td>
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<td>initiatives, means of implementation, institutional framework for sustainable</td>
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<td>development, gender equality, and education.</td>
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<td>2016/2017</td>
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<td>Overall appraisal of implementation of Agenda 21, the programme of further Implementation</td>
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<td>further Implementation of agenda 21 and the Johannesburg Plan of</td>
<td>of agenda 21 and the Johannesburg Plan of implementation.</td>
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<td>implementation</td>
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In each cycle, the thematic clusters of issues will be addressed in an integrated manner, taking into account economic, social and environmental dimensions of sustainable development. The Commission agreed that the implementation process should cover all these issues equally and noted that the selection of some issues for a given cycle did not diminish the importance of the commitments undertaken with respect to issues to be considered in future cycles.

The Commission further agreed that means of implementation should be addressed in every cycle and for every relevant issue, action and commitment. Linkages to other cross-cutting issues are also to be addressed in every cycle, as shown below.

It was against this background that the Bureau of the 13th session of the Commission on Sustainable Development requested the Secretariat to develop a matrix of information tool along the line of thematic themes for each cycle of the CSD to provide the user with a convenient overview of concrete experiences in addressing barriers and constraints identified in the areas of the thematic themes. It is meant to expedite the compilation of the policy options and practical measures contained in the Chair’s summary of the interactive discussions held at the Intergovernmental Preparatory Meetings of the CSD, so as to make it a living document, and to develop web-based tools to disseminate information on implementation and best practices.
It is also based on information submitted by governments, including through national reports; and by UN agencies, international and regional organizations and by Major Groups. It takes into account information contained in Secretary General's reports and Partnerships for Sustainable Development registered with the CSD Secretariat, as well as information emerging from the regional implementation meetings. It is not an official outcome document of the CSD. As an information tool, it is a work in progress, which the Secretariat will continue to update as more information on implementation is made available.

It consists of four columns which are structured as follows:

- **Barriers/Constraints**: Information in this column is based on Secretary General's Reports, national reports, reports of Regional Implementation Meetings and the related background documents, and inputs from Major Groups and CSD Partnerships.
- **Case studies**: Case studies are drawn from Secretary-General's reports, reports of Regional Implementation Meetings and the related background documents, and inputs from Major Groups and CSD Partnerships, as well as case studies submitted for CSD-16.
- **Lessons learned**: Best practices or results. This column provides a snapshot overview of the lessons learned, best practices or results of the particular case study.
- **Key implementation actors**: This column indicates key implementation actors, based on information contained in the case studies.

**How developing nations fit into the matrix**

The matrix is a flexible tool that would enable the user, be it a developing or developed country, to access information that will enable it to address barriers and constraints in the implementation of the thematic themes of the CSD cycles as well as in drawing from the pool of lessons learned from best practices from other countries. Notwithstanding that it is not a negotiated document; it could assist developing countries in the implementation of outcome decisions on the thematic themes of the CSD cycles.

The fundamental problems facing developing countries are not in the matrix but lack of capacity to meet up with the requirements for effective application of the matrix. First and foremost, most developing countries lack the requisite technology that would provide them with easy and unhindered access to information freely available on the web site of the Secretariat of the CS to all countries. Even basic requirements of the matrix such as preparing national reports and inputs of major groups and civil society countries to update on the level of implementation of the agenda for sustainable development could not be met by most developing countries for so many reasons, including lack of financial resources, technical know how, national coordination, capacity and political will, etc.

For our country, Nigeria, although there are many federal Ministries and Agencies of government handling the issues of sustainable development, none has the legal authority and mandate to coordinate the implementation agenda. Among them are Federal Ministry of Environment, Ministry of Foreign Affairs, Federal Ministries of Water Resources, Energy, Agriculture, Industry, Trade, Women Affairs, Finance, Transport, Health, Education; National Planning Commission, Central Bank, National Energy Commission, NNPC, Office of the Special Adviser to the President on MDGs, National Poverty Eradication Programme (NAPEP), National Economic Empowerment and Development Strategy (NEEDS), NEPAD Nigeria, etc.

Each one of the Ministries and Agencies in Nigeria, as operational bodies, has mandate to implement one aspect of sustainable development but none has the mandate or
the structure to coordinate national implementation of sustainable development. In effect, there is no national body coordinating sustainable development in the three tier levels (Local, State and Federal) of governments in Nigeria. Nigeria’s marginal progress in the implementation of the Agenda 21 and other outcomes of the UN Conferences and Summit as they relate to sustainable development could be traced, mainly, to the lack of national coordinating body for implementation of such decisions as well as inadequate and uncoordinated allocation of resources for the implementation of sustainable development agenda.

The Federal Ministry of Environment, which is the focal point on environmental aspects of sustainable development, and has tried to assume the role of coordinator, either by omission or default, was not structured or well equipped financially to perform that role. Being the operational body on environmental issues, other Ministries and agencies, such as Finance and National Planning as well as Central Bank with apriori mandate on development matters (economic aspect of sustainable development) simply refused to submit to the Federal Ministry of Environment, and hardly attend any Inter-Ministerial meetings called by Environment to reach national consensus or participate in international meetings on sustainable development. Furthermore, the Millennium Development Office has charted an independent approach that does not appreciate that currently are MDGs important but small part of overall decisions on sustainable development.

In effect, it will be difficult to apply the matrix in Nigeria and many developing countries. This is because the enabling environment does not exist. It is self evident that neither in economic planning nor in annual fiscal policies did successive governments integrate or mainstream outcomes of sustainable development in relation to the MDGs. Using the CSD thematic themes as a practical example, the matrix composed of energy, industrial development, air pollution/atmosphere and climate change. The information available would indicate the adequacy of private sector investment, capacity development support and CSD partnerships database. The capacity development to increase access to energy services by enhancing policy frameworks, entrepreneurial developments, consumer organization and credit systems, expanding the number and capabilities of enterprises operating in rural markets. It would also indicate international partnerships, government, entrepreneurs and local communities that are available and ready to engage in the implementation process.

The matrix under this theme further addressed issues such as lack of incentives and resources for service providers to expand service governance structures for managing energy services, lack of capacity and business models for off-grid services. It dealt with regulatory frameworks with particular focus on energy access not prioritized and integrated into the development strategies, regulatory framework for energy efficiency in building sector, lack of policy support for increased renewable energy application. It highlighted insufficient awareness and access to new technologies or fuel in relation to household energy, lack of financing of public service energy efficiency projects, lack of information about renewable energy and application levels. The information provided in the matrix is so fulsome with case studies and real specific investment modules that any country with certain level of seriousness could dramatically reshape its sustainable development focus with its application.

Nigeria and other developing countries have clear responsibilities with regard to sustainable development which they have not lived up to, particularly with respect to mobilisation of domestic resources and international financial, technological and technical support for the implementation of sustainable development. We are seeing a huge gap among developing countries that following up effectively in the implementation of sustainable development.
agenda, such as South East Asian countries, in particular India, China, Brazil, South Africa and those lagging behind mainly from sub-Saharan Africa.

The Earth Summit established the Global Environmental Facility (GEF) as the financial mechanism to provide grants to developing countries for projects that benefit the global environment and promote sustainable livelihoods in local communities. GEF projects address six complex global environmental issues:

- Biodiversity
- Climate Change
- International Waters
- Land Degradation
- The Ozone Layer
- Persistent Organic Pollutants (POPs)

Since 1991, the Global Environment Facility has provided $6.8 billion in grants and generated over $24 billion in co-financing from other sources to support over 1,900 projects that produce global environmental benefits in more than 160 developing countries and countries with economies in transition. GEF funds are contributed by donor countries. In 2006, 32 donor countries, including Nigeria pledged $3.13 billion to fund operations for four years.

According to Global Environmental Outlook (GEO) 2000, Africa had received $US419 million (22 per cent of all GEF funding) for approved projects by June 1998. By mid-1998, the regional projects in the biodiversity focal area had been allocated the highest amount globally (some $US250 million). GEO 2000 lists examples of other national and sub-regional projects in the biodiversity focal area, including the management of plant genetic resources, and of protected areas, the conservation and management of habitats and species, island biodiversity, coastal, marine and freshwater ecosystems, forest ecosystems and capacity and institution building.

As the financial mechanism of the Climate Convention, GEF allocates and disburses about $250 million dollars per year to fund projects in developing countries in energy efficiency, renewable energies, and sustainable transport. Moreover, it manages two special funds under the UNFCCC — the Least Developed Countries Fund and the Special Climate Change Fund. The GEF supports mitigation projects that reduce or avoid greenhouse gas emissions in the areas of renewable energy, energy efficiency, and sustainable transport. It also supports adaptation projects that increase resilience to adverse impacts of climate change of vulnerable countries, sectors, and communities.

In the area of international waters, the projects focus on water-body management programmes, pollution control, integrated land and water programmes, and oil pollution management projects.

Biodiversity conservation constitutes one of the GEF's greatest priorities. Since 1991, the GEF has invested nearly $7.6 billion in grants and co-financing for biodiversity conservation in developing countries. As the financial mechanism of the Convention on Biological Diversity (CBD), the GEF helps countries fulfill their obligations under the CBD. The biodiversity portfolio supports initiatives that ensure in situ and sustainable biodiversity
conservation in protected areas and production lands as well as capacity building for implementation of the Cartagena Protocol on Biological Diversity (CPB) and knowledge dissemination.

In 2002, the GEF Assembly expanded GEF’s mandate to include land degradation to the GEF portfolio. In 2003, the GEF was designated a financial mechanism of the United Nations Convention to Combat Desertification (UNCCD). Over the next three years, GEF expects to invest more than $750 million in projects that integrate sustainable land management into national development priorities, strengthen human, technical, and institutional capacities, bring about needed policy and regulatory reforms, and implement innovative sustainable land management practices. In the current replenishment, the GEF has allocated US$300 to focal areas of Sustainable Land Management.

Although Nigeria has benefited from funding activities of the Conventions and its financial mechanisms, it has not fully exploited the tremendous opportunities available in the funding of projects in the multilateral environmental conventions. Virtually all sub-Saharan African countries, including Nigeria, could not to-date access funding allocated to them under the resource allocation framework of the Global Environment Facility. This has to do with the inability of these countries to develop viable projects that would meet the eligibility criteria or incremental cost or any other requirements of the GEF on projects. It is also pertinent to note that we have not, so far, been able to provide the counterpart funding, as a matter of annual fiscal policy, required to guarantee access such funding from the international financial institutions.

It is urgent, at this point, for Nigeria to provide leadership expected of her as a major geopolitical player in the Continent of Africa, particularly at the meetings of the Conference of the Parties of the Conventions, where decisions affect Nigeria and other developing countries in Africa are taken. More significantly, Nigeria’s international image is incessantly being tarnished by its inability to pay its statutory contributions to multilateral organisations to enable it exploit all the available potential opportunities, which by far outstrips such payments in term of benefits. The vacuum thus created is increasingly being contested by other regional players like South Africa, Egypt, Brazil and Indonesia in the South South context.

We must therefore seize the moment of an evolving international environment to re-establish our rightful position among the comity of nations.
ABSTRACT
The supply and demand for the requisite number of teachers, quality teaching and quality learning have taken centre stage of educational debates in Africa because of the increasing enrolment of learners and the chronic shortage of competent and qualified teachers. There is, therefore, an urgent need to ensure the provision of sufficient teachers to meet the needs of education systems and to ensure that all teachers are properly qualified and possess the relevant knowledge, skills and attitudes to teach effectively. This paper reflects critically on the role that open and distance learning (ODL) can play in upgrading and supplying more qualified teachers in Africa. In so doing it attempts to rethink the fundamental precepts and the self understanding necessary to realize an African Renaissance in teacher development on the African continent by means of open and distance learning.

OPEN AND DISTANCE LEARNING IN TEACHER DEVELOPMENT
Frankly, I am not convinced the mere importation of technology from India or Europe will address the essential need for African states to stand up and utilize judiciously available resources, and to draw on the human capacity that Africa is so rich in. Some of that richness reside among Africa’s intellectuals and academic institutions that need be conscripted to become agents for [teacher] development (Pityana, 2006, pp. 11 & 12)

1. INTRODUCTION
The intention behind this paper is to rethink the fundamental precepts and the self understanding necessary to realize an African Renaissance in teacher development on the African continent by means of open and distance learning. In other words, this paper reflects critically on the role that open and distance learning (ODL) can play in upgrading and supplying more qualified teachers in Africa.

It is not unproblematic to talk about “open and distance learning”. Butcher (in Dodds, 2005) quotes the following definition of open learning in support of his argument against the concept:

Open learning is an approach which combines the principles of learner-centredness, lifelong learning, flexibility of learning provision, the removal of barriers to access learning, the recognition of prior learning experience, the provision of learner support, the construction of learning programmes in the expectation that learners can succeed and the maintenance of rigorous quality assurance over the design of learning materials and support systems (p.58).

He (2005) points out that many distance learning programmes fail by far to meet these somewhat ambitious standards and that there is nothing intrinsically open about distance learning. While we take note of his position, we align ourselves with Dodd’s (2005) sentiments that open and distance learning as an umbrella phrase underpins the historical origins of most of the non-commercial developments in distance learning (and for that matter open learning) in the twenty first century as serious educational efforts to remove barriers to learning, to increase access and therefore to remove barriers to educational equity. Keeping in
mind the colonial and historical legacies of the continent, we believe that these efforts are particularly relevant to open and distance learning in Africa.

There is also increasing and strong interest among governments, institutions, international agencies and teachers themselves in the use of open and distance education methods and technologies for initial training and the continuing professional development for teachers. The last decade has seen considerable growth in the demand and diversity of distance education programmes, the integration of distance education with traditional provision and new initiatives using information and communication technologies (ICT). These trends are located in a changing world, and we wish to refer to the context of change which is articulated by Robinson and Latchem (2003). They posit that in many countries, teacher development sits uneasily in a context of rapid education change given by:

- A concern to make lifelong learning a reality and to equip a country for global economic competition;
- Increasing government intervention and control alongside greater decentralisation;
- Growing use of ‘quality’ to regulate education and increase accountability;
- Attempts to use limited resources differently;
- The growing prominence of information and communication technologies (ICT) and higher expectations of the roles they will play in education;
- Greater attention among policy makers and plans to international comparisons and standards in education;
- Emerging national standards for teacher qualifications;
- Curriculum reform;
- Changing views of learning, form transmission models of teaching to constructivist models of learning and

- A shift of emphasis from inputs to outcomes in judging the quality and effectiveness of education systems (Robinson & Latchem, 2003, p.3).

All of these factors need to be taken into account in the severe shortage of teachers at all levels of the education systems in Africa is coalesced. UNESCO’s Education Sector plan predicted that in Sub-Saharan Africa (SSA) at a conservative estimate, 4 million additional teachers alone would be needed by 2015 to meet the Universal Primary Education goal of the Millennium Development Goals. In some SSA countries, the majority of primary education teachers have only a lower secondary qualification, often without any professional training. These personnel enter the profession reluctantly, leave quickly, and they include large numbers of so-called para-teachers.

The demand for greater numbers of better-qualified teachers has been exacerbated by the scourge of HIV-AIDS; by the poor working conditions, including low salaries; by increased numbers of learners entering the system and by increasing numbers of people wanting to enter the profession. HIV-AIDS kills teachers faster than they can be trained, makes orphans of students, and threatens to derail efforts to get all boys and girls into primary schools by 2015.

Trends suggest that in many African countries, significant numbers of children continue to be excluded from schooling and also that even if these children could be accommodated; the supply of teachers into the system is clearly inadequate. Moreover, the sub-Saharan African context reveals an increasing enrolment of learners especially at the level of primary education and an ever decreasing cohort of teachers. Consequently, over the past few decades, the rapid expansion of school facilities, the increased enrolment of learners in many African countries saw a corresponding increase in the diversification of teacher training programmes to produce more teachers and to train them adequately (Birdsall, Levin, & Ibrahim, 2005).
Birdsall, et al (20015) found that the increase in enrolment and teacher provision have, however, not always resulted in better completions or in tangible improvements in socio-economic development. Thus, the provision of high quality teachers in sufficient numbers is as important as increased enrolments (Kvaternik, UNESCO, 2003).

In the Second Decade of Education for Africa (2006) it is maintained that the focus and goal on Teacher Development is “To ensure the provision of sufficient teachers to meet the demands of education systems and to ensure that teachers are properly qualified and possess the relevant knowledge, skills and attitudes to teach effectively” (African Union, Second Decade of Education for Africa, 2006, p.7).

It is against this background that we need to investigate how open and distance learning can best be employed to meet the need for teacher development in Africa. But first of all we will turn our attention to recent developments in open and distance learning.

2. RECENT DEVELOPMENT IN OPEN AND DISTANCE LEARNING (ODL)

Traditionally those involved in education had their task clearly defined. At its simplest teachers were the experts who made their knowledge available to students mostly through lecturing. The teacher was regarded as the source of knowledge and the student the recipient. Teaching practices could, therefore, be organised around the relationship between the teacher and the student. This relationship, however, was not the idea that knowledge could be packaged and presented to a student. It was assumed by a specific power relationship: the teacher as information-giver and the student as information-receiver. The teacher had the task to transmit the accrued body of knowledge didactically (Chetty, 1997). Learning was equated with reproducing what the teacher wanted.

Teaching was teacher and content centred. The learners were not supposed to question the subject which they were supposed to “make their own”. It is not surprising that even the organisation of distance education as a main provider of lifelong learning reflected this relationship. In ODL this meant that the student was presented with knowledge as text. In large ODL institutions the production of texts evolved into an industry. The need for mass education as well as the lack of personal and didactic contact allowed for the use of other media apart from print (Van Niekerk, 2004).

In a different model of ODL, which developed later, the focus is on the production of quality materials (Rumble, 1992). It accentuates the autonomy and self-reliance of the learner. The learner is less teacher dependent but relies on structured learning opportunities designed to lend maximum support to the learner. ODL institutions are set up to develop and produce materials for students. The emphasis shifts from the teacher to the content. These institutions are almost like publishing houses. A core group of curriculum specialists would appoint authors on a contract basis to author materials for the institution. The author forms part of a team that could include a media specialist, language editor, academic editor, graphic artist, instructional designer, etc. The team meets regularly under the guidance of a project manager. The materials developed are usually sent to independent evaluators for evaluation. It is clear that the central role of the teacher as author has been eliminated. Producing learning materials has become a team effort. The teacher is now subsumed in the materials with the aim to provide integrated learner support.

Advances in technology also make it possible to produce multi-media learning packages. Learner support and the marking of assignments is contracted out to a network of tutors. Although these tutors were not necessarily part of the course development team, they could be
involved in the evaluation of course materials. The emphasis has, therefore, shifted from the teacher as the central figure to the development of learning packages for students (see, for example George, 1995; Glennie & Bialobrzeska, 2006; Van Niekerk, 2004). Much is also being written at present about the evolution of open and distance learning and the establishment of communities of learning (see, for example, Heydenrich, Higgs & Van Niekerk, 2003). The development in the practice of open and distance learning since the inception of correspondence teaching displays and not surprising parallel with the changes in epistemology influencing our thinking about education.

Since there is a close link between epistemology, curriculum and distance education practice, it will be argued that distance education practice needs to be transformed in order to respond to epistemological changes, and be congruent with the demands of the curriculum. Teaching practice cannot be at odds with educational demands. In this sense African education philosophy offers an answer to the current challenge that ODL practice faces in Africa when it comes to teacher development (see, for example, Higgs, 2003; Higgs, Higgs & Venter, 2003; Higgs & van Wyk, 2004; Higgs & van Wyk, 2007). One should rethink teacher development in Africa today in the context of recent developments in open and distance learning while focusing at the same time on indigenous frameworks provided by African education philosophy.

Society and, especially teachers, should realise that they have become used to seeing teaching in one particular way only. The traditional picture of a teacher standing before a class in front of a chalkboard talking still defines teaching for many people. This illusion of what it means to teach is so imprinted on the minds of teachers in ODL that they find it difficult to abandon the mode of “chalk and talk” even in ODL. They want to teach the way they have been taught. This is one of the biggest problems that instructional designers have to deal with. The problem is further compounded by the metaphor that equates teaching to “the transmission or transfer of knowledge”.

It was made clear that in terms of ODL practices, differences with traditional forms of education are not always obvious. One could easily be misled into thinking that it is simply a matter of bridging the distance in time and space between student and lecturer whilst the real distance is between teaching and learning where the teacher becomes her/his own teacher. A curriculum has to be presented that does not, through practice of textual interpretation, inculcate obedience in the learner as a free subject. Rather, ODL should be underscored by the principles of open, independent and flexible learning (Holmberg, 2001). Knowledge as social responsibility serves this idea which can only work when higher institutions of learning, including teacher training institutions, form part of the community. Teaching based on partnership and as a dialogue between teacher and student as well as student and learning material (content) is emphasised not to interpret the material for the student but to provide opportunity to formulate their own questions, form their own interpretations and produce their own texts. In ODL, an environment which does not foster a culture of teacher dependence but one of independent learning.

Paradigm shifts in the theory of knowledge may require a different approach to teaching and learning. Not only should the course content reflect epistemological changes, but also re-imagined teaching strategies. The grand narrative of teaching being the transmission of knowledge has been deconstructed once and for all.
3. CHALLENGES FACING ODL IN AFRICA

In terms of these recent developments, open and distance learning together with the appropriate information and communication technologies (ICT’s) has the potential to impact significantly on education content and delivery teacher development in Africa. For example:

- ODL provides opportunities for learning that are flexible and relatively free of constraints on time and place of study;
- ODL can be carried out at scale with consistent quality which makes for more cost-effective systems;
- ODL is a more learner-centred approach with options for greater interaction between learners and resource materials, tutors and teachers;
- ODL has the capacity to deliver both quality learning resources and operate effective systems of student support;
- ODL can provide opportunities for professional development and upgrading without taking the teacher away from the workplace;
- ODL materials can be customised to local needs and priorities, combining the benefits of scale with the attraction of cultural relevance and
- ODL for teacher development has a deep pool of experience in Africa.

However, these advantages are only optimized via the use of appropriate ICT’s in open and distance learning. In 2004 School/Net Africa (SNA) commissioned a study of eLearning in partnership with the Commonwealth of Learning (COL), the International Institute for Communication and Development and the Open Society Initiative of Southern Africa. This represents the most extensive examination yet conducted of teacher development using ICT’s in African countries for both pre-service and in-service training. The findings flag significant challenges in integrating ICT’s into teacher development. These include:

- The variety of levels at which ICT capabilities can be taught and the difficulty of making large scale and effective strategic interventions;
- The lack of a comprehensive pan-African framework to inspire the development of local technological models and local teacher content for building teachers’ ICT capabilities;
- The lack of coherent government policies for developing teachers’ ICT capabilities;
- The low priority accorded to funding ICT education and the under-resourcing of institutions;
- A shortage of locally developed, contextually relevant course content for both teachers and learners and
- A reluctance to invest in equipping teachers with necessary skills to integrate ICT’s when schools do not have the computer laboratories where they can put their skills into practice with learners.

Most open and distance learning programmes in Africa rely on print material and have not integrated other technologies. The challenge for open and distance learning programmes in teacher development in Africa is to start exploring the possibility of integrating information and communication technologies in their programmes is especially critical because of the widespread use of these technologies in various sectors of society. Teachers trained in Africa need to be knowledgeable with regard to these technologies if they are to have a competitive edge in the world of education today and access to information and communication technologies is still generally poor in Africa and signing open and distance learning programmes in teacher development that make extensive use of such technologies may be hampered by poor access to these technologies question of the access of institutions,
staff and students to information and communication technologies is, therefore, a critical one and raises the question of training practices in open and distance learning practitioners.

3.1. Training practices for ODL practitioners in Africa

On commenting on training practices for open and distance learning practitioners in Africa, Adekanmbi (2005, p.5) observes:

- The training of practitioners in Africa has not been comprehensive. The basic educational foundation that is needed by most practitioners is yet to be fully implemented. While it is true that to say that not all the dimensions of issues in open and distance learning have been addressed, it is more noticeable that advanced issues especially those relating to the use of information and communication technologies are in serious need of attention;
- The costs of training available outside Africa where great number of appropriate training facilities exist makes systematic training expensive. Added to this is the lack of a proper understanding by institutions with distance facilities of the need to make appropriate funds available for training in open and distance learning. This is an issue which also needs to be addressed;
- An increasing lack of training in open and distance learning at the professional and technical level is observed. There is a need to promote professionalism through appropriate policies on recruitment and training of the right cadre of staff. It is not uncommon to have heads of open and distance learning units coming in as seasoned administrators but still trying to find their feet on issues of curriculum development, instructional design, media issues and a wide range of related matters. It will be necessary for open and distance learning heads to be abreast of developments in the field of open and distance learning;
- The areas of training in media, graphic design, instructional design and budgeting have to be taken into consideration. Topics like design, compugraphics for open and distance learning and digital video and audio development and production must also be provided for; and
- Existing collaborative efforts in training in open and distance learning suffer from a lack of trust, a lack of equitable practice and adoption of practices. To this end, open and distance learning associations will need to move further in the direction of more genuine collaborative initiatives.

Instead of perpetuating a situation where Africa continues to ask for its own largesse from the ICDE by way of sponsorship at conferences, the time has come for African open and distance learning practitioners to provide within the continent opportunities for high level conferences that would serve as further training avenues in open and distance learning for its members.

Against the backdrop of issues raised above, the following proposals are made as to a way forward:

- More collaborative initiatives in open and distance learning need to be pursued in Africa;
- There is a need to identify areas of excellent practice in the regions to reduce the overall cost;
- There is a need for various organizers of programs to develop training packages and have a systematic policy on recruitment and training with the aim of promoting good practice;
- There is a need to facilitate the writing of books as well as the production of training packages in the continent;
More research orientated studies in various aspects of open and distance learning should be embarked upon in the continent and adult education departments and institutes should adopt academic programmes in open and distance learning.

These challenges include issues of sustainability and quality in the provision of open and distance learning programmes in teacher development.

3.2. Sustainability and distance learning programmes

In most African countries the implementation of open and distance learning programmes for teacher development has relied heavily on external funding. What African governments need to consider is how dependence on external funding can be reduced. The implementation of open and distance learning programmes for teacher development programmes in Africa continues to be hampered by inadequate funding which results in the failure to produce the required study materials.

Although open and distance learning is considered cheaper when the required infrastructure and funding is available, it initially requires a substantial investment. In the light of this, the question that needs to be posed is, “How willing are governments and institutions in Africa to provide open and distance learning by investing in these programmes?” In short, the question of the sustainability of open and distance learning in teacher development programmes needs to receive critical attention as does the issue of the quality of open and distance learning programmes.

3.3. Quality of ODL programmes

Quality is an important concern in the role that open and distance learning plays in upgrading and supplying more qualified teachers in Africa. A concern involves the quality of the:
- Programmes being offered;
- Candidates recruited in teacher training institutions;
- Services provided in the open and distance learning programmes;
- Outputs by open and distance learning programmes and
- Education system as a whole.

The issue of quality is still unresolved in teacher development in Africa. Although a number of trained teachers have been added to the education system in some African countries, the demand for trained teachers still exceeds by far the present provision of such teachers. Few tracer studies have been carried out to establish the impact of open and distance learning programmes on the school system. Therefore, the fact that open and distance learning programmes have been instituted in certain African countries, there are still fears that its products are not as good as those trained through full-time residential programmes. Some of the reasons for these fears are the low entry passes for those entering these programmes, the low pass rates and high drop-out rates.

Open and distance learning has also been used to give students a second chance at education, and this seems to have been particularly the case in teacher development programmes in Africa (De Wolf, 1994; Holmberg, 1995; Rumble, 1993). Unfortunately, because the majority of those joining these programmes had low entry passes, the perception was reinforced that open and distance learning was for failures. In many open and distance learning programmes have been accused of having high drop-out and low pass rates (Fraser, 1992; Holmberg, 2001; Paul, 1990; Perraton, 2000). These means that providers of open and distance learning programmes for teacher development must facilitate quality teacher training.
otherwise open and distance learning will continue to be viewed as an inferior alternative, good enough for failures and one that only produces mediocre graduates.

We also acknowledge that open and distance learning programmes for teachers do not exist in isolation from the complex web of social and cultural issues, policies and resource decisions that exist in any country. As Robinson and Latchem (2003) argue, the decision to use open and distance learning, its purpose, content and the form it takes, are situated within this broader environment and is shaped by the agendas that exist there. It should also be stressed that open and distance learning is more than an alternative system and its concerns are more than operational ones. Its planning and use should address fundamental social and cultural issues in teacher development and the extent to which planners of open and distance learning engage with or neglect these kinds of issues that affect the quality of the provision. Consequently, when considering open and distance learning and teacher development in Africa, it is imperative that we reflect critically on issues of history and context. This means that we need to rethink teacher development by open distance learning in Africa.

4. RETHINKING ODL AND TEACHER DEVELOPMENT IN AFRICA

Much of the history of Africa has been dominated by colonial occupation. Colonialism in Africa provided the framework for the organised subjugation of the cultural, scientific and economic life of many on the African continent. Subjugation impacted on African people’s way of seeing and acting in the world, African identity, to all intents and purposes, became an inverted mirror of Western Eurocentric identity. This state of affairs gave birth to numerous attempts to reassert distinctively African ways of thinking and of relating to the world, and is expressed in our days the call for an African Renaissance.

The call for an African Renaissance has been present in the period marking the nearly four decades of African post-independence. The process of colonisation that unfolded during this period saw Africa assert its right to define itself within its own African context in the attainment of independence. Wa Thiong’o (1993) claims that independence was about people’s struggle to claim their own space, and fight to name the world for themselves, rather than be named through the colour-tinted glass of the Europeans. In the context of education, Hoppers (2002) describes this continuing struggle in the following way:

The African voice in education at the end of the twentieth century is the voice of the radical witness of the pain and inhumanity of history, the arrogance of modernisation and the conspiracy of silence in academic disciplines towards what is organic and alive in Africa. It is the voice of ‘wounded healers’ struggling against many odds to remember the past, engage with the present, and determine a future built on new foundations. It invokes the democratic ideal of the right of all to ‘be’, to ‘exist’, to grow and live without coercion, and from that to find a point of convergence with the others. It exposes the established hegemony of Western thought, beseeches it to feel a measure of shame and vulgarity at espousing modes of development that build on the silencing of all other views and perceptions of reality. It also seeks to make a contribution to the momentum for a return of humanism to the centre of the educational agenda, and dares educators to see the African child-learner not as a bundle of Pavlovian reflexes, but as a human being culturally and cosmologically located in authentic value systems (p.2).

What is meant by the African Renaissance is, therefore, founded on the perception that the overall character of much educational theory and practice in Africa is overwhelmingly either European or Eurocentric. In other words, it is argued that much of
what is taken for education in Africa is in fact not African, but rather a reflection of Europe in Africa.

The African Renaissance has also, taken on a much greater significance in recent days with the call for the recognition of indigenous African knowledge systems. The inference here is the distorted view that Africans possess little indigenous knowledge of value that can be utilized in the process of educational transformation. This same inference also presupposes that the norm for educational achievement and success African children and students is that of Western European capitalist elitist culture, where the English language is sacralized, and the internalization of bourgeois European values seen as the index of progress.

And it is in response to this state of affairs that call for an African Renaissance in education goes out, a call which insists that critical and transformative educators in Africa embrace an indigenous African world view and reorient their nation’s educational paradigms in indigenous African socio-cultural and epistemological frameworks. This implies that, all educational curricula in Africa should have Africans as their focus, and as a result be indigenous-grounded and orientated. Failure to do so will mean that education becomes alien, oppressive and irrelevant, as is seen to be the case with the legacy of colonial and neocolonial education systems in Africa.

The call for an African Renaissance in education, therefore, seeks to demonstrate, how indigenous African knowledge systems can be tapped as a foundational resource for the socio-educational transformation of the African continent, and also how these indigenous African knowledge systems can be politically and economically liberating. This means that by virtue of assuming the indigeneity of culture, the call for an African Renaissance in education does not connotate a detachment from political radicalization and mobilization. In short, it would claim that the influence of Western Eurocentric culture on Africans needs to be forcefully arrested by all critically conscious African educators in the struggle for the establishment of an African identity in educational theory and practice.

The liberation of Africa and its peoples from centuries of racially discriminatory colonial rule and domination has had far reaching implications for educational thought and practice. The transformation of educational discourse requires a curriculum framework that respects diversity, acknowledges lived experience and challenges the hegemony of Western forms of knowledge. The design and implementation of such a curriculum framework can provide for the construction of empowering knowledge that will enable communities in Africa to participate in their own educational development. It must be noted, however, that such a curriculum framework reaffirming an African heritage does not set out to replace Western forms of knowledge, rather it seeks to give indigenous African knowledge systems their rightful place as equally valid ways of knowing among the array of knowledge systems in the world so as to solve global and local problems more effectively.

Okolie (2003) argues that having contributed to the marginalization, inferiorization and exclusion of traditional knowledges and ways of knowing in the discourse and practice of African development, higher education can contribute towards a reversal of this approach and towards true improvement in Africa’s rural communities. Higher education should examine the extent to which the idea of development promulgated by development agencies and governments is informed by the wishes and thoughts of local communities. It ought to examine the source of the knowledge that informs what is imposed on or prescribed for Africa, and how scholars are implicated in the universalisation of the European experience. It should ask which ways of knowing scholars validate and promote and which ones they ignore, invalidate, and why. In short, it can help to reconstruct new development knowledges that will be African-centred.
We agree with Okolie (2003) that the value of postmodernist, post-structuralist, post-colonial and deconstructionist perspectives lies not in the rejection of ideas or knowledges because they are Western in origin or the privileging of discourse over reality. Rather, it lies in the location of the social basis of dominant ideas, knowledges and ways of knowing; the acknowledgement of the power of words/concepts/definitions and how they can be constructed and used for the purposes of domination (or liberation); the affirmation and promotion of other ideas, knowledges and ways of knowing that are non-hegemonic and may be anti-systemic; the acknowledgement of the value of a people’s lived experiences and that these experiences vary from group to group and from time to time even within the same society although they are connected to one another.

Indigenous African knowledge systems, therefore, need to be valorised and legitimised in the educational discourse and curricula of institutions of higher education, including those involved with teacher development. The emphasis on an African context deserves special attention in the curricula of higher education. In this regard, Njoku (2001) argues for a redirection of our educational project, without leading to the extreme of doing away with Western education. He (2001) advocates rather an integration of Western and African systems of knowing. A restoration, however, must precede integration, for as Njoku (2001) states:

This procedure calls for closer attention than we have hitherto consigned our own knowledge systems. It is our duty to place a value on them and to give them a place in formal studies. Attention to endogenous knowledge in Africa may help to bridge the gap between the gown and the town which is the bane of most of our universities and to gradually initiate the process of closing the artificial and unhealthy gap between our elite and the rest of our people (p.2).

Njoku (2002) goes on to refer to the fact that graduates in many African countries are often so divorced from their known communities that they do not have the language to plough back what they have learnt to benefit their communities and therefore make such decontextualised learning and degrees meaningless. Matos (2000) agrees with this line of thought by stating that a major ‘disease’ of education and research in Africa is the systematic attempt to dismiss the intrinsic value of African culture, language, customs and practices from the curriculum. The regard for the intrinsic value of the African context should, therefore, resonate strongly, and permeate formal curricula in teacher education. In other words, curricula in teacher education should be firmly anchored in the cultural and intellectual environment of the community in which it is located.

4.1. Teaching and learning in ODL: establishing communities of inquiry and interpretation

Gravett (2004) indicates how research into student learning supports the establishment of communities of inquiry and interpretation. She begins by showing how the establishment of communities of inquiry and interpretation can contribute to deep learning as opposed to surface learning metaphorically speaking. A deep approach to learning means that a student seeks to understand and discover underlying meaning, whilst in a surface approach the focus is on superficial characteristics. Gravett states that “(t)hey focus on the signs instead of what is signified” (2004, p.24). Students employing a surface approach will focus on the requirements of the tasks at hand and rely on rote learning to achieve the perceived outcomes.

Bruner (cited in Gravett, 2004, p.27) distinguishes between “learning to be” and “learning about”, the latter comprising most of the learning education institutions. According to Gravett (2004, p.26), “(l)earning to be requires the practices of inquiry of the
knowledge domain and how best to utilise the conceptual frameworks of the knowledge domain in support of the inquiry. Learning about has to lead to learning to be --- they are interrelated. This is the very foundation of lifelong learning where one develops new ways of seeing, new ways of knowing, new ways of doing together. "Through learning to be, a person is developing a social identity" (Gravett, 2004, p.26). This identity under development, under construction, shapes future learning as well as what a person focuses on and pays attention to. Knowledge, as previously stated, is a process and not a product and involves becoming aware of the epistemological foundations of a knowledge domain.

The challenge for teachers and especially ODL is to develop teaching and learning activities that embed the effective ways of seeing in different situations which are then explored with students" (Gravett, 2004, p.27). Doing so would develop students’ capability of discerning the relevant aspects of situations. Learning and teaching activities therefore have to provide for students to experience different and seemingly similar situations in which to try out different solutions to problems.

Discernment also means that students become aware of their own way of seeing something, which might contrast with other ways of seeing the same thing. "Learning from others implies that we become aware of their ways of seeing things regardless of whether or not we agree with or are convinced by their ways of seeing" (Gravett, 2004, p.28). It is in the learning group that we acquire tolerance for other ways of seeing things and that we can come to understand the validity of different ways of seeing and knowing, and come to know the reasons for our own understanding. It is through engaging in collective inquiry that a community of inquiry and interpretation is established. In this regard Biesta (2004) offers an interesting way of understanding the idea of “community.” Drawing on an article by Biesta (2004) entitled “The community of those who have nothing in common: education and the language of responsibility” we could expand our understanding of the role of community in education (Van Niekerk, 2004, pp.185-195).

4.2. Two kinds of community

According to Lingis (in Biesta, 2004), a community is usually regarded as a number of people who have something in common such as a common language, a common conceptual framework or working together as a nation or an institution. An institution of higher education, such as a university, which has a common purpose and a common set of values, is a good example of a community. Likewise, a group of people living in an informal settlement might develop a sense of community through sharing and hardship.

Biesta (2004), drawing on the work of Lingis, distinguishes between two kinds of community. In the first instance he describes the rational community which is produced by a common discourse based on "... a rational system in which, ideally, everything that is said implicates the laws and theories of rational discourse" (Biesta, 2004, p.4). According to Biesta (2004), the purpose of education is to produce rational communities. They legitimise a certain way of speaking while simultaneously delegitimising other ways of speaking. The rational community is therefore just an extension of rational knowledge, or of what certain groups hold rational knowledge to be.

The purpose of education has been precisely to lead children in the original sense of the word, namely “to lead (them) out” beyond their present and particular rooted identity “into the orderly, rational realm of modern society” thereby “releasing” them from their local, historical and cultural situation and bringing them into contact with a general rational point of view (Biesta, 2004).

It follows that those who are not part of the community, those who are strangers, aliens, are those who appear as a problem. The only way to tackle this problem is to socialise strangers by
means of education to become members of the rational community. Only through education will they acquire a voice, an ability to speak.

The result is that when “we speak as members of the rational community, it is not me who is speaking”. I only speak as a representative of the rational community. When I speak to the stranger though, I can only speak as another human being, an earthling; when I expose myself to the stranger, when I find my own voice, then it is the human being who is speaking. The only way that I speak with my own voice is when I let go of the rational voice. What matters is not what we say, but what we do and all I can do is to respond.

The language that I use is the language of responsiveness and responsibility using my own voice. It is by using my own voice that I become engaged with the other community and that we come into the world as unique and singular beings and not as a representative of some general idea of what it is to be human (Biesta, 2004).

Biesta (2004) argues that although rational communities are important, it is through the “Other” community that we come to understand what it might mean to be, to live with, others as unique and singular beings who are not interchangeable (Van Niekerk, 2004).

4.3. Community in an African context

There is an extensive discourse on community in Africa. This discourse embraces philosophical, sociological, as well as political references, and also, influences the nature of teacher development (see, Higgs, 2007).

Having explored different notions of community, we investigate the concept of community in an African context. In this respect, we wish to draw on a chapter by Letseka in a book entitled African voices in education (Higgs, Vakalisa, Mda & Assie-Lumumba, 2000). Letseka examines the concept of communality in traditional African life to which African philosophy should provide a conceptual response (2000) indicates that the idea of botho or ubuntu (humanism) is regarded as pervasive and fundamental to African socio-ethical thought and that it elucidates the communal rootedness and interdependence of persons and also underscores the importance of human relationships.

The expression motho ke motho ka batho or umuntu ng umuntu ngabantu translates to “a person depends on others just as much as others depend on him/her”. It focuses on the “communal embeddedness and connectedness” of persons and highlights the importance attached to people and human relations. As Sindane (in Letseka, 2000) suggests: “Ubuntu inspires us to expose ourselves to others, to encounter the difference of their humaneness so as to inform and enrich our own” (p. 183).” Letseka (2000) argues that African philosophy is deeply implicated by communality and botho or ubuntu and that it ought to provide a conceptual interpretation and analysis of the two as defining aspects of traditional African life. Education should, therefore, promote botho or ubuntu, interpersonal and cooperative skills and human development. Letseka (2000) proposes “…(a) pragmatic, experiential approach to education, during which learners learn by example, by living in communities people who are endowed with these skills by interacting with them on a regular basis” (p. 192).
5. CONCLUSION: THE ROLE OF COMMUNITY IN OPEN AND DISTANCE LEARNING

The ideal of botho or ubuntu can only work when teacher development forms part of the community; this requires that attempts at teacher development in Africa be deinstitutionalised. The grand narrative of traditional forms of teacher development have to be deconstructed and it should manifest its many identities through the people that make up any open and distance learning institution and who collaborate in creating meaningful learning opportunities for learners (Van Niekerk, 2004).

In establishing communities of learning in ODL the teacher as facilitator will have to devise cooperative learning strategies and foster a creative environment that discourages a teacher-dependent attitude. The teacher's task would be to create a context for learning and to be a mediator in developing a learning culture and establishing a community of learning. In community-centred projects, the facilitator/tutor plays a major role in identifying community-based problems and encouraging the forming of study groups. The facilitator may be supported by a coordinating body that can arrange for suitable materials to be designed and delivered to support group learning. The facilitator may encourage group members to design their own materials. The end result of the process may be an action plan that works at individual, group and community level.

We should then rethink teacher development completely in an African context based on an African philosophy (Higgs, 2003, Ramose & van Wyk, 2004). The school with its specialist teachers as we know it is a result of the industrial and modern period. In the post-modern, post-industrial period research papers on education promoting the “school without walls” has become a cliché, received with little more than beating interest. Deinstitutionalising education is mostly regarded with apprehension and yet the practice of ODL espouses the very same idea - an idea which demands attention in teacher development in Africa by means of open and distance learning.

... if we want humanity to advance a step further we must invent and we must make discoveries ... we must turn over a new leaf, we must work out new concepts, and we must try to set afoot a new (humanity) (Fanon, 1967, p.87) ... and we cannot hand over this responsibility to anyone outside Africa (Mboya, p.151).
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SUB THEME I

OPEN & DISTANCE LEARNING FOR TEACHER DEVELOPMENT
Abstract

Teaching and practice in pre-school has been found to be structured and academic in its orientation. It fails to emphasize other dimensions of child development such as social-emotional development. The purpose of this study was to investigate teachers' perceptions of the impact of Early Childhood Education Programme on the social-emotional readiness of pre-school children at the entry to primary one. The research was a descriptive survey and targeted pre-school teachers, pre-school trainers, pre-school managers, primary one teachers and head-teachers. Simple random sampling and stratified sampling methods were used to generate a sample of 738 respondents. Questionnaires, focus group discussion and content analysis were used for data collection. The data was analyzed using descriptive and inferential statistics by use of a computer program, Statistical Package for Social Sciences (SPSS), Windows '95. It was found out that all the teacher categories had more bias towards academic skills. Consequently, it was recommended that social-emotional skills should be integrated into the pre-school planning, teaching and practices.

Key Words Social-emotional, Pre-school, Readiness skills, Missing piece, Holistic learning
Definition of Social Emotional Learning

Social and Emotional Learning (SEL) is the educational process that leads to the development of emotional intelligence—that is, the process by which we become better at understanding and managing our emotions AND learning how they impact the choices we make, the relationships we have and our outlook in life. It refers to the acquisition of the understandings and specific skills that are at the heart of a child’s academic, personal, social and civic development. Social and emotional learning is critical not only for success in school, but also in life. SEL enables individuals to recognize and manage emotions, understand their personal values, develop caring and concern for others, make responsible decisions, establish and maintain positive relationships and handle challenging situations effectively.

Key Social Emotional Competencies

- Awareness of Self and Others
- Positive Attitudes and Values
- Responsible Decision Making
- Social Interaction Skills

Introduction

Recent years have seen a global endeavor to prioritize early childhood care and education as a foundation for later learning and development as evidenced by the Global Guidelines for Early Childhood Education and Care in the 21st Century (Association for Childhood Education International, World Organization for Early Childhood 1999). Such efforts are a response to a variety of complex social issues and economic trends. The process of industrialization has resulted in increased numbers of women with young children entering the labor force, families with two working parents, an increase in the number of single parents and the subsequent demise of traditional systems of child care and extended family support systems, (Driscoll & Nagel, 2002; Graves et al. 1996).

Odada & Ayako, (1988) observe that in the Kenyan traditional system, there were adequate and elaborate childcare systems provided not only by the mother but also members of the extended family (grandparents, aunts and older siblings). The close-knit communities, once sources of caring adults who guided children and served as role models, are today neighborhoods of strangers. These changes have placed a stress on existing systems and are also giving birth to alternative child-rearing arrangements for example, pre-school institutions. The pre-school teacher is expected to develop not only the physical and cognitive skills of children, but also social-emotional skills (NACECE 1992). A research carried out by Kariuki (2002) revealed that pre-school teaching practice lacked a clear focus on social-emotional skills. The main challenges facing early childhood care and education in Kenya is that of harmonising curriculum and teaching methodologies to help ease children’s transition from pre-school to the primary grades. Educators continue to criticize the emphasis on an exclusively academic curriculum versus a play-centered and developmentally appropriate curriculum in early childhood education programs as noted by Mutero (2001).

Research by developmental psychologists and educators indicate that there exists a positive relationship between quality early childhood education and individual development, as well as productivity in later years, (Hurlock 1978). Supporting this view is World Bank Report (1995) in asserting that early childhood education is the gateway to healthy, fully functioning and accomplished individuals as well as productive and creative society. Quality early childhood education program which is holistic approach, is therefore essential to lay a good foundation for life. Philosophically, Ses (1999), asserts that children can be
viewed as growing plants that need nurturance, future adults, natural and national resources that need to be nurtured, and/or as investments critical to the sustenance of a society and its ability to compete in the technological age. According to the World Development Report (Jaycox, 1992), education and economic development are positively correlated, making education intrinsic to development.

Considering this important foundation, the Kenya Government together with its development partner, Bernard Van Leer Foundation, in 1987 came up with the National Center for Early Childhood Education (NACECE), which operates at national level and the District Center for Early Childhood Education (DICECE), operating at district level. One of the objectives of the (DICECE) centers is to train pre-school teachers and other personnel in programs for young children through in-service courses so that this study was done to establish the perceptions of teachers on the impact of Early Childhood Education Program as an instrument which not only develops localised curriculum materials for preparing the Pre-school children in their social-emotional readiness for standard one entry, but also facilitates training programs.

Pre-school teachers deal with the most critical sensitive period of children’s lifetime ‘formative years’ (Hurlock 1978). Teachers are therefore required to go through a quality training program that will take care of all-round development. This will take place in an environment that will recognise the points at which interpersonal, intra-personal and academic domains converge. According to Hurlock (1978), the development of strong social-emotional skills program allows these necessary linkages to be made.

In line with the above argument, Tobin, et al. (1989), reckon that social-emotional learning should be introduced more directly into the conscious agenda of educators. This will enable the educators to plan for and engage themselves in activities that promote these competencies without a sense of guilt. Within the Kenyan context, this thinking is in line with the Kamunge Report (1998). This was a presidential working party Education and Manpower Training for the following decade and beyond to review the whole educational – philosophy, policies and objectives to ensure that they were in consonance with changing social, cultural, economical and political demands of the country. This is in support of the view that early learning begets later learning and success, just as early failure breeds later failure (Boocock, 1995; Heckman, 1999). Further, Kamunge’s report recommendations on the ways and means of sustaining the momentum of educational growth without sacrificing quality or relevance. The report stipulated that there was a need to strengthen pre-primary education, which forms the foundation for later education. One way of doing this according to the report is to empower pre-school teachers through early childhood education training program that will enable them to deal with children using a holistic approach.

One of the constraints of Early Childhood-Education Program in Kenya, as reflected in an evaluation report by UNICEF, is that the schools with trained teachers, although providing better services and care of children, seem to be moving towards too much structuring and formalisation (UNICEF 1992). Curriculum formalisation has been noted by John Dewey, as cited by Morrison (1991, p.62), to be hostile to genuine mental activity and to sincere emotional expression and growth. The danger of a structured and formalised curriculum is subjecting the pre-school children to an academically oriented curriculum and forgetting to map out other parameters of child development such as social-emotional growth.

Theoretical Framework

The study was designed and conducted based on developmental theory of early childhood, which postulates that learners take full account of and develop appropriate experiences in the affective domain and not to limit themselves to intellectual development (Blenkin, & Kelly...
The learners in developmental theory are not restricted to cognitive skills only but are expected to acquire capacities of generating a genuine theory of emotional, social and in general, affective development but also which can harmonise these with development on the intellectual front. The developmental theory of early childhood education encourages the learners to take full account of and develop appropriate experiences in the affective domain and not to limit themselves to the intellectual domain (Blenkin, & Kelly 1988). Hurlock (1978) supports the view that emotional development plays an important role in the child's life and each emotion contributes to the kind of personal and social adjustment the child makes. In effect, according to Maurice (1997), any system of education and socialisation that does not take children (and indeed adults) as first social and emotional beings into consideration will not be effective in producing healthy citizens. Maurice argued that such a system may produce individuals with high scores but not productive community members, contributors to workplaces or families, or thinking members of a democratic system where interpersonal give-and-take is essential.

Purpose and Objectives of the Study

The study was designed to investigate the perceptions of teachers on the importance of social-emotional skills for pre-school children as they enter primary one. The issue of readiness has been understood to mean academic readiness without due consideration for other parameters of child development. This misconception of child readiness has led the pre-school teachers to lay more emphasis on cognitive skills at the expense of social-emotional skills. The study was guided by the following objectives;

1. to describe the area of emphasis of all the categories of teachers with regards to social-emotional and academic skills in the process of planning and teaching.
2. to find out the difference in perception between the pre-school trained and untrained teachers on the importance of social-emotional skills as indicators of readiness for pre-school children at the entry to primary one.

In order to achieve the above objectives, the study was guided by the following research question and a hypothesis;

Research Question

Which areas do the different teacher categories emphasise on between social-emotional skills and academic skills in the process of planning and teaching?

Hypothesis

Ho: There is no significant difference between the perceptions of pre-school trained and untrained teachers on the importance of social-emotional skills of pre-school children at the entry to primary one.

Research Design

The research was a descriptive survey and ex-post-facto research design. Ex post facto research design, according to Kathuri and Pal (1993), assists in getting possible antecedents of events that have happened and cannot be manipulated by the researcher. This design was
appropriate for this study since it enabled the researcher to study the effects of an independent variable on a dependent variable without any manipulation.

Population

The study was carried out in three selected provinces in Kenya, Rift valley, Central and Eastern. The target population for this study was composed of the pre-school teachers, pre-school trainers, pre-school managers, primary-one teachers and head-teachers. The rationale was that once the teachers nurture positive perceptions on social-emotional competencies, they would consciously integrate them in their planning and teaching. The total number of pre-schools in the three districts was 1500. Nakuru had 844, Nyeri 489 and Embu 167. The number of primary schools was 940. Nakuru had 436, Nyeri 372 and Embu 132, (respective District Education Offices, 1997).

Sampling Procedure and Sample Size

Random sampling method was used to select three provinces out of a total of eight and one district from each of the three provinces, thus; Rift Valley (Nakuru), Central Province (Nyeri) and Eastern Province (Embu). Proportionate numbers of schools was worked out and selected to form the sample for the study. The schools were then randomly picked from a list of schools from each district using random numbers. Respondents selected from each district reflected the number of schools in a particular district. The use of random and proportionate sampling ensured that the three provinces were fairly and equally represented in form of selected schools and respondents.

From each of the three districts, the researcher selected 40 pre-schools and 40 primary schools. This gave the researcher 120 pre-schools and 120 primary schools. According to Sudman (1976), the figure of at least 100 subjects in each major group is an accepted number of cases for survey research. However, the distribution per district changed due to proportional sampling which helped to attain equal representation in every district. Thus, 68 pre-schools were picked from Nakuru, 39 from Nyeri and 13 from Embu (Table 1). For the purpose of this study, middle class and top class pre-school teachers were used. Each of the two classes provided a teacher. This gave the researcher a total of 136 pre-school teachers in Nakuru, 78 in Nyeri and 26 in Embu.

All the pre-school trainers were included in the sample since they were few. There was an average of 6 trainers in every district, giving a total of 18. However, Embu district had two more trainers and this contributed to the final number of participative pre-school trainers to 20. The number of pre-school managers corresponded to the number of pre-schools, since in every school, there was a manager.

The same procedure was used to select the sample of primary schools. There was a total of 360 respondents from primary schools (240 standard one teachers and 120 Head teachers).
Table 1
Proportional Sampling of Pre-school and Primary Schools in Nakuru, Nyeri and Embu

<table>
<thead>
<tr>
<th>Pre-school population</th>
<th>Pre-school Sample</th>
<th>Primary School Population</th>
<th>Primary School Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>844</td>
<td>68</td>
<td>436</td>
<td>56</td>
</tr>
<tr>
<td>489</td>
<td>39</td>
<td>372</td>
<td>48</td>
</tr>
<tr>
<td>167</td>
<td>13</td>
<td>132</td>
<td>16</td>
</tr>
<tr>
<td>1500</td>
<td>120</td>
<td>940</td>
<td>120</td>
</tr>
</tbody>
</table>

Instrumentation

Data for the study was collected by means of questionnaires developed by the researcher for each category of respondents. There were five sets of questionnaires one for each category of respondents. The first part of each questionnaire consisted of personal characteristics of the respondents. The pre-school teachers filled in their age, gender, marital status, the level of education, type of training and their teaching experience. The primary one teachers were not required to attend pre-school training and therefore did not need to indicate their training background. The second part of the questionnaire aimed to find out the level of preparedness of pre-school children as regards social-emotional skills. The respondents were required to indicate whether they had learnt about social-emotional skills (where it applied), and whether they promoted those skills in children. All the other categories were expected to indicate whether the children were prepared well enough in social-emotional skills as they joined primary one. The third part of the questionnaire contained different social-emotional and academic skills, where the respondents were expected to respond to the different levels of importance and preparedness. The final part of the questionnaire provided the respondents with an opportunity to give their own recommendations on how pre-school education program would be improved.

Validity

The instruments were validated through a pilot study and a panel of five experts. The researcher conducted the pilot study using a sample of 52 respondents selected from different schools in Nakuru District. This sample was picked outside the designated main areas of data collection. The sample included pre-school teachers, pre-school managers, pre-school trainers, primary one teachers and headteachers. On the other hand, the panel of experts comprised of the supervisors, experts from the Faculty of Education (Egerton University) and Early Childhood Education Department (K.I.E). In the process, the content of the instruments was modified whereby some items were dropped out and others added.

Reliability

The reliability coefficient reflects the extent which items measure the same characteristics. Coefficient alpha is calculated using the variance of the total test score and the variance of the individual item scores. It represents the average inter-item correlation based on all possible divisions of the test into two parts. The reliability coefficient was worked out using the Guttman split half reliability and was found to be 0.6878 for social-emotional items and 0.7634 for academic items. Guttman sets a correlation coefficient of 0.7 or above as an acceptable level. Thus, the instrument was considered reliable for the study.
Administration of Research Instruments

The research assistants delivered the questionnaires to the respective schools and they were well informed on their role in facilitating effective administration of the instruments. The researcher had given the research assistants rigorous training on administering and completion procedures. The research assistants were under strict instructions not to leave the questionnaires behind but to wait until the respondents completed them. This contributed to the high response rate.

Focus group discussion was carried out by the researcher with selected few pre-school teachers in Nakuru District. The schools selected for focus group discussion were carefully picked, not to include the above sampled schools. The researcher purposed to pick on trained pre-school teachers for the focus group discussions to ensure that the teachers selected had similar exposure in their profession. The information from focus group discussion was used to supplement the information obtained from the questionnaire. Finally, the researcher carried out document analysis that included pre-school guidelines for teachers, standard one admission forms and interview forms given to individual pre-school children at the entry to primary one. The various documents were analyzed based on some significant criteria such as content, appropriateness and adequacy of the content. The main aim of document analysis was to establish the sensitivity of teachers and planners about social-emotional skills.

Results

The data collected from the respondents was analyzed using a Statistical Package for Social Sciences (SPSS) for windows ’95. Results were presented as frequencies, means, standard deviations, percentages and t-test. All tests of significance were at P<0.05. The analysis was guided by a research question and a hypothesis.

This research established that promoting social-emotional development in children is the “missing piece” in efforts to attain all round education of pre-school children. Study results show a unique emphasis on academic skills by all teacher categories. Table 2 shows higher means for academic skills than for social-emotional skills. This in a nutshell, seemed to reflect the fears of many observers of early childhood education that there was more emphasis on academic competencies than on social-emotional dimensions of child development. On average, the academic skills enjoyed higher means than the social-emotional skills, (Table 2). Blenkin and Kelly (1988), observe that early childhood education programs need to address a child’s physical, mental and social-emotional development simultaneously in holistic and integrated ways. The writers emphatically assert that no psychologist or educationist could possibly view children as other beings in which the social-emotional and cognitive processes are part of the whole person, fully interdependent.

Table 2

<table>
<thead>
<tr>
<th>Skills</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharing with others</td>
<td>752</td>
<td>3.91</td>
<td>0.87</td>
</tr>
<tr>
<td>Cooperative play</td>
<td>752</td>
<td>3.86</td>
<td>0.88</td>
</tr>
<tr>
<td>Coping with annoying behaviour of others</td>
<td>752</td>
<td>3.25</td>
<td>0.301</td>
</tr>
<tr>
<td>Coping with emotional stress</td>
<td>752</td>
<td>3.41</td>
<td>1.26</td>
</tr>
<tr>
<td>Ability to deal with aggressive feelings</td>
<td>752</td>
<td>3.49</td>
<td>1.18</td>
</tr>
</tbody>
</table>
Besides, the majority of teachers felt that the pre-school children were not as well prepared in social-emotional skills as they were in academic skills (Table 3). It was consequently found out that not only did these results tie up with the findings from focus group discussion but social-emotional competencies were conspicuously missing in primary one admission requirement forms. The teachers expressed the that their teaching was more skewed toward academic skills than in social-emotional skills. But they were quick to note that there was pressure to excel in academic skills since this was the standard used by the stakeholders to measure performance and a good school. This could be evidenced by Mutero (2001) in his observation of criticism by educators on the exclusive emphasis on academic curriculum versus a play-centered and developmentally appropriate curriculum in pre-schools. It should, however, be noted that there is imminent danger when children grow up with knowledge but without social-emotional skills and a strong moral compass. Hence, a combination of academic and social-emotional learning is the true standard for effective education in the world today and for the foreseeable future.

Table 3
Descriptive Statistics for Perceptions of all Teachers on the Level of Preparedness of Pre-school Children in Social-emotional Skills

<table>
<thead>
<tr>
<th>Skills</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharing with others</td>
<td>751</td>
<td>3.24*</td>
<td>1.07</td>
</tr>
<tr>
<td>Cooperative play</td>
<td>751</td>
<td>3.39*</td>
<td>1.06</td>
</tr>
<tr>
<td>Coping with annoying behavior of others</td>
<td>751</td>
<td>2.40*</td>
<td>.201</td>
</tr>
<tr>
<td>Coping with emotional stress</td>
<td>751</td>
<td>2.56*</td>
<td>1.27</td>
</tr>
<tr>
<td>Ability to deal with aggressive feelings</td>
<td>751</td>
<td>2.72*</td>
<td>1.22</td>
</tr>
<tr>
<td>Confidence</td>
<td>751</td>
<td>3.43*</td>
<td>1.18</td>
</tr>
<tr>
<td>Independence</td>
<td>751</td>
<td>3.12*</td>
<td>1.22</td>
</tr>
<tr>
<td>Knowledge of self</td>
<td>751</td>
<td>3.19*</td>
<td>1.20</td>
</tr>
<tr>
<td>Ability to communicate</td>
<td>751</td>
<td>3.56</td>
<td>1.13</td>
</tr>
<tr>
<td>Ability to draw</td>
<td>751</td>
<td>3.21</td>
<td>1.11</td>
</tr>
<tr>
<td>Writing numbers and letters</td>
<td>751</td>
<td>3.88</td>
<td>1.02</td>
</tr>
<tr>
<td>Recognition of letters</td>
<td>751</td>
<td>3.92</td>
<td>1.03</td>
</tr>
<tr>
<td>Performing simple arithmetic</td>
<td>751</td>
<td>3.53</td>
<td>1.10</td>
</tr>
<tr>
<td>Recognition of number values</td>
<td>751</td>
<td>3.65</td>
<td>1.17</td>
</tr>
<tr>
<td>Reading simple words</td>
<td>751</td>
<td>3.53</td>
<td>1.20</td>
</tr>
<tr>
<td>Performing manual tasks</td>
<td>751</td>
<td>3.41</td>
<td>1.19</td>
</tr>
</tbody>
</table>

Key: Social-emotional Skills

Interesting results were manifested by the result of test for independent samples where there was no difference in perceptions between trained and untrained pre-school teachers (Table 4), hence the null hypothesis of no difference was retained. From the descriptive...
statistics analysis, it was found out that the trained pre-school teachers were almost similar to those of untrained pre-school teachers. The impression created by these results were that the early childhood training program did not have any significant impact on the way the pre-school teachers perceived the importance of dimension of early childhood education and practice (Table 4). A final report prepared for the World Bank on training for Early Childhood and Education in Kenya observed that many teachers rely on their own educational experiences with rigid rote teaching as the primary method of teaching—not using the excellent locally made materials and learning approaches promoted by NACECE (World Bank Report, 1995).

Table 4
Perceptions of Trained and Untrained Pre-school Teachers on the Importance of Social-emotional and Academic Readiness of Pre-school Children

<table>
<thead>
<tr>
<th>Competencies</th>
<th>Trained Mean</th>
<th>Trained SD</th>
<th>Untrained Mean</th>
<th>Untrained SD</th>
<th>t-test</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social-emotional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>importance</td>
<td>3.92</td>
<td>.70</td>
<td>3.93</td>
<td>.68</td>
<td>-.158</td>
<td>.875</td>
</tr>
<tr>
<td>Academic Importance</td>
<td>4.31</td>
<td>.64</td>
<td>4.33</td>
<td>.67</td>
<td>-.128</td>
<td>.899</td>
</tr>
<tr>
<td>Social-emotional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Readiness</td>
<td>3.83</td>
<td>.73</td>
<td>3.98</td>
<td>.91</td>
<td>-1.195</td>
<td>.233</td>
</tr>
<tr>
<td>Academic Readiness</td>
<td>4.43</td>
<td>.59</td>
<td>4.26</td>
<td>.77</td>
<td>1.665</td>
<td>.099</td>
</tr>
</tbody>
</table>

(*p<0.05; **p<0.01; ***p<0.001)

Conclusions

The results of the study indicated that pre-school teachers focused more on preparing children academically than in other developmental areas such as social-emotional development. The above results would probably be contributed by the fact that early childhood education program lacked conscious and direct focus on social-emotional competencies and hence did not impact on pre-school staff as far as their perceptions were concerned. This was clearly demonstrated by the results that showed no difference in perceptions from both the trained and untrained teachers. It was no wonder that all teacher categories perceived the importance of social-emotional competencies differently and yet they had common goals about child development. A revelation from the original findings showed that the pre-school teachers were found to possess low academic qualifications and this worked against them in understanding the principles of early childhood education and development. These findings are a clear departure from the argument presented by Robb (2006) that education is no longer only about the academics and cognitive skills. Social-emotional learning skills are becoming as integral a part of education as cognitive skills such, the teachers are required to create safe environments for learning to teach SEL skills. Robb (2006) however, notes that in order to teach these skills and this safe environment, teachers themselves must have been taught these skills, have had opportunities to practice them and have a certain level of attention and emotional well-being themselves.

It was consequently recommended that early childhood training program should be strengthened. There should be conscious effort to include social-emotional competencies in the training, teaching and practice of early childhood education. The pre-school staff need to be equipped to help children to be academically competent, socially and emotionally skilful and socially responsible. It cannot be one in sac rifice of the other.
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QUALITY ASSURANCE IN OPEN AND DISTANCE LEARNING IN NATIONAL OPEN UNIVERSITY OF NIGERIA: CONCEPTS, CHALLENGES, PROSPECTS AND RECOMMENDATIONS

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Abstract

Open and Distance learning was introduced to the university education system in Nigeria in 1983. However, it became functional in 2001. It is a time and phenomenal evolution in the history of Nigerian higher education. The programme provides access to interested groups who are interested at any time and anywhere in the acquisition of university education. Open and distance education is flexible, and learner friendly. Multiperspective approaches to learning are adopted in order to ascertain the quality of instruction. However, the programme is confronted with challenges such as high cost of production of instructional materials and acceptability of the products by the general public. These challenges are capable of distorting the intended gains of the programme. Hence the paper calls on all stakeholders to address the recommended strategies such as adopting the discussed quality assurance framework, establishment of institutional press and ICT resource centres as well as the provision of financial support to the clienteles.

Introduction

Education contributes to the growth of national income and individual earnings. In today’s information societies, knowledge drives economic growth and development. Higher education is the main source of that knowledge - its production, dissemination and its absorption by any society.

Experiences both nationally and internationally have shown that conventional education is extremely hard pressed to meet the demands of today’s educational milieu especially for developing countries like Nigeria. The limitation of space in the universities imposes restrictions on access. If they had their way almost every product of the senior secondary system will want a place in a conventional university. However, statistics from the Joint Admissions and Matriculation Board (JAMB) have revealed that they cannot have their way (see Table 1).

Table 1: Number of Applicants and Admissions into Nigerian Universities

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Applications</th>
<th>No. of Admissions</th>
<th>% Admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995/96</td>
<td>508,280</td>
<td>32,473</td>
<td>6.4</td>
</tr>
<tr>
<td>1996/97</td>
<td>472,362</td>
<td>76,430</td>
<td>16.2</td>
</tr>
<tr>
<td>1997/98</td>
<td>419,807</td>
<td>72,791</td>
<td>17.3</td>
</tr>
<tr>
<td>2000/01</td>
<td>550,399</td>
<td>60,718</td>
<td>11.0</td>
</tr>
<tr>
<td>2001/02</td>
<td>823,214</td>
<td>78,416</td>
<td>9.5</td>
</tr>
</tbody>
</table>

Source: JAMB
On the average, less than 12 per cent of those who apply for admission are able to secure placement (Okebukola). The National Universities Commission and the Committee of Vice-Chancellors of Nigerian Universities (2008) have alerted the nation on the need to create space for prospective students. This is due to the fact that out of the 447,928 candidates who qualified for university admission for 2008/2009 session, only 153,000 can be admitted in existing universities because of the carrying capacities of each of the universities. According to Adediran (2008) this is retrogressive considering the fact that Nigeria has 92 degree awarding institutions, made up of 27 federal universities, 31 state universities and 34 private universities.

Odutola (2008) remarked that the situation was worrisome and the nation should urgently do something to widen access to university education. To achieve this he suggested the following:

a) Conscious and concerted injection of funds into the nation’s universities by the proprietors of these institutions.

b) More private universities should be given operational licences while existing universities should be strengthened to admit more students.

Okebukola (2007) expressed worries about the inability of qualified candidates to get a space in the universities. On his own part, he put forward the following suggestions:

a) Re-introduction of the Higher School Certificate

b) Qualified polytechnics and colleges of education should be given degree-awarding status.

c) The National Open University of Nigeria should be strengthened to take in more prospective undergraduates.

Varghese (2007) explained that studies have shown that inequalities are higher where enrolments in higher education are low. Empirical evidence from India indicates that higher education contributes significantly to a reduction in absolute and relative poverty. This therefore implies that educating the poor helps to reduce inequalities and poverty. He went further to enumerate the benefits of higher education:

a) It ensures better employment, higher salaries and a greater ability to consume and save.

b) Educating the poor helps to reduce inequalities and poverty.

c) Building universities was a symbol of self-reliance. They provided a new knowledge base for policy decisions.

d) Development of national education systems. Universities design curricula, develop textbooks, train teachers and promote national languages and cultures at all levels.

e) Public universities contribute to the development of national policies with a secular outlook thus protecting national identities and traditions even when challenged by globalisation.

If higher education can ensure these benefits then with discussing the quality assurance of open and distance learning mode of higher education-National University of Nigeria (NOUN). This paper will therefore be discussed under the following heading: 

a) Concepts of Quality Assurance, Open and Distance learning

b) Challenges of Open and Distance learning

c) Prospects and Recommendations
Concept of Quality Assurance

Quality assurance is a set of activities or procedures that an organisation undertakes to ensure that standards are specified and reached consistently for a product or service. Its goal is to create reliable systems by anticipating problems and designing procedures to avoid as many errors and faults as possible.

In the present day in National and International perspectives, quality is the top of most agenda. Quality of education has significant impact and invaluable contribution to the area of development. If quality could be ensured by innovating new methods, it could validate the quality of open and distance learning programmes. This brings us to quality assurance in open and distance learning for sustainable development.

A Framework For Quality Assurance

Although quality is improved incrementally, project by project, an institution needs an institution wide framework for managing quality if it is to have impact. The following checklist attempts to map out the areas that a quality assurance system would need to cover:

- **a) Quality Policy and Plan:** The open and distance learning organisation should develop a policy on quality. All levels of staff should have opportunity to shape its development and goals agreed upon, and this policy must be translated into a practical plan.

- **b) Identifying Critical Functions:** The critical functions targeting goals must be identified. The procedures to implement these critical functions must be analysed, mapped out and must match reality. These procedures should embody best possible practices.

- **c) Specification of Standards:** Standards for all critical functions must be clearly defined and specified. These standards must be clearly communicated and available in written form for easy reference. They must be reasonable and measurable with provision of regular opportunity for reviewing their appropriateness and amendments.

- **d) Involvement of Users:** Students, tutors, course developers, operational service units and all other stakeholders must be involved in setting appropriate standards and developing procedures.

- **(e) Documentation:** All these procedures for achieving standards must be clearly documented and explicit. They must be reliable, user-friendly, accessible and up-to-date and possibly reviewed when necessary.

- **(f) Training and staff development:** Adequate provision should be made for training and development of staff; this is closely linked to advancement of standards. There should be proper mechanism put in place to assess training and development of staff on a regular basis and resources allocated to meet them.
g) Monitoring: There should be systematic and routine monitoring mechanism for critical function, to check if standards are being met and procedures followed.

h) Cost: There should be a strategy for monitoring that of implementing and maintaining quality assurance activities. This should take into account both human and financial cost. There must be a review process to find out if the costs are greater than the benefits. (Robinson 1994).

Quality assurance according to Harman (2000) has been defined as a systematic management and assessment procedure adopted by higher education institutions in order to monitor performance against objectives and to ensure achievement of quality outputs and quality improvements.

In summary, it can be looked at as an approach to manage quality which focuses on the management of processes. It aims to apply agreed procedures to achieve defined standard as a matter of routine.

The Concept of Open and Distance Learning

Distance education aims at increasing access to education to those who have difficulty in accessing it within the mainstream such as the poor, illiterate, women, marginalised and those living in remote areas.

Distance education is the means by which the teacher is taken literally to the student. It is a teaching and learning process in which students are separated from the teachers by a physical distance which is often bridged by communications technology (Dhanarajan, 2001).

Open learning on the other hand refers to policies and practices that permit entry to learning with no or minimum barriers with respect to age, gender or time constraints and with recognition of prior learning (Glen, 2005).

Generally, open and distance learning education courses are made up of a number of course components or learning materials which can include the following: teaching texts, study guides, course guides, readers or anthologies, assignments, television broadcasts or videotapes, radio broadcasts or audiotapes, software or online information and data, CD-ROMS, textbooks and laboratory material.

Tuition materials are sent with questions to be answered. Recorded electronic materials and the students do this at their spare time. In addition, students support may be provided, either through personal communication at local universities or through online student tutors. Both the media used for open and distance learning and the student support arrangements affect the possible level of interaction in open and distance learning courses.

The emergence of the system of ODL is an inevitable and phenomenal evolution in the history of educational development internationally. Unlike the formal system of education which has its inherent limitations with regards to expansion, provision of access, equity and cost-effectiveness, the growth of open and distance mode of education has now made it to be flexible, learner-friendly and multiperspective in approaches to teaching and learning. This has helped to enhance creativity, leadership and integrated development of personality.
The vision of the National Open University of Nigeria (NOUN) is to be regarded as the foremost university providing highly accessible and enhanced quality education anchored by social justice, equity, equality and national cohesion through a comprehensive reach that transcends all barriers. (Aleazi 2006)

NOUN reflects a novel development in the provision of higher education in Nigeria. It is the first full-fledged university that operates in an exclusively open and distance learning (ODL) mode of education. NOUN focuses mainly on open and distance teaching and learning system, and delivers its course materials via print in addition to information and communication technology (ICT).

In summary, Open and Distance learning is a type of learning whereby opportunity is given to people (young and elderly) who have passed the ages of admission into regular universities to continue their education. It is also directed at youngsters beyond school age, who qualified and desire to earn a university degree. It enables people who are disadvantaged in various ways, some have part time employment, and some have disabilities, while some others are homeless to be educated.

Challenges of Open and Distance Learning

During the colonial periods, many Nigerians including nationals patronized correspondence colleges of the United Kingdom for international and advanced level training (Owoeye, 2004). Later, Nigerians had the opportunity to travel to the United Kingdom to further their education. Training was later extended to the preparation of students for the General Certificate Examinations – Ordinary and Advance levels – by notable institutions such as the Rapid Results College, as well as Cambridge University and University of London (Owoeye, 2004). However, delivery from foreign providers stopped when Nigeria first assumed full independence. According to Ojo and Olakulehin (2006) international development began in many sectors of the Nigerian economy including education. NOUN—an indigenous correspondence college was first launched in 1983 but was stopped in 1985. It was later relaunched in 2001.

Unlike the formal system of education which has its inherent limitations with regards to expansion, provision of access and equity and cost effectiveness, growth of information and communication technologies has facilitated the expansion and distance mode of education. It is now possible to adopt flexible, learner-friendly and multiperspective approaches to teaching and learning. This has helped to enhance creativity, leadership and integrated development of human personality. However, the following challenges can frustrate the entire programme:

1. Epileptic or unavailability of power can mar the use of audiovisual materials and increase overhead cost if the use of generator has to be employed.

2. The printing of course materials require the use of electricity. For economy of Nigeria that is generator-driven cost of production will become very high. This could frustrate early production of printed materials thus causing delay in commencement.

3. Acceptability of the certificate by labour market based on suspicion and fear of quality compromise. This is a natural occurrence for any new product therefore appropriate to be aware of this fact.
4. Affordability. Since it is not residential it will involve movement for the students. This therefore has its cost implications. The unemployed and the lowly paid may not be able to afford it.

Conclusion

The birth of the National Open University has indeed helped Nigerians that hitherto would not have had access to higher education to be enrolled in one.

The National Open University of Nigeria dedicates itself to preparing professionals in various disciplines through the distance learning mode.

The emergence of the system of Open and Distance learning is an inevitable and phenomenal evolution in the history of educational development internationally.

It caters for continuous educational development of professionals such as teachers, accountants, bankers, lawyers, nurses, engineers, politicians, self-employed businessmen and businesswomen etc.

The range of target clientele is wide and should be continually reviewed to meet Nigerians’ ever-changing needs.

Learning is fundamental to the achievement of sustainable development. Development is a massive challenge of learning but conventional methods of teaching cannot meet the scale of the challenge. Technology must be used to enhance and extend teaching as it has transformed other areas of life. The technology of open and distance learning has proved particularly successful because it reaches more learners with better quality teaching at lower cost.

Open distance education is causing a revolution in higher education in Africa. From South Africa to the Sudan, Nigeria to Tanzania, Rwanda, Kenya, Zimbabwe, Sudan, nations are experimenting with open distance education models in order to meet growing demands for higher education places, meet the countries national development goals with diminishing resources and competing sectors of the economy. African governments are hereby urged, especially Ministers of Education to welcome, applaud and support these initiatives. This led to the establishment of the African Council for Distance Education (ACDE) in a conference of African Vice Chancellors/Presidents devoted to the development of distance education in Africa. African council for distance education seeks to achieve the following goals:

(a) Promote open and distance learning, flexible learning and continuing education in Africa.

(b) To promote research and training in open and distance learning.

(c) To contribute to the development of policies essential to advancement of open and distance learning.

(d) To foster continental and global collaboration in open and distance learning.
(e) To provide forum where individuals, organisations and governments can deliberate on policy matters on open and distance learning.

(f) To promote the development of appropriate methods and technologies in education and training relevant to open and distance learning.

(g) To provide a forum for interaction, sharing and dissemination of ideas on open and distance education.

Open and distance learning has a huge role to play in advancing the development agenda. To meet the global challenge and global economy by producing effective manpower, quality of open and distance learning should be ensured.

The emergence of the system of ODL is an inevitable and phenomenal evolution in the history of educational development internationally. It is poised to impact education to anybody, anywhere and anytime. This is because, there is a large body of students that are yet to be reached, and the ODL system has the capacity to integrate the state of the art technologies with the time tested methodologies. In order to get the maximum value from this system, it is hereby recommended as follows:

The quality assurance of the programme should not be compromised. From time to time there is need to review the programme following the framework for quality assurance.

The entry requirements such as Ordinary level credits should continue to be same as in conventional universities if it is to earn the recognition and acceptability of the labor market and the general public.

NOUN should have its own press, ICT centre and resource centre. This will enable her to have control and meet the dates for material delivery. These projects are quite expensive but will be cost effective at the end of the day.

The beauty of NOUN is the provision of learning materials especially printed materials. This has earned it credibility and also has distanced it from the conventional university whereby the students are at the mercy of the lecturer who if not well supervised may teach only what he knows.

If the emergence of NOUN is to reduce poverty and inequality and create access it is likely that poorly paid workers or unemployed may not be able to afford. It is therefore recommended that bursary, students loan and scholarship award from relevant organisations should be extended to NOUN students.

Conclusion

Conventional higher education will never be able to meet the demand for access to higher education. This is therefore an excellent opportunity for open and distance education to provide access (Egerton University, 2004).

Open and distance learning has a huge role to play in advancing the development agenda. To meet the global challenge and global economy by producing effective manpower, quality of open and distance learning should be ensured.
However, open and distance education in Nigeria is confronted by some challenges which could be redressed if the suggested recommendations are adopted by the relevant bodies.

References


Egerton University. (2004). African Council for Distance Education Conference of Vice Chancellors/Presidents.


AN APPRAISAL OF THE IMPLEMENTATION OF DISTANCE LEARNING PROGRAMMES IN NIGERIA HIGHER EDUCATION: SCIENCE AND LANGUAGE TEACHER PREPARATION

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Abstract

Open and Distance Learning (ODL) Programme is considered one of the most important educational innovations of the last century. Providing useful opportunities has always been a major intention of ODL. From the beginning of correspondence courses during the first half of the 19th century to the modern conception of ODL in higher education, providing students with useful knowledge, skills, attitudes and abilities is the purpose of a successful programme. However, the integration of Information and Communication Technologies (ICT) into ODL in the last decade makes acquisition of lifelong learning skills also imperative. This study attempts to analyse the implementation of Open and Distance Learning programmes in institutions of higher education vis-a-vis the National University Commission’s minimum standards. Using a qualitative approach in data sourcing, three universities were selected for the study. Data analysis involved simple percentages and frequencies. Results show that ODL teacher preparation programmes have come a long way but have not fully achieved its objectives. The need for largely technology-driven and integrate ODL programmes is called into play.

Key words: Open and distance learning, Implementation, Innovations, Lifelong learning skills, technology-driven, teacher preparation.
Introduction

In the last decade, the issue of capacity building aimed at enhancing the abilities and capabilities of teachers has drawn attention worldwide. The teacher thus remains the main actor in the successful implementation of any curriculum, be it science or language. Adegoke (2003) observes that the whole education system (pre-school, primary, secondary, and tertiary and teacher education) has a crucial role to play in bringing about true learning for empowerment, which transcends mere acquisition of knowledge. Besides, global challenges in terms of digital age and current technological developments, has created new demands and increased investments requiring the maintenance of critical pedagogy through best possible classroom practices. As Obebe (2005:40) succinctly puts it:

"In the new century, the 21st century, the capacity to educate will depend upon our ability to attract, recruit and train competent, committed and caring teachers."

Much of literature such as (Light, 1999; Ajeyalemi, 2002; Bamidele, 2003; Lawal, 2008; Owhotu, 2008) continue to express the view that the process of global modernity, innovations and day-to-day realities have prompted the need for a rethinking on how teacher preparation should be organised in meeting societal goals in a more suitable manner. Delor's Report to UNESCO (1996) focuses on the four pillars constituting the principles of qualitative education in teacher preparation in the 21st century as learning to know; learning to do; learning to be and learning to live together. Unfortunately, many communities around the world lack the preparation of teachers and quality education programmes needed to build a foundation for a more peaceful and prosperous future (Obebe, 2005:40) particular, the role of open and distant education in offering alternate teacher preparation programmes (pre and in-service) in place of the traditional classroom experience has also received consideration in modern literature. This paper therefore aims to analyse ODL programmes in Nigeria higher education in terms of science and language teacher preparation.

Some Related Works on Open Distance Learning

In discussing some of the conceptions of ODL, (Nwiri, 1992; Searcy, et.al., 1993; Aderinoye, 2002; Adesina, 2002; Darkwa & Mbuko, 2000) and others have offered considerations in knowledge in ODL in terms of definition, programme design, course development, learner support services lifelong learning and on-line education. Jamilah (1995) suggests that distance learning frees the learner from time and place and meets his or her specific needs and interests. According to him, distance learning is best administered in an institution referred to as Open University.

Unesco (2005) views distant education as an educational process in which a significant population of teaching is conducted by someone
removed in space and/or time from the learner. Open learning on the other hand is viewed as an organised activity based on the use of teaching materials, in which the constraints on space are minimised in terms of either access or of time, place, method or a combination of these. Further expanding the concept of ODL, Gabriel (2000), cited in Ayidi & Ikem (2005), argues that distance learning is not synonymous with e-learning. According to her, distance learning is a generic term that describes any form of learning other than the traditional instructor-led mode. It includes correspondence courses delivered through the mail as well as electronically.

In discussing the potentials of ODL, Ayadi and Adeyeku (2005) assert that African academics and opinion leaders can open and distance education outfits and outlets to help solve the educational problems currently confronting and threatening the future of the African continent. They confirmed that establishing and sustaining distance partnerships will assist in fostering the actualisation of the much needed jump-starting of the ailing teaching and learning enterprise in Africa. They noted that this could ultimately and in many ways be a prescription for major African illness—poverty. Marx (2008) that ODIs one of the remarkable changes in the global environment and trends that educators must respond to in meeting the objectives of the millennium.

Darkwa and Mazibuko (2000) submit that the majority of distance learners in Nigeria are goal-oriented working adults seeking degree or specialised training. ODL therefore serves learners whose life circumstances may not allow traditional classroom setting. Adegoke (2008) agrees with Darkwa and Mazibuko when he says that Open University system is one that can help expand opportunities to all learners through open learning. According to him, distance learning is part of open learning, as such today’s universities are no longer restricted to specific time and place.

In the area of technologies utilised in ODL instruction, Brey (1993) reports that the two primary forms of communication utilised to deliver instruction ODL education are synchronous and asynchronous. Distance learning based on asynchronous methods use recorded instructional materials. These types of materials allow learners to be separated in time and distance from the delivery of instruction. Telecommunication systems such as broadcast television or electronically stored media such as video conferencing, audio, CD-ROM, cassette recordings and other curriculum resources are among the technologies listed in asynchronous communication. On the other hand, distance education programme of a synchronous nature uses technologies that offer live interactive instruction. The system is interactive because the instructor can see and hear the students at all the sites. Students are also able to see and hear one another as well as their instructor (Blakesley & Zahn, 2001).
ODL Initiatives in Nigeria

Developing nations like South Africa, Botswana, Tanzania, Kenya, Ghana have engaged in initiatives and policies to maximize and exploit the potentials of ODL as alternate avenues to serve educational needs of non-traditional students and working adults. Nigeria, the giant of Africa is not an exception. The history of ODL in Nigeria is legendary, spanning from the establishment of Correspondence Open Studies Unit (COSU) in 1973-74 academic session. The Correspondence Open Studies Unit (COSU) was upgraded to an Institute in April 1983 and it became Correspondence and Open Studies Institute (COSIT) in 1997, COSIT was renamed Distance Learning Institute (DLI).

These initiatives are in line with the goals of the National policy as an instrument par excelon for:

- Engendering self reliance, empowerment and creativity
- Enhance cultural vitality
- Facilitate social progress and equality
- Fostering democratic values and individual success

Furthermore, Section 6 Tertiary Education on National Policy on Education highlights under sub-section B70 that:

"Since no education may rise above the quality of its teachers, teacher education shall continue to be given emphasis in educational planning and development."

The open and distance learning programmes in Nigerian universities are also in conformity with the National Universities Commission's accreditation components.

At present, the reading and studying of the printed course materials can take place in the home, in an environment convenient for the student or at some designated places called Study Centres across the geopolitical zones of the country.

The practical classes take place at the study centres. Assignments are compulsory features of the course delivery system. All in all, distance education enrollment at universities in Nigeria has witnessed phenomenal growth over the last decade; suggesting ODLC continues to offer alternative to learner's individual circumstances and educational needs. It is against this background that this study attempts to appraise the actual operations of ODL teacher preparation programmes as means of describing, understanding, as well as making judgments and decisions related to its appropriateness/ effectiveness. A curriculum that is worth its salt, should be worthwhile and relevant (Adegoke, 1987).
Theoretical Framework

The National Universities Commission Programme Evaluation Model for Open Distance Learning will be used. This model is useful in explaining the present challenges facing ODL teacher preparation in Nigeria higher education. The theoretical components of this model comprise the various aspects of distance education in terms of:

- Philosophy, vision, mission and objectives
- Admission requirements
- Curriculum design
- Course materials
- Staffing
- Learner support
- Administration
- Internal efficiency
- External efficiency
- Students welfare and Counseling
- Funding evaluation
- Quality assurance
- Use of information and communication technologies

Rational for the Study

Teacher preparation in ODL has been on in some Nigerian universities for almost a decade. To the best of the researcher's knowledge, it is important to note that a comprehensive appraisal of teacher preparation programme in ODL has not been undertaken in Nigeria. Tanner (1966) asserts that a new programme must be regarded an experiment and the proffered solution as hypothesis until they have stood the test of time. This study is set to bridge this gap.

Statement of the problem

Studies by Bamidele (2003); Dibiase (2000) acknowledge that there is tremendous evidence of achievements in ODL particularly in growth rate, application of technologies and other support services. However, despite these efforts, Ayade and Ikem (2005) observe that there has been a perceptible decline in the quality of teacher preparation in ODL in Nigeria over the years. They claim that there exist a mismatch between society's investments in ODL teacher preparation and society's expectations from it. This view is echoed by Obebe (2005:45) who acknowledges that teacher preparation for school subject areas such as social studies, sciences and arts and social sciences should be looked into. Such informed statements give strong indication that a call for the assessment of ODL programmes in Nigerian higher education is not only imperative but urgent. More so, the acquisition and sustainability of knowledge, lifelong learning skills and attitudes in science and language preparation is of crucial importance to technological advancement and hence national development.
Purpose of the study

The purpose of this study is to:

Investigate the extent to which effective implementation of science and language teacher preparation has been achieved in Nigerian universities.

Research questions

The research questions which this study addressed are:

In broad terms:

1. How effective is the implementation of teacher preparation in ODL programme based on NUC standards?

More specifically:

Will there be a significant difference in NUC standardisation and ODL science and language teacher preparation programmes?

b) How adequate are the curricula contents in ODL science and language teacher programmes in Nigerian universities?

c) How adequate are the quantity and quality of resources (human and material) in use in ODL teacher preparation?

d) What are the most crucial constraints to effective implementation of ODL teacher preparation?

e) How adequate are the methods of ODL teacher preparation in Nigerian universities.

Methodology

The study utilised a qualitative approach in data sourcing, but also used interpretative perspective in the study analysis (B., 1989). Demographically, there were thirteen universities in Nigeria operating full distance learning programme and those constituted the population of the study. The study focused on the universities that have a fairly similar type of implementation structure. Out of the thirteen universities, three were purposively selected for detailed survey as follows:

University of Lagos, Lagos
University of Ibadan, Ibadan
University of Abuja, Abuja.

The first two universities are first generation universities in the country while the last one is a third generation university. Apart from the long history of operating ODL in these two first generation universities, they
have the largest number of students' enrollment in the country and the largest staff strength. The University of Abuja was included in this study to provide comparative data on new and old universities.

Sample

A simple random sampling technique was used in selecting 60 course facilitators in the selected universities during the 2007/2008 session. The total number of students involved in the study was 30. The choice of the sample was informed by the awareness of the variety of problems based on location and age of the institutions. Comparisons from these divergent geographical settings will enhance the generalization of the study to other contexts.

Instrumentation

A questionnaire designed by the researchers consisted of three sections. Section A measured demographic information. Section B contained nine sub-headings with 34 items rated on a 5-point Likert (scale) ranging from strongly agree, agree, undecided, strongly disagree, disagree. Section C consisted of two open-ended questions that reflect the respondents thinking about the teacher preparation programmes. Secondary data were obtained from the following sources: records and documents; direct observation; in-dept interviews and focus discussions with students and principal officers from the National Open University (NOUN) Headquarters, Lagos. These secondary data were lumped with data from the files in various departments and in some of the universities selected for detailed study. To collect information on the financial status of the selected universities, some selected univerbursars were interviewed. On the whole, in-depth interviews were conducted with the following people; directors, facilitators, some staff and students.

Reliability and validity of the Instruments

The content validity was employed to validate the items through a pilot study using two lecturers in English Education and two facilitators in ODL. The test-retest reliability was calculated by administering the questionnaire to the original sample after a two-week period. The coefficient gave a scale of 0.82. The University of Lagos DLI programme's content validity will be done by their experts in science and language education.

Procedure

Initial visits to institutions to establish rapport
Subsequent visits to administer questionnaire, interviews on students and officers
Content analysis of materials
General discussions.
Data analysis

Data involved quantitative and qualitative analyses. The responses collected from 60 facilitators from 3 universities were collated and analysed accordingly using simple percentages and frequencies.

Table 1: Comparison of the Ratings of the Philosophy and Objectives of ODL in the Universities

<table>
<thead>
<tr>
<th>S/N</th>
<th>Philosophy &amp; Objectives of ODL</th>
<th>UNILAG P</th>
<th>U</th>
<th>N</th>
<th>U.I. P</th>
<th>U</th>
<th>N</th>
<th>UNIABUJA P</th>
<th>U</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Philosophy and vision</td>
<td>20</td>
<td>-</td>
<td>-</td>
<td>20</td>
<td>-</td>
<td>-</td>
<td>20</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>well understood and well</td>
<td>(100%)</td>
<td></td>
<td></td>
<td>(100%)</td>
<td></td>
<td></td>
<td>(100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>defined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Mission and objective</td>
<td>18</td>
<td>1</td>
<td>1</td>
<td>20</td>
<td>-</td>
<td>-</td>
<td>20</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>clearly understood</td>
<td>(10%)</td>
<td>(50%)</td>
<td>(5%)</td>
<td>(100%)</td>
<td></td>
<td></td>
<td>(100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Philosophy, mission, vision</td>
<td>20</td>
<td>-</td>
<td>-</td>
<td>20</td>
<td>-</td>
<td>-</td>
<td>16(100%)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and objectives of ODL</td>
<td>(100%)</td>
<td></td>
<td></td>
<td>(100%)</td>
<td></td>
<td></td>
<td>(100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>are attainable within the time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note:

P = Positive rating      N = Negative rating      U = Undecided
* Percentages in brackets

Table 1 above shows that the philosophy, vision, and objectives of ODL are clearly defined and understood by all stakeholders in the three universities sampled. The table showed that all the three universities rated all the items high with only 4 respondents representing 20% at University of Abuja having a divergent opinion about the clarity of the philosophy and objectives of ODL programme.
Table 2: Comparison of Admission Requirements for the ODL Teacher Preparation Programme

<table>
<thead>
<tr>
<th>S/N</th>
<th>Admission Requirement</th>
<th>UNILAG</th>
<th>U.I.</th>
<th>UNIABUJA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>P</td>
<td>U</td>
<td>N</td>
</tr>
<tr>
<td>1</td>
<td>Requirement clearly defined</td>
<td>15</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(75%</td>
<td>15%</td>
<td>(10%</td>
</tr>
<tr>
<td>2</td>
<td>Allow learners to be separated in time and</td>
<td>12</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>distance</td>
<td>(60%</td>
<td>50%</td>
<td>(85%</td>
</tr>
<tr>
<td>3</td>
<td>Oriented towards working adult</td>
<td>16</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(80%</td>
<td>15%</td>
<td>(5%)</td>
</tr>
<tr>
<td>4</td>
<td>Helping to solve Nigeria educational problems</td>
<td>10</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(50%</td>
<td>15%</td>
<td>(35%</td>
</tr>
</tbody>
</table>

Table 2 above shows in terms of frequencies and percentages the ratings of the admission requirements for students for ODL teacher preparation programme.

Research Question (a)

Will there be a significant difference in NUC standardisation and ODL science and language teacher preparation programmes?

To answer research question (a), results in Table 2 were used. The results show that all the three universities rated entry requirements as adequate as each of the items recorded at least 50% positive rating by the respondents.

Ratings of item 4 positively at both Unilag and UI are not as high as that of University of Abuja; depicting that the respondents do not subscribe totally that standardisation by NUC will help solve Nigeria educational problem.
Table 3: Comparison of the Ratings of the Adequacy of the Curriculum of ODL by the Universities

<table>
<thead>
<tr>
<th>Item</th>
<th>S/N</th>
<th>UNILAG</th>
<th>U.I.</th>
<th>UNIABUJA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rating of ODL curriculum</td>
<td>P</td>
<td>U</td>
<td>N</td>
</tr>
<tr>
<td>1</td>
<td>ODL curriculum too restricted</td>
<td>18 (50%)</td>
<td>8 (40%)</td>
<td>2 (10%)</td>
</tr>
<tr>
<td>2</td>
<td>Philosophical principle behind ODL programme outdated</td>
<td>9 (45%)</td>
<td>4 (20%)</td>
<td>7 (35%)</td>
</tr>
<tr>
<td>3</td>
<td>Curriculum is largely technology-driven</td>
<td>11 (55%)</td>
<td>5 (25%)</td>
<td>4 (20%)</td>
</tr>
</tbody>
</table>

Table 3 above shows in terms of percentages and frequencies, the opinion of the respondents from the three universities on the adequacy of the curriculum of ODL.

Research Question (b): How adequate are the curricula contents in ODL science and language teacher programmes in Nigerian universities?

Results in Table 3 was used to answer research question (b). Table 3 showed that the opinions of the respondents as regards the adequacy of the curriculum differ from one university to the other. 50% of the respondents in Unilag rated the curriculum as too restricted while the majority of respondents in U.I., i.e. 80% think otherwise while the respondents in UniAbuja were mainly indifferent the restrictiveness of the curriculum.

Similarly, while the majority of the respondents in Unilag believed that the philosophical principles behind ODL programme, the respondents from U.I. and UniAbuja pooled 70% and 40% respectively in support of the principle as it is currently.

The opinions of respondents on item 3 in Table 3 were also divergent. While 55% of Unilag respondents agreed that the curriculum is largely technology-driven, 50% of respondents from UniAbuja disagreed and 60% of UI respondents were not certain. It can therefore be concluded
from results in Table 3 that the adequacy of the ODL curriculum in Science and language teacher programmes in Nigerian universities is contentious and viewed differently by individual university.

Table 4: Rating of Adequacy of ODL Course Materials

<table>
<thead>
<tr>
<th>Item Description</th>
<th>UNILAG</th>
<th></th>
<th></th>
<th>U.I.</th>
<th></th>
<th></th>
<th>UNIABUJA</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Institution provided adequate materials for ODL learners</td>
<td>11 (55%)</td>
<td>5 (25%)</td>
<td>4 (20%)</td>
<td>6 (30%)</td>
<td>4 (20%)</td>
<td>10 (50%)</td>
<td>5 (25%)</td>
<td>5 (75%)</td>
<td></td>
</tr>
<tr>
<td>2. Textbooks, CD-ROM, Audio-video tapes &amp; compact discs are designed by the institution</td>
<td>4 (20%)</td>
<td>-</td>
<td>16 (80%)</td>
<td>1 (5%)</td>
<td>-</td>
<td>19 (95%)</td>
<td>1 (5%)</td>
<td>-</td>
<td>19 (95%)</td>
</tr>
<tr>
<td>3. ODL delivers lectures through radio and television with study materials from audio, radio tapes and discs.</td>
<td>3 (15%)</td>
<td>-</td>
<td>17 (85%)</td>
<td>-</td>
<td>-</td>
<td>20 (100%)</td>
<td>-</td>
<td>1 (5%)</td>
<td>19 (95%)</td>
</tr>
<tr>
<td>4. Recommended textual materials are not readily available.</td>
<td>3 (15%)</td>
<td>2 (10%)</td>
<td>15 (75%)</td>
<td>-</td>
<td>1 (5%)</td>
<td>19 (95%)</td>
<td>-</td>
<td>5 (25%)</td>
<td>15 (75%)</td>
</tr>
</tbody>
</table>
Table 4 above shows the rating of ODL course material availability in the three universities in terms of frequency and simple percentages.

From Table 4, 55% of Unilag respondents stated that adequate materials are available for ODL learners while respondents of U.I. and UniAbuja disagreed as the recorded 50 and 75% respectively stating that adequate materials are not available to ODL learners.

Table 4 also shows that 80, 95 and 95% of the respondents from Unilag, U.I. and UniAbuja respectively stated that the institutions do not design the textbooks, CD-Rom, Audio-video tapes and compact discs for the ODL programme. It shows that the respondents were unanimous on this item that the institutions do not have inputs in the designing of the materials.

Respondents were also unanimous in their responses to items 3 and 4 in Table 4 as shown by the corresponding high percentage. On item 3 in Table 4, it was observed that 85, 100 and 95 of Unilag, U.I. and UniAbuja disagreed that ODL delivers lectures through radio and television using study materials from tapes and cdis. In a similar manner, the respondents from the three universities disagreed that recommended textual materials are not readily available as depicted by 75, 95 and 75% recorded respectively by Unilag, U.I. and UniAbuja under negative rating (N) in Table 4.

Table 5: Rating of Adequacy of Staff for ODL Programmes in the Universities

<table>
<thead>
<tr>
<th>Item</th>
<th>Rating of Staffing</th>
<th>UNILAG</th>
<th>U.I.</th>
<th>UNIABIJA</th>
</tr>
</thead>
<tbody>
<tr>
<td>S/N</td>
<td></td>
<td>P</td>
<td>U</td>
<td>N</td>
</tr>
<tr>
<td>1</td>
<td>Most staff are professionally trained</td>
<td>3</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>(15%)</td>
<td>(20%)</td>
<td>(65%)</td>
<td>(15%)</td>
</tr>
<tr>
<td>2</td>
<td>Some institutions lack competence</td>
<td>4</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>(20%)</td>
<td>(35%)</td>
<td>(45%)</td>
<td>(20%)</td>
</tr>
<tr>
<td>3</td>
<td>Periodic training for ODL instructors</td>
<td>5</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>(15%)</td>
<td>(40%)</td>
<td>(35%)</td>
<td>(10%)</td>
</tr>
<tr>
<td>4</td>
<td>Staff members are on part-time basis</td>
<td>4</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>(20%)</td>
<td>(50%)</td>
<td>(30%)</td>
<td>(25%)</td>
</tr>
<tr>
<td>5</td>
<td>Staff</td>
<td>11</td>
<td>2</td>
<td>7</td>
</tr>
</tbody>
</table>

140
Table 5 shows the rating by respondents of the adequacy of staff for ODL teacher programme in terms of frequency and percentages.

Research Question (c): How adequate are the quantity and quality of resources (human and materials) in use in ODL teacher preparation?

On the adequacy of staff for ODL programme, Table 5 shows that while 55% of Unilag respondents said adequate numbers of staff are available, only 30% of the U.I. respondents shared same view as those of UniAbuja said there is gross inadequacy of teaching staff as depicted by 65% of them with negative rating of item 5 in Table 5. Table 5 shows that the quality of staff is low as depicted by the high negative ratings of item 1 of 65 and 55% respectively of respondents from Unilag and UI while 55% of respondents in UniAbuja were undecided. Also in Table 5, 20, 20 and 40% of the respondents from Unilag, U.I. and UniAbuja respectively stated that some instructors of ODL teacher programme are incompetent. This presupposes that many competent instructors teach ODL programme since the percentages are low when compared to those that rated competency of staff low.

Table 5 further shows under item 3 that training programme for ODL instructors is hardly conducted. Only 25 and 10% respondents from Unilag and U.I. respectively agreed that periodic training for ODL instructors do take place while 50% of UniAbuja respondents attested to regular training programme being carried out for ODL instructors. In Table 5 under item 4, it was observed that most ODL instructors in UniAbuja are on part-time basis (60%) while few number of part-time ODL instructors is recorded for Unilag and U.I. Where 20 and 25% respectively stated that part-time ODL instructors exist. The adequacy of staff in terms of quantity and quality are not the same in ODL programme of the universities. It seems that the adequacy is more pronounced in UniAbuja than the other two universities.

Table 6: Appraisal of Methods of Teaching ODL Programme

<table>
<thead>
<tr>
<th>Item S/N</th>
<th>Methodology</th>
<th>UNILAG</th>
<th>U.I.</th>
<th>UNIABUJA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Teachers use</td>
<td>P U N</td>
<td>P U N</td>
<td>P U N</td>
</tr>
<tr>
<td></td>
<td>(5%) use</td>
<td>(95%)</td>
<td>(100)</td>
<td>(5%)</td>
</tr>
<tr>
<td></td>
<td>varieties of</td>
<td></td>
<td>(5%)</td>
<td>(10%)</td>
</tr>
<tr>
<td></td>
<td>materials</td>
<td></td>
<td>(%)</td>
<td>(85%)</td>
</tr>
<tr>
<td>2</td>
<td>Method of course delivery does not encourage</td>
<td>1 2 17</td>
<td>1 19 1 3</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>(5%)</td>
<td>(10%)</td>
<td>(85%)</td>
<td>(5%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(5%)</td>
<td>(15%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(%)</td>
<td>(80%)</td>
</tr>
</tbody>
</table>
Table 6 shows in terms of frequencies and percentages, the ratings of the methods of teaching ODL programme in the three universities.

Research Question (d): How adequate are the methods of teaching ODL in Nigerian universities?

To answer research question (d), results in Table 6 were used.

Results in Table 6 showed a similar trend throughout the six items and in all the three universities. It was observed that negative ratings (N) recorded the highest percentages in all cases.
Specifically, respondents in all the three universities observed that teachers do not use variety of methods in course delivery and that learners do not have adequate competence in the use of multi-media course delivery. Furthermore, they agreed that methods of teaching encourage life interactive instruction while students large population does not affect demonstration during ODL course delivery. Respondents also unanimously stated that students are not motivated to attend lectures regularly and also do not agree that learners are separated in time and distances from delivery of instructions depicted by results under items 4 and 5 in Table 6.

Table 7: Evaluation Procedure of ODL Programme

<table>
<thead>
<tr>
<th>Item</th>
<th>Evaluation</th>
<th>UNILAG</th>
<th>U.I.</th>
<th>UNIABUJA</th>
</tr>
</thead>
<tbody>
<tr>
<td>S/N</td>
<td></td>
<td>P</td>
<td>U</td>
<td>N</td>
</tr>
<tr>
<td>1</td>
<td>There is provision for regular evaluation of learners programme</td>
<td>11</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>(55%) (20%) (25%) (10%) (25%) (65%) (25%) (25%) (75%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>ODL programme in Science and Arts has achieved its objectives</td>
<td>6</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>(30%) (25%) (45%) (10%) (40%) (50%) (35%) (10%) (55%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>The present role of ODL teacher preparation requires modification to meet specific needs of learners</td>
<td>7</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>(35%) (20%) (45%) (40%) (25%) (35%) (25%) (15%) (60%)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7 above shows in terms of frequencies and percentages, the rating by respondents of ODL programme. Item 1 of Table 7 shows that 55% of...
Unilag respondents believed there is provision for regular evaluation of learners programme while U.I. and UniAbuja that pessively had high negative ratings of 65 and 75% signified that no provision for regular evaluation of learners of ODL programme. Table equally shows that item 2 elicited similar responses from the three universitites in which negative ratings of 45, 50 and 55% were recorded implies that ODL programme in science and arts has not achieved objectives. Furthermore, Table 7 shows under item 3 that 35, and 25% were respectively recorded by Unilag, U.I. and UniAbuja and positive ratings. It implies that only few respondents think that there is a need for modification of ODL teacher preparation program as presently obtainable.

Results of the Interview

To further validate the responses from the questitai, some students in ODL programme were interviewed. The general tone of opinion of the interviewees are summarised below:

Respondent A agrees that:

The standard and quality of courses offered in ODL very high. It compares very well with my colleagues in conventional university. This is why I have now registered for my Masters program.

Respondent B notes that:

The major problem has to do with the facilitators. They miss a lot of lectures during the weekends only to stress us during residential. They need a balance to help us internalise the teaching.

Respondent C noted that:

The delays in releasing results is getting out of hand. Imagine, it took eight months for my final results to be out.

Respondent D feels that:

The authorities should look into the cost of tuition and other internal payments. It is simply outrageous because some of us are adults without jobs.

Respondent E agrees that:

Instructional materials are scarcely available. There is nothing like audio/video tapes, CD-ROMs, or electronic transmission of materials. We use only our books and lecture materials.
Discussion

Five research questions were raised to provide a comprehensive picture and detailed understanding of the various aspects of Distance Learning in Nigeria. Results show that ODL programmes have come a long way but have not fully achieved its objectives. Moreover, the demographic reality of students from diverse background demands competent staff strength to deal with the multiple needs and demands of students. In addition, universities can enhance the new mode of quality higher education through adequate training of staff in ODL pedagogy.

The responses of the subjects also exposed the dearth of delivery methods—materials such as ICT facilities, television and radio broadcast as well as electronic transmission of materials—multimedia. Another dimension to this problem is that some of the factors are ignorant of the use of these facilities. The implication becomes obvious when we consider that Nigeria is still light years away from internationally accepted standard in ICT as our electricity is epileptic and cannot therefore be relied upon. Without a steady power, the internet, television, radio and all other aids needed, the programme will hardly function.

The respondents unanimously complained about the high cost of the tuition fees. The implication is obvious when we consider (May and Komane, 2001) assertion that:

"None of the countries in sub-Saharan Africa has fulfilled the promise of providing education to the entire population through conventional education system. It is in this context that distance education is viewed as an appropriate method of education delivery. Since education is able to provide people who have missed an education opportunity at one level or another to recapture what they have lost without necessarily going back to the classroom."

There is need to ensure that projects of this nature go beyond high sounding ambitions. They have to be matched with realistic fees and workable materials. It is not an understatement to suggest that most of the infrastructure are totally inadequate for the needs of the present day and age. For these institutions to be relevant amongst their peers in a developed world they must provide adequate management involvement and support.

Conclusion and recommendations

For Nigerian universities to capture the promise of ODL, every component of the programme must be largely technology driven and integrated through computer networks. The use of the Internet should be encouraged as a means of interaction with lecturers. There is need for massive production of study packs, CD-ROMs and other workable materials. With the redefinition of ODL as pace setters, we need to improve on the quality of instruction and research the existing
institutions. Implicitly, qualified experts in handling distance education should be recruited as facilitators. The emphasis should be on producing open university graduates that will have the technical know-how to face the challenges on today's world. Above all, part of the efforts and resources being expended on unserious political issues can be channelled into these institutions for optimum results.
References


STRATEGIES FOR PREVENTING HIV/AIDS FROM STUDENTS IN TERTIARY INSTITUTIONS AND ITS IMPACT ON WORKPLACE: IMPLICATIONS FOR COUNSELLING

Mrs. M.C. Okonkwo
Anambra State University, Uli, Nigeria

Abstract

The study was a survey to determine the strategies for preventing HIV/AIDS in tertiary institutions and its impact on workplace. The study aimed at determining the strategies that would help to achieve healthy environment in the institutions and also to identify the impact of HIV/AIDS on the workplace. The population of the study comprised of two hundred (200) students in Anambra State University (Uli and Igbariam campuses) and Nnamdi Azikiwe University, Awka. A sample of 100 students was chosen from the entire population. The researcher used a structured questionnaire for data collection. Two research questions were answered. Data were analysed using arithmetic mean for the research questions, the findings of the investigation among others were: employment of staff with high moral standard, power alleviation, involvement of students in programmes and others. The impact of HIV/AIDS on workplace include: reduced supply of labour, loss of skilled and experienced workers etc. These have implications for counselling.

Introduction

Human Immune Deficiency Virus and Acquired Immune Deficiency Syndrome (HIV/AIDS) has threatened the country's productivity and economy. NPC, (2004) stated that HIV/AIDS is the major social and health problem. HIV/AIDS has assumed a pandemic proportion and is one of the leading causes of death worldwide (UNAIDS, 2001). Government should therefore sit up, for it requires a multi-sectorial response in solving the problem. This deadly disease has brought so much misery, distress and grief to individuals, tragedy and destruction to families, wrecking communities, depopulating nations and damaging economies, thus mobilization, participation and involvement of all sectors of the economy. Therefore, a multi-sectorial approach is needed, that is, a network of activities to reduce the ravaging effect of diseases.

Thus, reports from seminars and workshops, confirm that governments of different countries are becoming increasingly interested in controlling or getting rid of the deadly disease called HIV/AIDS. It is very vital to join hands to prevention or control the disease. The sectors to join hands with government include: health, education, non-governmental organisations, at all levels. In the health sector, counselling, laboratory testing, administration of highly active antiretroviral drugs and compliance, prevention of mother to child transmission, home-based care for those infected and treatment of opportunistic infections.

It is therefore important that our students are made to visit victims of HIV/AIDS in hospitals because of the saying of Usdin (2003) that many Africans humorously interpret the AIDS acronym as American Invention to discourage sex in Africa. NPC, (2004) stated that HIV/AIDS is the major social and health problem, increasing number of victims are left motherless/fatherless, the youths and children pass on and the aged are left helpless, the productivity and economy of the country is also threatened. The disease cuts across board, although it does not come to you but if you go to it your immune system will be destroyed. Nwafor (2005), Njoku and Nwosu (2004) opined that the most common victims are students, chief executives, commercial sex workers, teachers, long distance drivers, young boys and girls,
traders, unqualified medical workers and hairdressers among others. The disease does not recognize status or age.

Njoku (2004) stressed that the statement by Clarke suggested that enough attention has not been given to the relevant agents that would help eliminate the virus. HIV/AIDS is yet to be brought under control in the testimony to our collective unpreparedness to deal with the virus (Clark, 2003). Thus, UNESCO/ NUC (2004) believed that none of these initiatives to be used for controlling HIV/AIDS, at the tertiary level since the youth between the ages of 15 and 24 are the worst hit. The control of HIV/AIDS and STDs would not make meaningful impact if the primary and secondary school students were kept aside. The root should be uprooted and dealt with to avoid it growing again. If we start from the tertiary institutions the primary and secondary will later find themselves in the tertiary institution and it will be like cutting a tree from the top and believing that an evil tree would die.

Njoku (2004) stated that increase in moral laxity in staff and students are not restricted to any teaching staff or group of students while Kaluba (2003) wrote in the early days of the outbreak of HIV/AIDS, that government looked up to teachers and related office workers to provide moral leadership on HIV/AIDS campaigns.

HIV/AIDS is affecting the fundamental right of work particularly with respect to discrimination and stigmatisation of people living with and affected by HIV/AIDS. Emphasis should be placed on prevention of HIV/AIDS in the workplace and students in institutions. This is because no one unit or division can effectively control the deadly scourge. The Institution, Management, Counsellors, Lecturers, Departmental Associations, Students Union, Health Centers, Student Affairs Division, Hall Warden, deal with students in one way or the other. They should play their own role by adopting a suitable strategy that would help all to achieve healthy environment in the workplace which is part of the local community and has a role to play in the struggle to limit the spread and effects of the epidemic. HIV/AIDS is affecting fundamental right at work with respect to discrimination and stigmatisation of people living with and affected by HIV/AIDS. It is based on these that the researcher sought to determine the strategies for preventing HIV/AIDS in tertiary institutions and its impact on work place. The researcher also highlighted the implications for counselling.

Purpose of the Study

The major purpose of the study was to determine the strategies and impact associated with HIV/AIDS. Specifically the study sought:

- To determine the strategies that could be used to prevent HIV/AIDS in tertiary institutions in Anambra State.
- To discover the impact of HIV/AIDS on workplace in Anambra State.

Research Questions

The following research questions guided the study:

- What are the strategies for preventing HIV/AIDS in tertiary institutions?
- What are the impacts of HIV/AIDS on the workplace in Anambra State?
Methodology

Survey method was employed. The study was carried out in Anambra State. The study aimed at determining the strategies that would help to achieve healthy environment for all the institutions in Anambra State and identifying the impact of HIV/AIDS on the workplace. The population of the study comprised two hundred (200) students of the Anambra State University (Uli and Igbariam campuses) and Nnamdi Azikiwe University, Awka who had undergone HIV/AIDS training course. Due to certain constraints, all the students could not be reached, the researcher therefore, used simple random sampling technique to select hundred (100) students.

The researcher constructed and used an instrument titled questionnaire for strategies and impact for HIV/AIDS on work place (QSIHWP) to collect relevant data for this study. The instrument contained 20 structured items to elicit information about strategies and impacts of HIV/AIDS from students of the two mentioned universities. Section “A” contains 20 items, which deal with the strategies of HIV/AIDS while section “B” contains 10 items, which deals with Impact of HIV/AIDS on workplace. The items were placed on a 4-point Likert scale of strongly Agree (SA), Agreed (A) Disagree (D) and strongly Disagree (SD).

The QSIHWP instrument was face validated using four experts from the department of Educational Foundations whose ranks range from senior lecturer to professor; all from Nnamdi Azikiwe University, Awka. The experts were given copies of the research questions along side with the draft instrument for the validation exercise. The aim was to ensure that the instrument measured what it was designed to measure. The experts offered useful suggestions and modified some items. The test-retest method was used to ensure reliability of the instrument. The researcher administered the same instrument on thirty students who were not part of the target population at an interval of five weeks. The sets of scores were computed using Pearson Product Moment Correlation Co-efficient obtained was 0.78, which indicated a correlation between the responses obtained during the two periods of administration considered high enough for the study.

Data Analysis

All the 100 copies distributed were collected and analyzed by the researcher. Mean and Standard Deviation statistics were used for answering the research questions. A mean of less than 2.50 indicates not a strategy or an impact while a mean of 2.50 and above was given a positive interpretation.

Results

The results are presented in tables in accordance with the research questions posed in the study.
Table 1: Mean, Standard Deviation and ranking of respondents on strategies of HIV/AIDS

<table>
<thead>
<tr>
<th>S/N</th>
<th>ITEMS</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>RANK</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Students should have the will power to say no to sex and other campus vices</td>
<td>40</td>
<td>30</td>
<td>11</td>
<td>13</td>
<td>3.08</td>
<td>10th</td>
</tr>
<tr>
<td>2</td>
<td>Use of capacity building</td>
<td>74</td>
<td>12</td>
<td>8</td>
<td>6</td>
<td>3.52</td>
<td>3rd</td>
</tr>
<tr>
<td>3</td>
<td>Employment of staff with low moral standard</td>
<td>16</td>
<td>20</td>
<td>40</td>
<td>24</td>
<td>2.36</td>
<td>18th</td>
</tr>
<tr>
<td>4</td>
<td>Disassociating students from programme development</td>
<td>10</td>
<td>30</td>
<td>44</td>
<td>16</td>
<td>2.30</td>
<td>19th</td>
</tr>
<tr>
<td>5</td>
<td>Employment of staff with high moral standard</td>
<td>78</td>
<td>11</td>
<td>9</td>
<td>2</td>
<td>3.63</td>
<td>1st</td>
</tr>
<tr>
<td>6</td>
<td>Involvement of students in programme development</td>
<td>70</td>
<td>12</td>
<td>10</td>
<td>8</td>
<td>3.32</td>
<td>5th</td>
</tr>
<tr>
<td>7</td>
<td>Students to visit victims if hospitals permit</td>
<td>50</td>
<td>30</td>
<td>12</td>
<td>8</td>
<td>3.28</td>
<td>6th</td>
</tr>
<tr>
<td>8</td>
<td>Students to avoid exchanging under wears, objects etc.</td>
<td>60</td>
<td>16</td>
<td>14</td>
<td>10</td>
<td>3.19</td>
<td>8th</td>
</tr>
<tr>
<td>9</td>
<td>Screening the first year students</td>
<td>50</td>
<td>35</td>
<td>10</td>
<td>5</td>
<td>3.17</td>
<td>9th</td>
</tr>
<tr>
<td>10</td>
<td>Students should not have the will power to say no to sex and other campus vices</td>
<td>10</td>
<td>20</td>
<td>40</td>
<td>30</td>
<td>2.20</td>
<td>20th</td>
</tr>
<tr>
<td>11</td>
<td>Adequate use of the guidance and Counselling unit</td>
<td>40</td>
<td>30</td>
<td>14</td>
<td>16</td>
<td>2.89</td>
<td>11th</td>
</tr>
<tr>
<td>12</td>
<td>Incorporating what the students should know about HIV/AIDS and STDs</td>
<td>9</td>
<td>60</td>
<td>20</td>
<td>11</td>
<td>2.60</td>
<td>13th</td>
</tr>
<tr>
<td>13</td>
<td>Establishment of school community relationship</td>
<td>13</td>
<td>30</td>
<td>40</td>
<td>17</td>
<td>2.53</td>
<td>16th</td>
</tr>
<tr>
<td>14</td>
<td>Re-orienting of values</td>
<td>10</td>
<td>54</td>
<td>20</td>
<td>16</td>
<td>2.54</td>
<td>14th</td>
</tr>
<tr>
<td>15</td>
<td>Massive inspirational publicity</td>
<td>13</td>
<td>40</td>
<td>34</td>
<td>13</td>
<td>2.52</td>
<td>17th</td>
</tr>
<tr>
<td>16</td>
<td>Educating students before they leave industrial attachment</td>
<td>78</td>
<td>11</td>
<td>9</td>
<td>2</td>
<td>3.63</td>
<td>1st</td>
</tr>
<tr>
<td>17</td>
<td>Poverty alleviation</td>
<td>74</td>
<td>12</td>
<td>8</td>
<td>6</td>
<td>3.52</td>
<td>3rd</td>
</tr>
<tr>
<td>18</td>
<td>Display of professional work ethics by medical personnel and hall wardens</td>
<td>10</td>
<td>54</td>
<td>20</td>
<td>16</td>
<td>2.54</td>
<td>14th</td>
</tr>
<tr>
<td>19</td>
<td>Access to drugs for ameliorating AIDS</td>
<td>50</td>
<td>30</td>
<td>12</td>
<td>8</td>
<td>3.28</td>
<td>6th</td>
</tr>
<tr>
<td>20</td>
<td>Adequate use of campus health facilities</td>
<td>40</td>
<td>30</td>
<td>14</td>
<td>16</td>
<td>2.89</td>
<td>11th</td>
</tr>
</tbody>
</table>

Table 1 above shows that:

Employment of staff with high moral standard and educating students before they leave industrial attachment have a mean score of 3.63 and they rated strategies of HIV/AIDS and 91.3% of the respondents agreed to that, they are strategies of HIV/AIDS in tertiary institutions.

Use of capacity building and poverty alleviation took 3rd position with a mean score of 3.52 and 84% of the respondents agreed that both of them are strategies.
Involvement of students in programme development ranked 5th with a mean score of 3.32 and 78.7% of the respondents agreeing to that.

Students to visit victims if hospitals permit and access drugs for ameliorating AIDS ranks 6th with a mean score of 3.28 and 86% of the respondents consented to these opinions as strategies.

Employment of staff with low moral standard ranked 18th with a mean score of 2.36 and 40.6% of the respondents agreed to that.

Disassociating students from programme development ranked 19th with a mean score of 2.30 and 38% of the respondents agreed with this.

Students should not have will power to say no to sex and campus vices ranked 20th with a mean score of 2.20 and 34% of the respondents agreed to that, therefore, items No. 3, 4, 7, 10, are strategy for preventing HIV/AIDS. They have a mean score which is less than 2.50, and so, it is not a strategy for preventing HIV/AIDS. Also it was revealed in table 1 above that the items with serial number 1, 2, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, had mean scores of 2.50 and above and these are the strategies for preventing HIV/AIDS in tertiary institutions in Anambra State.

Table 2: Frequency, Mean, Standard Deviation and Ranking of respondents on Impact of HIV/AIDS on the Work Place

<table>
<thead>
<tr>
<th>S/N</th>
<th>Items</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>(\bar{x})</th>
<th>RANK</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Reduced supply of labour</td>
<td>63</td>
<td>17</td>
<td>10</td>
<td>10</td>
<td>3.42</td>
<td>1st</td>
<td>84</td>
</tr>
<tr>
<td>2.</td>
<td>Loss of skilled and experienced workers</td>
<td>61</td>
<td>20</td>
<td>8</td>
<td>11</td>
<td>3.32</td>
<td>2nd</td>
<td>81</td>
</tr>
<tr>
<td>3.</td>
<td>Absenteeism and early retirement</td>
<td>59</td>
<td>20</td>
<td>11</td>
<td>10</td>
<td>3.21</td>
<td>3rd</td>
<td>77.3</td>
</tr>
<tr>
<td>4.</td>
<td>Stigmatisation and discrimination against workers with HIV/AIDS</td>
<td>54</td>
<td>18</td>
<td>16</td>
<td>12</td>
<td>3.15</td>
<td>4th</td>
<td>72.6</td>
</tr>
<tr>
<td>5.</td>
<td>Reduced productivity and negative impacts on economic growth</td>
<td>59</td>
<td>72</td>
<td>5</td>
<td>3</td>
<td>3.07</td>
<td>5th</td>
<td>91.3</td>
</tr>
<tr>
<td>6.</td>
<td>Increased burden on women to combine care and productive work thereby increasing poverty as a result of death of the breadwinner</td>
<td>42</td>
<td>12</td>
<td>12</td>
<td>2.99</td>
<td>6th</td>
<td>76.6</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>On the trade unions, it could lead to loss of key staff and activities, which may lead to poor organisation and defects in support of its membership</td>
<td>32</td>
<td>40</td>
<td>14</td>
<td>14</td>
<td>2.98</td>
<td>7th</td>
<td>66.7</td>
</tr>
<tr>
<td>8.</td>
<td>Reduced membership</td>
<td>20</td>
<td>50</td>
<td>12</td>
<td>18</td>
<td>2.74</td>
<td>8th</td>
<td>70.6</td>
</tr>
<tr>
<td>9.</td>
<td>Reduction in financial strength</td>
<td>8</td>
<td>42</td>
<td>40</td>
<td>10</td>
<td>2.60</td>
<td>9th</td>
<td>55</td>
</tr>
<tr>
<td>10.</td>
<td>Increased productivity and positive impact on economic growth</td>
<td>64</td>
<td>32</td>
<td>10</td>
<td>2.43</td>
<td>10th</td>
<td>48</td>
<td></td>
</tr>
</tbody>
</table>
From table 2 above, it is observed that item No.1 ranked first (1st) with a mean score of 3.43. It is also observed that 84% of the respondents agreed that it is an impact of HIV/AIDS in workplace. Item No.2 ranked 2nd with a mean score of 3.32 and 81.3% of the respondents agreed with this item. Item No.3 ranked 3rd with a mean score of 3.21 and 77.3% agreed with this item as an impact of HIV/AIDS in workplace. Item No.4 ranked 4th with a mean score of 3.15 and 72.6% of the respondents agreed with this item. Item No.5 ranked 5th with a mean score of 3.07 and 91.3% of the respondents agreed with this item. Item No.6 ranked 6th with a mean score of 2.99 and 76.6% of the respondents agreed with this item. Item No.7 ranked 7th with a mean score of 2.98 and 66.7% agreed with this item. Item No.8 ranked 8th with a mean score of 2.74 and 70.6% of the respondents agreed with this item. Item No.9 ranked 9th with a mean score of 2.60 and 55% of the respondents agreed that it is an impact. Item No.10 ranked 10th with a mean score of 2.43 and 48% of the respondents agreed that it is not an impact of HIV/AIDS. Table 2 above reveals that items serial numbers 1, 2, 3, 4, 5, 6, 7, 8, 9, had the mean scores of 2.50 and above. They are therefore the impact of HIV/AIDS in workplace while item number 10 had mean score less than 2.50 and so it was given a negative interpretation.

Implications for Counselling

Counsellors believe strongly that most of the behaviours observed which expose them to the risk of contacting HIV/AIDS, are because of ignorance and lack of information on the matter. This may be the reason Okonkwo (2006) opined that schools should organise workshops, seminars and conferences on HIV/AIDS to create awareness. Counsellors should therefore organise seminars, workshops, and orientation using the media such as radio, television and newspapers to enable them get to students and others. Counsellors should let them know that the disease is incurable in nature, make them know ways of treating the disease HIV/AIDS & STDs. Equally, enumerate all measures that could be taken to prevent the conditions.

Counsellors should let the government know the importance of employing teachers who are of high moral standard because, if you are corrupt you cannot fight corruption. Counsellors also should let the federal and state governments see the need of involving students in program development. When one is made to participate in any decision-making concerning him/her such a person would become an active participant.

Counsellors should talk to students with the help of parents, teachers and other significant others on the need to avoid exchanging underwears, objects etc which could possibly contract HIV/AIDS and STDs can be contracted through the exchange of underwear of victims especially in the case of female students. Counsellors should let the school authorities know the importance of screening the first year students for it will help to determine their HIV/AIDS and STDs status before they are fully admitted. Counsellors and school authorities should include students who are victims of HIV/AIDS in the hospital once in every three months. That will help to make the students know that HIV/AIDS is real. Counsellors should insist that sex education be inculcated into school timetable. This will help the students (both old and new) know about the HIV/AIDS, STDs, rape and cultism among others. They will be made to know that an act of rape could lead one to contacting HIV/AIDS and STDs. Cultism is associated with drinking of blood during initiation and engraving of marks on the bodies of the initiates. HIV/AIDS could be contracted through any of them. During the orientation gathering in school, the counsellor lectures students on how to say no to sex, enable them acquire the will power to say no and other campus vices. They should all be educated on the evils of cultism and drug abuse as these activities are detrimental to their well-being.
The counsellor uses his/her professional knowledge to heighten campaigns on HIV/AIDS. Help parents, students and workers to know that distribution of condoms as if condoms offer absolute protection against HIV is not enough, rather, the promotion of use of condoms would only encourage promiscuity in our students thereby endangering their lives. Guidance and Counselling unit should be made more attractive; Guidance counsellors should apply the voluntary confidential counselling Technique Test (VCCT). Counsellors should be role models if students are to have confidence in them. They should always be readily available to students, be patient with them and handle each person's problem with care. Counsellors should be willing to confront any individual who may sexually harass students. She will also work with the medical unit as partner in progress.

Counsellors should endeavour to hand over everything about counselling to the curriculum planners who now incorporate them into the curriculum.

Counsellors should re-orient the students' values and beliefs using what they have to get what they do not have. If they continue with that, they will make them indulge in sexual immorality that is playing the sex game with reckless abandon and this according to Basic facts (2000) is the most common way of contacting HIV/AIDS and STDS. Counsellors should also make use of the media to encourage more participation in the re-orientation of values especially for the students.

Counsellors should state the need for the school and community to establish a cordial relationship to check the excesses of students who live outside the school. When this is done, the landlord should eject any student to the school authority. All students, whether they live in the hostel or outside should be made to abide by the rules and regulations of where they stay.

Counsellors should stress the need for tertiary institutions to engage in massive inspirational publicity and enlightenment campaign on HIV/AIDS and STDS on continuous basis.

Counsellors should counsel and educate students who are about to leave for industrial training programmes on the challenges they are going to face. Institutions see the need why they should not make demand on students as a result of government inability to adequately fund education. This makes it easy for students to fall prey to sexual harassment and sale of grades to highest bidders. HIV/AIDS and STDS should not be ruled out because these students would not restrict themselves to one-sex partner or abstain from sex. Counsellors should counsel the medical personnel and hall wardens to see the need of working side by side to see that the victim of HIV/AIDS do not pretend that nothing has happened.

Counsellors let government and philanthropic organizations ensure that people living with AIDS are helped in purchase of availability and accessibility remains a problem to many people especially in Africa. It is only well to do have access to the drug and can afford item.

Counsellors should educate the institutions on the need of adequate use of campus Health facilities, it will enable them control HIV/AIDS or STDS in a setting like the academic environment. Counsellor should let the institution see the inadequacy of health facilities has made medical personnel to use bare hand or disposable gloves to handle cases, also they do not have the correct disinfectants to treat or sterilize equipment adequately. There is the need to use the right tool and material even, when it means charging the students token sum. Counsellors should make the institution see the need of caring for students who are involved in
rape, drug abuse and in unhealthy sexual behaviors to seek counselling for counselling session and follow-up visits, should not be left out.

Conclusion

HIV/AIDS, STDs, does not in any ways discriminate nor status, therefore, the control of HIV/AIDS and STDs could only be effective if all and sundry take part to fight the dreaded diseases.

References

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TEACHER EDUCATION IN OPEN AND DISTANCE LEARNING FOR SUSTAINABLE DEVELOPMENT

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National Open University of Nigeria

Abstract

The paper x-rays the concept of sustainable development and argues that sustainable development reflects the process that meets the needs of the present without compromising the ability of future generations to meet their own needs. Education is at the heart of all this process. And without a vibrant and well educated workforce, sustained and reasonable development could not be attained. This Nigeria and indeed Africa lacks, as the majority of those who are expected to succeed those in the service at present are supposed to be in higher institutions now are not there.

The quality of teachers that a nation possesses determines the socio-economic, scientific, technological and even political development of that country. Teachers represent the most critical component of any strategy aimed at meeting the Millennium Development Goals (MDGs) of universal primary education and the global Education For All (EFA) priorities. Despite this, shortages of teachers remain a chronic problem throughout much of the developing world, particularly in Africa where HIV/AIDS continue to decimate an entire generation of trained professionals. The paper examines the problem of teacher shortage in Nigeria’s education system. The purpose of the study was to explore the feasibility of producing highly skilled and efficient personnel for the education system within the shortest possible time through the Open and Distance Learning (ODL) mode. Thus, the National Open University of Nigeria (NOUN) has established many academic programmes and courses including those in Teacher Education that meet the needs of professional bodies and the labour market. The School of Education (SOE) employs best practices in the use of ODL for Teacher Education. Finally, the paper recommends that government should take appropriate steps to involve private sector participation in the development of Distance Education and adequately fund Distance Education Programmes at all levels so as to facilitate the attainment of the MDGs.

Key words: NOUN, HIV/AIDS,

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LA FORMATION DES ENSEIGNANTS EN ENSEIGNEMENT A DISTANCE POUR UN DEVELOPPEMENT DURABLE

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Résumé

Cet exposé examine le concept de développement durable et soutient que le développement durable reflète le processus qui permet de répondre aux besoins du présent sans compromettre la capacité de générations futures à satisfaire leurs propres besoins. L'éducation joue un rôle clé dans tout le processus. Sans une main-d’œuvre de qualité et bien formée, on ne peut pas atteindre à un développement raisonnable. Ce qui manque au Nigeria et, en général, Afrique, étant donné que la majorité de ceux qui devraient prendre la relève et, par conséquent, trouver, à présent, dans des établissements d’enseignement supérieur n’y sont pas. C’est ainsi que la National Open University of Nigeria (NOUN) a mis en place un grand nombre de programmes et de formations – y compris celle de la formation d’enseignants – pour répondre aux besoins des associations professionnelles et du marché du travail pour satisfaire au développement continu des professionnels. L’exposé propose qu’un grand nombre d’initiatives souhaitables dans le domaine de l’éducation ont échoué surtout parce qu’elles n’ont pas tenu compte du “facteur enseignant”. Les programmes de formation d’enseignants a la Faculté des Sciences de l’Education font partie des efforts déployés actuellement pour améliorer le niveau des enseignants dans l’enseignement général et spécifique. La qualité d’enseignants disponible dans un pays détermine le niveau de développement socio-économique, scientifique, technologique et même politique. Les enseignants sont le composante plus important de toute stratégie visant à la réalisation des Objectifs de Développement du Millénaire (ODM) au niveau de l’enseignement primaire pour tous et de l’Education tout. En dépit de ceci, l’insuffisance du nombre d’enseignants reste un problème chronique dans la plupart des pays en voie de développement, et surtout en Afrique où le VIH/SIDA continue de décimer toute une génération de professionnels. Enfin, cet exposé soutient l’importance bénéficiaires des programmes de la Faculté des Sciences de l’Education sont exposés à des valeurs plus élevée, la reflexion critique, aux ides créatrices, aux aptitudes d’entrepreneurs, à l’ouverture d’esprit et à toutes les autres vertus essentielles au développement.

Mot clés: NOUN, formation d’enseignants, “factueur enseignant”, Développement ODM, VIH/SIDA.
Introduction

Education has become one of the most important instruments of the attainment of rapid socio-economic, political, scientific and technological development in modern societies. In fact, there is usually a high correlation between the overall level of development of any given society and her system of education. Thus, a high rate of development in any society is a product of a well organised, managed and supervised educational system.

Education is a requirement for the empowerment of individuals in any given society and is generally regarded as a passport for entry into modern sector jobs. To a large extent, it determines the individual’s level of participation in governance.

Without good schools and consequently good teachers, there cannot be any good system of education. Thus, while education could be regarded as the key that unlocks the door to modernisation, it is the teacher who holds the key to the door (Ukeje, 1996).

This assertion on the important role of the teacher in any educational system found expression in the Ashby Commission’s Report (1960), when it noted among things that, a well qualified teaching staff is the first step in any attempt to train skilled manpower and this should be given priority.

Problem of Teacher Shortage

The quality of teachers that a nation possesses determines to a large extent the social, economic, political an technological development of the country. This is because ‘no educational system can rise above the ability of its teachers’. Teacher education is cumulative in its impact in the sense that the quality of the teachers’ preparation for work at the secondary school level exerts a significant influence on that of the tertiary level.

Teachers represent the most critical component of any strategy aimed at meeting the Millennium Development Goals (MDGs) and the global Education For All (EFA) priorities.

Despite this, shortage of teachers remain a chronic problem throughout much of the developing world, particularly in Africa where HIV/AIDS continues to decimate an entire generation of trained professionals (COL, 2003, 11 and Alhassan, 2003a, 118).

Baikie (2002) noted that by the year 2000, no state in the federation had recorded up to 40% of the National Certificate in Education (NCE) teachers. Equally worrying was the fact that thousands of those in schools, as holders of the NCE were not appropriately trained to teach in primary schools to start with. Furthermore, the NCE was initially intended for teaching in the junior secondary school but hasn’t changed in focus in any dramatic manner to make itself relevant to primary education, especially in the light of the UBEC.

With more than 21.7 million children in the primary school system that has at least 65% of its teaching force unqualified and needs to meet a shortfall of about 405,000 teachers, it becomes imperative to consider alternatives. The average teacher-pupil ratio in Nigerian primary schools is about 1:45 (highest – 1:94 in Yobe State, lowest – 1:20 in Anambra State).

With 22 million children in the primary school system in Nigeria has about 520,000 primary school teachers, while the annual primary school teacher requirement is about 656,000. The shortfall in the number of primary school teachers, rising to a projected shortfall of 379,000 in six years, cannot be met through the formal school system.
This shortfall assumes an annual injection of 72,000 teachers into the system from Colleges of Education. The problem of teacher shortage in the education system presents a most daunting challenge to the realisation of the MDGs.

Producing Teachers Through the Open and Distance Learning (ODL) Mode

The School of Education (SOE) employs best practices in the use of ODL for Teacher Education as part of current efforts to raise the general and specific education of teachers towards the production of highly skilled and efficient personnel for the education system.

At the SOE, several specialisation programmes such as B.Sc. Education – Biology, Chemistry, Mathematics, Physics, Integrated Science, Information Technology for Teachers, Agricultural Science, Business Education; B.A. Education – Early Childhood, Primary, French Language, English Language at the undergraduate level; Post-graduate Diploma in Education; M.Ed. – Educational Administration & Planning, Science Education, Educational Technology and M.Sc. Science Education have been selected to reflect several criteria, which include:

(a) National needs and employment opportunities
(b) Popular demand, learner needs
(c) Contemporary development in the private/business/commercial sector
(d) Availability of physical infrastructure
(e) Ease of material development and adaptation
(f) Availability of quality programmes both locally and overseas
(g) Ease with which a course could be modified/adapted to the Nigerian environment

The Mission of National Open University of Nigeria is ‘To provide functional cost-effective learning which adds life-long value to quality education for all who seek knowledge’. And its Vision is ‘To be regarded as the foremost University providing highly accessible and enhanced quality education anchored by social justice, equality and national cohesion through comprehensive reach that transcends all barriers’. (FME, 2002).

Towards fulfilling this Vision and Mission, NOUN opens access to all those in need of tertiary education without compromising quality.

The United States (USA), Britain, Germany, Japan and Italy attained greatness because of the quality of their scientists, notably physicists. The US becomes a superpower and Japan is a leading industrial nation because their physicists have greater scientific know-how and practice than the rest of the world. A sound knowledge of physics and excellent understanding of its concepts and principles are highly essential for potential medical doctors, pharmacists, engineers, engineers and other allied scientists.

The SOE is committed to provide wider access to professional training in different specialisations.

It is therefore imperative for the SOE to develop the needed physics educator, chemistry educator, biology educator, mathematics educator, language educator, French educator, Business educator and integrated science educator. Distance Learners are exposed to well-rounded education to meet the rigorous academic demands at the secondary school level.
The Early Childhood Education programme prepares distance learners for work with young children and is an excellent preparation for those who intend to enter professions related to working with young children.

It is generally agreed by all in the field of education that mathematics is an indispensable subject for scientific and technological development. Important as this subject is in our school curriculum, the teachers are few. The Mathematics Education programme nurtures teachers to teach mathematics effectively.

The Postgraduate Diploma in Education (PGDE) programme is designed to provide professional training for those who wish to become skilled teachers but had never had any educational training.

The M.Ed. Educational Administration & Planning programme equips distance learners with the essential knowledge and fundamental skills for management leadership in institutions, Government and Non-Governmental Agencies, Local Educational Authorities, Schools, Colleges and Universities.

The M.Ed Programme in Educational Technology exposes distance learners to the theory and practice of Educational Technology and distance learners are getting skilled in the Art and Science of computer application.

The M.Sc. (Ed.) Science Education programme is designed to provide professional and scholarly training for those who have interest in the advanced study through distance learning mode.

Distance learners in all programmes are being exposed to courses that prepares them as professional teachers/leaders in teacher education, and teachers who would serve as leaders for educational reform in rural and urban schools. Education remains the proponent engine of development.

Mode of Course Delivery

Full time and flexible modes are recognised by the NOUN. Whereas a full time programme in the NOUN has the same duration for same programme as in the conventional university, the flexible mode normally spread over a maximum of double the duration of the full-time in the conventional university. A four-year programme may therefore take eight to sixteen semesters depending on the chosen mode and the learner’s effort.

Methods of Course Delivery

The SOE therefore provides instruction through any or a combination of the following:

(i) Specially designed;
(ii) Practical classes and Internship;
(iii) Face to face interaction at the Study Centre aided by instructional Facilitators;
(iv) Video and audio tapes;
(v) CD-ROMs, VCD, DVD, and
(vi) Web-based delivery
In NOUN, students interact more with their course materials than with instructional facilitators. In fact, to a large extent, the course materials may take the place of the instructional facilitators. It is to be noted that the course materials were specially developed to provide opportunity for ‘student-tutor (instructional facilitators)’ interaction in a teaching-learning process. The language is necessarily simple, unambiguous, communicative, and interactive. Context delivery is structured and sequenced in a way to cater for all types of learners. This is achieved by NOUN through investment in staff training in the area of course materials development.

The delivery infrastructure have a star topology with the PROAhq as the central hub and the study centres acting as nodes. The link between the hub and the nodes could either be the intranet/WAN, Television or Radio broadcasting or physical transport of hardcopy materials.

Quality Assurance in NOUN

As Braimoh (2003) succinctly puts it, the hallmark of any tertiary institution’s activities, among other things, is to strive to maintain quality and excellence. This process will be at the levels of institutional performance review and the maintenance of programme quality assurance. Therefore, in order to achieve tangible success at both levels, it becomes pertinent for tertiary institutions to embrace the philosophy of the 5Ps: Prior preparation prevents poor performance.

‘Quality assurance’ refers to a set of practices that have been introduced into public sector provision, notably in the higher education sector, as part of the changes brought by the expansion of post-secondary provision of education. Quality assurance became important for open and flexible learning (OFL) during the 1980s and 90s, as a result of its use by public sector providers, and also as a result of the growing emphasis on accountability in education generally (Baijnath et al. 2001).

The focus of any quality system must be to satisfy the needs and aspirations of the learners vis-à-vis the appropriate delivery of services. There are many factors that may be considered for the improvement of the management strategy of distance education programmes in order to achieve higher quality. Akinpelu (1995) and Braimoh, et al. (1999) have stated the major aspects to which good attention should be paid in a distance education delivery mode, including the following:

- admission requirements and procedure;
- development and production of instructional materials;
- structure and management of the delivery system;
- student assessment procedures;
- quality of materials used for instruction and promotion of learning;
- problem of assessment of the effectiveness of an individual distance education facilitator since distance education has the element of quasi-bureaucratization (team work);
- the student support services;
- monitoring, evaluation and feedback system; and
- availability of adequately human and material resources for operation of the programme.

All these are challenges to effectiveness, and hence, quality of distance education. This situation has actively engaged the attention of scholars, educators in the field of distance education, as judged by the spate of literature in recent years (Omolewa, 1989; Tait, 1993; Halliday, 1994 and Panda and Jena, 2001).
In a bid to deliver quality education, the NOUN is collaborating with reputable local and internationally acclaimed stakeholders within and outside the country. Within the country, NOUN has linkages with the National Teachers Institute (NTI), National Agency for Mass Literacy (NAML), the Nigerian Television Authority (NTA), Educational Television Unit, institutions of higher learning, the Joint Admissions and Matriculation Board (JAMB), the National Board for Technical Education Board (NABTEB), National Examination Council (NECO), the Organised Private Sector (OPS) and the Education Tax Fund.

NOUN has established international collaborations with open and distance learning institutions, that have excellent reputation and tract records, UNESCO, Commonwealth of Learning (COL), UNICEF, UNDP, the British council, the World Bank and DfID.

Further collaboration is welcome from interested organisations for partnerships in sharing of instructional materials, development of new courses, training teachers and managers, programme evaluation, widening access and credit transfer, use of ICTs and Student Support Services.

The role of the private sector in the maintenance of standard and quality in the tertiary institutions is significant especially since its members use more of the product of the institutions than the public sector. And with government’s privatisation policy of the economy, the private sector will continue to expand at the expense of the public sector. Adesola (2002) puts it, to achieve this end professional bodies which provide registration for their members to practice should strengthen their education bodies/accreditation bodies to ensure maintenance of high standard of academic and practical training, including facilities such as laboratories, libraries, staff adequacy and class sizes.

Training courses mediated via technology have to ensure that materials, learner support system, access to and confidence in the working of the technologies used and administrative arrangements, are all crucial elements requiring careful monitoring. A weakness in one part of the system can have consequences on all the others.

Quality Control Mechanisms

Open and distance education programme in NOUN is comparable in content, human and material resources to those offered in residence and include provision for periodic student-to-faculty (school) interaction. Each course provides timely feedback to students about their progress and performance. Each student has access to appropriate academic support services.

The need to improve the content of education, and ensure continued relevance and maintenance of quality is the urgent need to balance access with relevance and improve quality. A potent tool for achieving this, especially in a depressed economy, is that which provides optimal advantage at minimal cost; in other words, increases access without compromising quality and content.

This is what the National Open University of Nigeria offers. With the advent of new technologies in the information and communication sub-sector, the chances of widening access to education are better enhanced now than ever before.
It is important to note that the same requirements and procedures for evaluating traditional programmes and courses are being used with necessary modifications for ODL programmes and courses delivered through printed materials and computer/ electronic transmission.

Significantly, standards and benchmarks are set for programmes run in the NOUN in consultation with the NUC and other agencies, both local and international, with interest in academic quality and open and distance education.

The NOUN cooperates with existing media houses inputting radio and television broadcasts during its first few years. However, it should develop its own independent capability in these areas as it attains its maximum enrolment target. Admission policies, procedures and practices, including all promotional information and enrolment agreements, will fully and clearly continue to represent best practices in open and distance education.

A distance education course is much more than a package of study materials. To ensure that they benefit from the special circumstances of self-study at a distance, students are being supported in various ways. They may be distant from their study centres but are not isolated. A scheme for using instructional facilitators/tutors for programmes has been developed and is being used within a quality assurance framework. They are being put in touch with peers in the same course who are also available for exchange of views, information, and provide clarification when needed and where feasible, meet them regularly at designated study centres across the country to discuss with their students and provide mutual support.

The key element in the strategy of course design and development in NOUN is that it is student-centred. To service and complete their studies successfully, students must develop appropriate coping skills and strategies. One of the roles of instructional facilitators and counsellors is to assist NOUN students to do this. All students enrolling for the first time in NOUN and many students at the beginning of each new course will need regular access to academic tutor/instructional facilitators. Such facilitators were trained and are acquainted with the course materials and its requirements. The relationships between instructional facilitators and students is to be personal, friendly and fairly frequent.

Besides learning from course materials and instructional facilitators, NOUN students are encouraged to learn from each other, and distance education institutions should actively encourage self-study groups among learners. It is important to note that the instructional facilitators and counsellors employed by NOUN to support learners are knowledgeable, trained in monitoring adults and are supported by NOUN. In addition, instructional facilitators are being monitored and provided with regular feedback on their performance by NOUN.

Assessment

The NOUN employs two models of assessments for its students. These are continuous assessment and end of semester face to face examinations. Students are subjected to internal and external examinations processes.

The nature of the assessment is as follows:

(i) Self-assessment exercises within each unit of study;
(ii) Tutor-marked assignments at the end of each unit of study;
(iii) End of semester face to face examination, including project work.
(a) Self-assessment: These are assignments within the study materials for the learner to evaluate themselves as their study progresses.

(b) Tutor-marked assignment: These assignments are also included in the study materials. They are being done by the learners and submitted to the tutors at the study centres. They are being marked and records kept for use to form part of the course assessments. This is weighted 40% of the overall for undergraduate and 30% for postgraduate learners.

(c) End of Semester Face to face Examinations including projects: This examination covers all that the student studied within the semesters weighted 60% / 70% of the overall assessment score. It is to be noted that to pass a course, a student must necessarily obtain 50% of the 40% slot for continuous assessment; while 50% to 60% slot for end-of-semester examination must be obtained.

(d) The Grading System in the National Open University of Nigeria is consistent with what obtains in the conventional universities in Nigeria.

Quality in NOUN academic programmes and activities is being assured as there is a deliberate conduct of regular evaluation as one of the most valuable tools for learning. Such experiences gained from the results of evaluation were being applied to programme operations to achieve and maintain standard.

Conclusion

This presentation has attempted to highlight the following major points:

- Sustainable development reflects the process that meets the needs of the present without compromising the ability of future generations to meet their needs.
- Education is at the heart of all this process.
- Without a vibrant and well educated workforce, sustained development could not be attained.
- The problem of teacher shortage in Nigeria’s education has a corrosive effect on the development of other professionals.
- The SOE employs best practices in the use of ODL for Teacher Education.
- Distance Education (DE) is a venture which requires huge investment. Government should therefore adequately fund DE programmes at all levels to facilitate the attainment of the goals of EFA. The UNESCO 26% budgetary allocation to Education should be attained and sustained.
- Government should take appropriate steps to involve private sector participation in the development of DE.
References


OPEN AND DISTANCE LEARNING (ODL) AND TEACHER DEVELOPMENT: THE CASE OF THE UNIVERSITY OF ZAMBIA

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Abstract

The University of Zambia has been offering distance learning courses since its inception in 1966. Distance education, which is one of the most important activities of the university, has played and continues to play a pivotal role in the development of the country’s valuable human resources, especially teachers, in accordance with the original purpose of the distance education programme. This is evidenced by a relatively bigger number of education programmes offered through ODL, namely Bachelor of Arts with Education, Bachelor of Education in primary education, Bachelor of Education in special education and Bachelor of Education in adult education in the university.

The priority given to teacher education is in line with the Ministry of Education’s desire to retain highly motivated school teachers by upgrading their qualification and to subsequently improve the quality of education at all levels of the education system. This is also in accordance with the provisions of the national policy document on education: Educating Our Future, which, among other objectives, provides for the development of cost-effective programmes that reach large numbers for a relatively small outlay. The Policy also emphasizes the need for in-service training programmes that are school-based and are responsive to the identified needs of teachers.

The university has, therefore, embarked on initiatives aimed at expanding its capacity to better deliver ODL courses and more meaningfully contribute to teacher training and development. Therefore, this paper highlights the importance of ODL in teacher development in Zambia, in general, and at the University of Zambia, in particular. It describes the nature and scope of the provision of distance education at the university, the challenges the institution faces in this area and the strategies for them.

Keywords: programmes rentables, rôle essentiel
Introduction

Education plays a very significant and crucial role in the development of human resources in any given society. The general definition of education is that it is a preparation for life. This entails that education is the preparation for every aspect of living; that is, the satisfaction of people's material needs, the growth of their personal talents as well as their personality. It is, above all, the vehicle for national development and prosperity.

The Zambian government is fully committed to the provision of good quality and all-encompassing education to its citizens as reflected in the following mission statement of the Ministry of Education:

The mission of the Ministry of Education is to guide the provision of education for all Zambians so that they are able to pursue knowledge and skills, manifest excellence in performance and moral uprightness, defend democratic ideals and accept and value other persons on the basis of their personal worth and integrity, irrespective of gender, religion, ethnic origin or any other discriminatory characteristics. (Educating Our Future, 1996:ix).

The quality and effectiveness of an education system depend on, among other factors, the quality of its teachers. Teachers are the key persons in determining success and in meeting the system’s goals. The educational and personal well being of children in schools hinges crucially on the teachers’ competence, commitment and resourcefulness (Educating Our Future 1996:109).

However, Zambia faces numerous challenges in realising the ultimate potential of education in promoting and enhancing national development largely due to the economy’s inability to effectively support the expansion of higher education. This lack of expansion has, in the case of the University of Zambia, meant that less than one third of prospective students who want to enter conventional (i.e. face-to-face) learning programmes are enrolled every year. This has justified the need for expansion of ODL.

The distance education unit at the University of Zambia was established in 1966 and enrolled its first students in March, 1967. The following were the original aims of distance education:

- Contributing to the development of the much needed high-level human resources.
- Meeting the educational needs of many capable adults who missed the opportunity to benefit from university education because of lack of facilities in the colonial period.
- Upgrading teachers for the secondary school sub-sector.

Distance education has, and still plays, a significant role as it helps the University of Zambia to reach a relatively large pool of students with little additional cost by comparison to enrolment in full-time study programmes; opens access to university education to people who would otherwise lose the opportunity completely; enables students with occupational and social commitments to register for a degree after a shorter period of full-time study than would otherwise be possible.
Most of the ODL programmes at the University of Zambia provide professional upgrading opportunities, especially for serving teachers, thereby contributing to the enhancement of the quality of education in the Zambian education system. The programmes of study offered include Bachelor of Arts (the only non-educational programme), Bachelor of Arts with Education, Bachelor of Arts with Library and Information Studies (taken by both teachers and non-teachers), Bachelor of Education (Special Education), Bachelor of Education (Adult Education), and Bachelor of Education (Primary Education).

It should be noted that since one of the original objectives of providing ODL at the University of Zambia was to upgrade teachers for the secondary school sector, the ODL teachers’ study programme at this institution, just like the face-to-face ones concentrated on the training of secondary school teachers. The Bachelor of Education degree in primary education was only introduced in 1996. It is a three-year programme intended to provide professional development to practitioners in the primary education sector. It was hoped that this degree programme would enhance the professional development of primary education practitioners, that had been neglected at the University of Zambia for three decades.

In a continued move to improve the quality of teacher education, a new programme, the Bachelor of Teacher Education (B.Ted.) will be introduced in 2009. It will be offered by the University of Zambia and will be a distance learning programme for the upgrading of all teachers currently serving in High Schools but do not possess degree qualifications. This programme was initiated by the Teacher Education and Specialised Services unit of the Ministry of Education and it is known as Fast Track. Its mandate is to train about 5000 teachers in a relatively short period.

Student enrolment at the University of Zambia

In the early years of the University the policy was to admit 21 per cent of total UNZA admission into distance education programmes. Up to 1997 the university administered a Mature Age Examination which enabled students without acceptable formal qualifications to be admitted into both full-time and distance learning programmes. Up to the 1990s only adults of 25 years and above were admitted to distance education programmes and the majority of them were admitted into the School of Education, reflecting the priority given to teacher upgrading and development. Distance student enrolments increased from 229 in 1966 to 1,614 students (899 male and 715 female) in 2006. The admission for the just ended academic (2007) was 1,785 students (906 male and 879 female).

Distance education enrolment constituted about 17 per cent of the total UNZA enrolment in 2007. In recent years, about 10 per cent of distance students are below 25 years; indicating a change in the profile of distance students from predominantly mature students to a mixture of older and young students. ODL has, therefore, increasingly become a convenient mode of study among many people, both old and young as they are able to work and study at the same time (The University of Zambia).

Challenges/constraints

Operating in a conventional university has created problems for ODL as it cannot adequately respond to the ever rising demand for university education. There are structural challenges of a duo mode university. The organisation, administration and coordination of distance learning courses is the responsibility of the Directorate of Distance Education but all tuition is given by
members of academic staff of the three Schools of study, namely, School of Education, School of Humanities and Social Sciences and Natural Sciences. Members of staff of the Schools offering distance learning courses prepare all study materials and assignments in accordance with approved course outlines. These are dispatched to students. The Directorate which maintains contact with each registered distance student has, therefore, no direct authority over teaching staff that participate in the distance education programme as these are answerable to their Heads of Department and Deans in teaching schools.

All distance students are required to attend the one-month Residential School which is held every year at the University in Lusaka during one of the vacations. Exemptions from attendance at Residential School are not normally granted. Therefore, newly admitted students who fail to attend Residential School automatically lose their places while returning students have to seek to withdraw with permission for that particular academic year.

Additionally, distance students cannot complete their programmes by distance learning because only first and second year courses are currently available to them. They, therefore, have to transfer to full-time studies, usually in the third year, to complete their programmes. This poses a problem to a good number of students as their employers cannot release them, let alone grant them paid study leave. Even if this was possible, not all teachers can be allowed to transfer to full-time. Some have ended up stopping or suspending their studies after investing a lot of their money and time studying by distance learning. Low staffing levels compound teachers’ problems. The Ministry would like to see to it that the teaching-learning process does not get negatively affected by the absence of many teachers who may be engaged in full-time studies for relatively long periods of time. It, therefore, tries to regulate the number of teachers leaving schools for training.

As indicated earlier, the Directorate has no lecturers of its own. The same lecturers teach full-time and distance students and this brings about a strain on their ability to deliver. They give priority to full-time students as they consider teaching on the distance education programme extra duties, or a burden on them. The attitude of some teaching staff to the distance education programme is rather negative. This is compounded by their lack of knowledge in ODL. Sometimes the Directorate has to depend on the benevolence of individual lecturers, Heads of Department as well as Deans in collaborating units to have the work done.

The university has offices in all the nine provincial centres which are staffed by Resident lecturers, except for Choma, which is a secondary school and whose contact person is the Headmaster. Resident lecturers run short certificate and diploma courses under the scheme called Extension Studies under the Department of Adult Education and Extension Studies of the School of Education. The Directorate uses the services of these officers for ODL activities such as administration of examinations and to a certain extent learner support services. However, the Directorate has no jurisdiction over them as they belong and are answerable to the Head of the Department of Adult Education and Extension Studies. Their participation in the ODL activities is like an added responsibility and the Directorate has to depend on the goodwill of individual Resident lecturers. The Directorate has no staff of its own in the provincial centres.

The other challenge concerns determining enrolment figures every year. Teaching units do this. The Directorate has no say in the number of students that are admitted to the various programmes of study. Schools in liaison with their various departments come up with what they deem optimum admission levels for each programme per academic year and make recommendations to the Senate Admissions Committee. The Directorate is represented by the
Director but the basic admission levels are more or less already determined by departments and the admitting schools.

Further more, there is lack of media diversity in the delivery of course materials and learner support services. The Directorate still predominantly uses printed study materials as the medium of instruction. These materials are printed and sent to students in their various locations by post. There have been cases where study materials dispatched to students are delayed or even lost in transit since large volumes have to be posted. Some students live in very remote areas where communication is very difficult due to poor road network. Vehicles transporting study and other materials can hardly reach them especially during the rainy season.

Addressing challenges/constraints
A number of measures and steps that have been and are being taken to address some of the challenges faced by the Directorate of Distance Education in its provision of ODL are as follows:

- Exploring the possibility of employing part-time lecturers and tutors specifically for ODL programmes and answerable to the Directorate as opposed to the current arrangement where all teaching staff belong to Schools within the university.
- Reintroduction of third and fourth year courses to enable students complete their study programmes exclusively by distance learning.
- Revising Resident Lecturers’ job description to include ODL activities as their core functions as they represent the whole university in the various centres.
- Conducting workshops and training sessions on various aspects of ODL teaching and other staff including Resident Lecturers.
- Looking at making structural changes so that the Directorate could have more say and possibly, control over student enrolment levels to enable it increase its annual intakes.
- Transforming course materials into electronic form so that they could also be delivered online and CDROM.

Conclusion
The fact that about 40 per cent of the approximately 10,000 students enrolled at the University of Zambia are in the School of Education attests to the Government’s commitment to the development of teachers. As indicated earlier, even in teachers’ degree courses, the number of students enrolled in teachers’ degree courses is less than that of those pursuing their studies in other disciplines. Considering that there are still many gaps in the entire education system in terms of among other things, more investment into teacher development would address the situation. Further more, the challenges which inhibit expansion and smooth running of ODL programmes at UNZA, especially those which affect teaching at a distance, ought to be attended to. There is also need to plough more resources developing human resources for the primary sector in order to bring it to the same level as that of the secondary sector. It should also be noted that since more and more colleges of education are introducing ODL programmes, there is need for the University of Zambia, through the Directorate of Distance Education, not only to collaborate with them but also provide leadership and/or guidance in this field.
References
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Abstract

The Blackboard, Grambling State University's online course management and learning system, has been used over several years for a "College Teaching" course for developmental educators and educational leaders. This course embraces a study of various teaching methods used in college remedial and developmental courses (e.g., lecture, discussion, effective questioning, computer assisted instruction, collaborative learning, etc.) with an emphasis on the best instructional practices for teaching remedial, developmental, underprepared, at-risk and non-traditional students.

We will discuss some teaching methods, the advantages and disadvantages of the total online management and learning system, and students' observations and evaluation. Some suggestions to improve this online delivery format will be presented.

Key words: Blackboard, development educators, online course development, non-traditional students, instructional practices for teaching remedial.

Résumé

Le système de gestion et d'apprentissage en ligne de The Blackboard, Grambling State University a été utilisé pendant plusieurs années pour une formation universitaire d'Enseignants à l'intention d'éducateurs du développement et de responsables du secteur de l'éducation. La formation porte sur l'étude de diverses méthodes d'enseignement utilisées pour les cours de rattrapage au niveau supérieur ((par ex., cours, débats, questions, enseignement assisté par ordinateur, apprentissage en collaboration, etc.) avec un accent sur les meilleures pratiques pour dispenser des cours aux étudiants ayant besoin de rattrapage, de développement, mal préparés, à risque et non conventionnels.

Cette formation en ligne est dispensée via the World Wide Web à l'aide de la plateforme Blackboard. Un programme est affiché sur les site avec les activités hebdomadaires (soit, entre autres, présentations d'enseignants (notes de cours) et prospectus. Le site est également un support pour débats électroniques et remise électronique de devoirs.


Mots clés: tableau noir, gestion de formations en ligne, éducateurs, pratiques d'enseignement, Méthodes d'enseignement, étudiants non conventionnels.
Introduction

This presentation focuses on an online course management and learning system for a “College Teaching” course designed for developmental educators and educational leaders. This system is the Blackboard delivery system and we will discuss its use in the delivery of a “college teaching” course at Grambling State University of Louisiana, USA. This course also integrates what Esnault (2007) referred to as the Actor-Network Theory and E-Learning. Esnault considered this approach as useful in understanding and improving the relationship between people and technology as follows:

“...The network is built on the mutual influences and intermediaries that actors exchange between each other. Actors in ANT are not only humans, but also nonhumans; as far as something acts, it is an actor. Thus when regarding e-learning situations, the LMS, the technical infrastructure at learners’ homes as well as on the institutional campus, the multimedia tools, the collaboration facilities (if any), among others, are actors as well as teachers, learners, and other human stakeholders. Being able to comprehensively identify all these stakeholders, take their diverse interests into account, and try to align at least some of these interests along common goals (what ANT calls “building the actor-network”) is a key step in the success of an e-learning development.” (p. 1)

The blackboard as an online platform or delivery system

Blackboard is Grambling State University’s online course management and learning system. It is designed to provide tools for building online resources for use with regular classes and can even be used to support classes offered completely online. Blackboard is a flexible system and to make full use of all its features requires certain technical skills, but fortunately it is possible for instructors to use it at a basic level with minimal formal instruction. A guide is available to help instructors who are comfortable with this approach get started on their own, with attention to the basics of content creation. (www.gram.edu)

In addition to this guide, there are several other ways to learn about Blackboard. The GSU Distance Learning Program offers Blackboard workshops for instructors providing hands-on orientation to the basic features of Blackboard (contact DLE or refer to GSU web for information on the workshop schedule). Users who prefer additional assistance using written documentation might want to take a look at Blackboard’s official instructor’s manual. Students can download a PDF copy by logging into Blackboard, entering any course that instructors are teaching, and following the links Control Panel > Assistance > Online Manual. If anyone is new to both Grambling State University and Blackboard he or she should take a look at the Blackboard Guide for Faculty, which provides an overview of the system and explains the administrative policies/procedures used at GSU. This document can be found on the GSU web site at www.gram.edu.

The use of online education is increasing in the USA and Blackboard has been used by many universities and other organizations throughout the USA as a delivery mechanism to teach the selected courses. For example, USA Today (April, 23, 2008, p. 6D) reported online education is booming and is becoming increasingly accepted by employers. A survey by Zogby International suggested. The survey found that 83% of CEOs and small-business owners who are familiar with
online education, also called distance education, believe that online degrees are as credible as those earned on a college campus.

Online courses are now offered by more than two-thirds of all US colleges and universities and 35% of schools offer programs that are entirely online. According to the 2007 Sloan Survey of Online Learning, about 20% of the USA’s 17 million college students say that they have taken at least one course online. But just 61% of the 1,547 CEOs surveyed were familiar with online education. About 50% said they would give more weight to candidate’s work experience; 46% said they considered work experience and educational training equally in hiring. Zogby conducted the survey in December and January for Excelsior College in Albany, New York (USA Today, April 23, 2008, p. 6D)

Using Blackboard to Deliver “A College Teaching” Course

Conceptual Framework Strands and Selected Program Outcomes for College Teaching Course

Wright, Sunal, and Wilson (2008) indicated that online learning has become the norm rather than the exception for many of today’s students. They reported that instructors are more willing to explore online learning options, students are enrolling in record numbers and colleges, as well as many K-12 institutions, are offering more online courses. Educators, we have more tools than ever to ensure online course success, but just as with a traditional class, we must continue to place emphasis on good pedagogy.” (p.1) (Shelton et al, 2005)

This course is designed to enable students to study various teaching methods used in the contemporary college classrooms (e.g., lecture, discussion, effective questioning, computer assisted instruction, small group instruction, peer teaching) and how they are used. Learning communities, effective course syllabi and online instruction with an emphasis on best instructional practices in developmental education. (Draves, 2002). Table 1 below shows how we align the conceptual framework strands of the College of Education at Grambling State University with course objectives, program objectives, learning activities and content and learning assessment using Blackboard.

Through broad-based curricula, consisting of performance assessment, research-based instruction and strategic field experiences, the educational leadership (including developmental education) programs at Grambling State University graduate educational and community leaders. Content, professional and pedagogical knowledge, skills and dispositions enable professional educators to help all students reach their full potential. The educational leadership department recognizes three strands: masters of subject matter content, facilitators of learning, and enhancers and nurturers of affective behaviors. The program outcomes represent what educational leaders (learners) will know and be able to do at the completion of course by relating course information with the conceptual framework strands. (www.mcc.cuny.edu/ITS/MEConline/onlinefaqs.htm)
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<th>Performance Objectives</th>
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| 1.0 Knowledge: Masters of Subject Matter Content | handouts; 
(1.1-3.4) requirements | The educational leader will use, 
Readings; 
Handouts; 
TBA; See course 
Orientation; 
Readings; Clarkston, 1986 
(1.1, 1.2, 1.4, 1.8, 2.1, 2.3, 2.4, 2.9, 2.11, 3.1, 3.3, and 3.4); 
· define, describe, Understand and use the discussion method 
Handouts; 
Assessment #3, TBA 
McKeachie Evaluation Survey 
evolve the discussion method 
(1.1-3.4) Lecture 
discussion method 
Readings 
(1.1, 1.2, 1.4, 1.8, 2.1, 2.3, 2.4, 2.9, 2.11, 3.1, 3.3, 3.4); 
· define, describe, Understand and use the lecture method 
Handouts; 
Assessment #2, TBA 
McKeachie Evaluation Survey 
evolve the lecture method 
(1.1-3.4) Lecture 
McKeachie 
(1994) |
|                    |                       | apply and evaluate various theories of 
Handouts; 
Assessment #1, 
McKeachie 
Notes 
Clarkston, 1986 
(1.1, 1.2, 1.4, 1.8, 2.1, 2.3, 2.4, 2.9, 2.11, 3.1, 3.3, and 3.4); 
· define, describe, Understand and use the lecture method 
Handouts; 
Assessment #1, TBA 
McKeachie Evaluation Survey 
evolve the lecture method 
(1.1-3.4) Lecture 
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- evaluate the Readings; effective questioning method (1.1, 1.2, 1.4, 1.8, 2.1, 2.3, 2.4, 2.9, 2.11, 3.1, 3.3, 3.4).
- define, describe, understand and use Discussion Handouts; Assessment #5, TBA.
- apply, use, and these methods Board, McKeachie, McKeachie Evaluation Survey (1.1-3.4).
- evaluate small group instruction, peer, etc. Portfolio (1.1, 1.2, 1.4, 1.8, 2.1, 2.3, 2.4, 2.9, 2.11, 3.1, 3.3, 3.4).

2.0. Skills: Facilitators of Reading; Assignments (repeat) (repeat) See Course Board Requirements.
Kemig, 1983 Final Exam

Course Evaluation

3.0. Dispositions: Enhancers See above See above Blackboard (Online) Forums; and Nurturers of Affective Blackboard Site; Behaviors (3.1-3.8) Ethics In -Class Disposition Survey
In order to achieve good pedagogy, online teaching takes additional time and teachers have to restructure course content as we did when we redesigned this course (Wright, Sunal & Wilson, p. 1). Some of the issues that we had to address were coping strategies, ease of navigation, skills required to complete the course, available online resources, feedback from instructors, and collaborative, interactive learning opportunities (Wright, Sunal & Wilson, p. 1). We use the Blackboard system which allows us to respond to these issues using the (1) Content Areas (syllabus; course documents (assigned readings); assignments with feedback); (2) Course Tools (announcements; tasks; discussion board (collaborative and interactive learning opportunities, skills required to complete the course); collaborative digital drop box (to submit assignments); (3) User Management (list/modify users; create users; enroll users); (4) Assessment (course statistics to track students’ use of site; grade book); and (5) Help (support; quick tutorials; contact system administrator) as shown in Figure 1 below.

This course provides students with the opportunity for supervised practice of instructional theory and techniques in an actual postsecondary classroom setting. Students are to teach or observe a teacher for one, but not more than two sessions during a semester of course enrolment. Students are informed in the syllabus that this is an online course delivered via the World Wide Web using the Blackboard (Bb) platform. To log on to the course, they should go to http://www.gram.edu. They are supplied with a user name and password when they register for “DEED 618. College Teaching”, that will allow them to access the course site. On the site they will find the course syllabus which includes a schedule (readings and other assignments) and weekly learning activities. The weekly learning activities include a welcome message, short biography of instructor, presentations (lecture notes) and handouts. The site is also the medium for electronic discussions and electronic submission of assignments. Blackboard does not like Mac computers, so students should use a PC. Anything they submit as an attachment or via the digital drop box should be done in Microsoft Word (98 or earlier) and double spaced.

In the Course Documents sections on the course website, students are provided with the information needed to access a number of Grambling State University electronic resources. Students are asked to complete the assigned readings, complete a supervised teaching practice utilizing several instructional theories and techniques. Students must submit a portfolio documenting the activities and reflections and a video/CD of actual teaching; and complete all written work that must conform to the convention of standard, written English including grammar, punctuation, syntax, etc. All written work must meet accepted scholarly standards of authorship and include appropriate citations and references to the works of others. Plagiarism is a serious academic offense punishable at this university by failure of the course in which it occurs and dismissal from the university. There is no tolerance for plagiarism and we will apply full penalty on those guilty of this form of academic dishonesty.
![Course Design](image.jpg)

**Course Design**

- **Syllabus**
- **Start Here!**
- **Course Documents**
- **Assignments**
- **External Links**

**User Management**

- **List / Modify Users**
- **Create User**
- **Batch Create Users**
- **Enroll User**
- **Remove Users from Course**
- **Manage Groups**

**Course Tools**

- **Announcements**
- **Course Calendar**
- **Staff Information**
- **Tasks**
- **Send Email**
- **Discussion Board**
- **Collaboration Digital Drop box**
- **Glossary Manager**
- **Messages**
- **Course Objectives**

**Assessment**

- **Test Manager**
- **Survey Manager**
- **Pool Manager**
- **Course Statistics**
- **Gradebook**
- **Gradebook Views**

**Course Options**

- **Manage Course Menu**
- **Course Design**
- **Manage Tools**
- **Settings**
- **Recycle Course**
- **Course Copy Import Course Cartridge**
- **Import Package**
- **Export Course**
- **Archive Course**

**Help**

- **Support Manual**
- **Contact System Administrator**
- **Quick Tutorials**

Figure 1. The Blackboard Delivery System’s Display of Content Areas
Students are expected to (1) complete all assigned readings, participate in all online activities; (2) complete all assignments; (3) apply several teaching methods in a postsecondary classroom for one, but not more than two sessions; (4) and submit a portfolio documenting the activities, reflections and a video/CD of actual teaching. Students can observe a colleague’s class if they do not have their own assigned class.

Each week the class discussed the assigned readings: McKeachie’s “Teaching and learning in the college classroom” and McKeachie and Svinicki’s “Teaching tips: strategies, research, and theory for college and university teachers” and other books or articles. Each class member was assigned to lead the group in discussing some readings for a particular week. All students read all of the assigned readings for each week. The selected discussion leader for a particular week will post a brief written summary (200 words maximum) of the highlights of the reading along with two questions related to the topic for the entire class to discuss. Posting must be done at least one day before the discussion is scheduled to begin. These should be thought-provoking questions that will allow students to reflect on the reading, discuss implications, and to critique author’s interpretation or presentation.

Discussion leaders and other students are encouraged to read the comments of their fellow students before they respond to the questions and engage in meaningful dialogue with each other. Discussion leaders and discussion participants earn credit for a discussion forum as follows: (a) The discussion leader must post a summary and two discussion questions and responds at least once to every member of the class who answers the questions; and (b) the discussion participants must respond substantively to at least two classmates’ responses to the two questions. (Tomlinson, 1989)

Advantages and Disadvantages of Blackboard: Gains and Use Over Traditional Approaches

Blackboard is a powerful, feature-rich web-based course management system that can be used to deliver campus based courses completely online or as a supplement for on-campus courses. The Internet is utilized for class sessions, lectures, homework, labs, and test of regularly scheduled courses. Some of the advantages and disadvantages of the Blackboard system are as follows. (Abboud 2008; Daniel 1997; Page 1996; www.tfhe.net/report/downloads/report/chapter1.pdf)

We agree with the following list of advantages and disadvantages as they are reported in the literature. We list them here with no modifications in some areas. Attributions are given to the original authors and institutions.

**Advantages**

- Courses can be accessed 24 x 7 anytime, anywhere. Traditionally, instruction is limited to the confines of the scheduled time that the course is offered.
- Faculty can choose to use as much or as little of the Bb environment: online announcements, course content such as syllabi, handouts, and presentations; multimedia such as images, animation, audio, video, etc.; facilitate online discussions about course content or course related topics; collect and grade assignments/assessments; manage the gradebook and post grades online. When students log in, they are able to view the syllabus, course documents, assignments, and materials. Distribution of course content no longer requires excessive duplicating, packaging and physically mailing of resources.
- User friendly interface for organizing course content and navigating the course site. File cabinets and paper folders are no longer necessary or organization and storage of course materials.
- Blackboard course web pages can be developed using many products such as the Microsoft Office Suite (Word, Access, Excel, and PowerPoint), FrontPage, Macromedia
Dreamweaver, etc. Providing additional visual aids and resources no longer require added equipment in the class.

- Faculty is able to view course statistics of individual users. They can determine the date and time of individual student's last login, whether students are addressing specific components, and the date and time assignments are submitted through use of the Digital Drop box.
- Students can check their grades online. Grades are easily managed by faculty and students.
- Bb reduces travel time for many students. Instead of driving to class, students can simply log on from their homes.
- Learners worldwide have access to course content at the same time as on campus learners. Revisions and updates are done from a central location (faculty, institution) which ensures changes are uniform and current for all students.

Disadvantages

- Inadequate resources at the institution or for the student.
  - Blackboard Help Desk – Faculty and students should know who to call when problems arise.
  - Knowledge of network traffic that the systems can handle, bandwidth available for access and transmission, stability of the Internet connection, system requirements and maintenance.

- Adequate time to develop the course web site (learn proper course design and prepare appropriate course content). Existing course materials cannot simply be transferred to Blackboard. This material can be a good starting point for developing web course content. The instructor will need to evaluate the learning objectives to be achieved; skills to be developed; nature of group work, if required; and determine if the materials are currently in a form that can be converted to the web-based course.

- Inappropriateness for disciplines/courses that need physical activity (i.e., drama performance).

- Lack of aural language exchange. Students are accustomed to working in groups to facilitate convergent learning; however there is forced and unavoidable social contact.

- Requires students to be self-disciplined in regard to time. Traditional methods structure time for students.

According to Abboud (2008), online education is steadily gaining in popularity, legitimacy and prestige. Because of the benefits to learn from home and on your own schedule, many professionals and academic experts agree that distance learning is gaining equal footing with traditional “brick and mortar” on campus degrees. Andrea Martin of the University of Maryland, University College (91 online undergraduate and graduate courses) said that there is “absolutely” no difference between online and traditional learning. In his book, “The No Significant Difference Phenomenon,” Professor Thomas Russell, director emeritus of instructional telecommunications at North Carolina State University, presented research on numerous studies comparing traditional and distance learning, and determined that there is generally no significant difference between the two modes of education. Dr. Farad Saba, founder of Distance-Educator.com noted that most universities do not differentiate between online and traditional learning. Saba further noted that “in that sense, the degrees are comparable”. He indicated that research on systemic comparative analysis and the so-called face-to-face education has shown no statistically significant difference between online and traditional learning. Nationally recognized universities that offer full programs through the Internet have commented that the quality of work is typically higher from the online student than the traditional student who is physically attending a class. In addition the degree earned online is the same credential earned when attending a traditional class. (Daniel 1997; Page 1996)

Quality online instruction requires more than directing learners to execute steps. Factors that affect course quality include:
Course design – Instructors should follow “good design principles” in their forethought and planning to enhance success for all learners.
Course delivery (i.e. teaching, faculty, performance) – implementation of the design
Course content – Course elements must work together to ensure that students achieve the desired learning outcomes (learning objectives, interactions and activities, resources materials and technology and assessment measurement).
Course management system – Tools and media should support the course objectives.
Institutional infrastructure -
Faculty training and readiness – Instructors should be properly trained to develop courses for online delivery and teach online courses.
Student engagement and readiness – Instructors should ensure students have the proper training or access to training that assists them in using the course materials effectively.

According to Leslie E. Vance, PhD, Program Coordinator, Information Technology, Western Governors University, five years ago, online degrees were greeted with skepticism. Not anymore. That’s practically because almost all traditional universities are now offering online courses or degrees. He indicated that many employers appreciate that online students must demonstrate a great deal of self-discipline to succeed online – that’s an attribute employer’s value. We embraced some of his suggestions. (See USA Today, 2008, 6D).

Prospects and Problems of using Blackboard in a Developing nation

The creation of new universities by religious organizations is a particularly important phenomenon. For example, the United Methodist Church established the African University in Zimbabwe, with department heads selected from nationals of different African countries. Well-established religious universities – Protestant, Catholic, and Muslim – operate in Kenya, Tanzania, and Uganda. A similar phenomenon involving Catholic universities occurs in Latin America.

Distance learning, in which students take classes simply via radio, television, or the Internet, has expanded enormously during the past decade. (Both Nelson Mandela and Robert Mugabe earned their degrees in this way, at the world’s first distance-learning university, the University of South Africa.) The five largest programs in the world are all based in developing countries, and all of these have been established since 1978. They claimed an aggregate enrollment of roughly two million students in 1997, and according to the World Bank, about 10 per cent of enrollment growth in developing countries during the past two decades has been due to distance learning. Many other researchers reported that educators have long been using radio and television to reach students in remote areas, but new satellite- and Internet-based technologies promise to extend distance-learning systems to a broader group of students, ranging from those in sparsely populated, remote areas to those living in dense urban agglomerations. In the USA, for example, the University of Phoenix is vigorously promoting its online courses, while in the UK, the publicly funded Open University has over 100 courses that use information technology links as an integral part of the teaching – with 4000 students per day connecting via the Internet. (See USA Today, 2008).

Distance learning has great potential in the developing world, offering a powerful channel for bringing education to groups that have previously been excluded. In the future it is almost certain to take place increasingly across borders. Already 12 per cent of the UK’s Open University students are resident outside the country. It is easy to conceive of high-quality developing country institutions offering educational programs and degrees in other parts of the developing world. While a desirable development, this would create a variety of problems relating to quality control and other forms of supervision.
Table 2 - Ten Largest Distance-learning Institutions

<table>
<thead>
<tr>
<th>Institution</th>
<th>Founded</th>
<th>Students</th>
<th>Budget (US$)</th>
<th>Unit cost (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anadolu University, Turkey</td>
<td>1982</td>
<td>578,000</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td>China TV University</td>
<td>1979</td>
<td>530,000</td>
<td>46</td>
<td>15</td>
</tr>
<tr>
<td>Universitas Terbuka, Indonesia</td>
<td>1984</td>
<td>353,000</td>
<td>21</td>
<td>10</td>
</tr>
<tr>
<td>Indira Gandhi National Open University, India</td>
<td>1985</td>
<td>242,000</td>
<td>10</td>
<td>35</td>
</tr>
<tr>
<td>Sukhothai Thammathirat Open University, Thailand</td>
<td>1978</td>
<td>217,000</td>
<td>46</td>
<td>30</td>
</tr>
<tr>
<td>Korean National Open University</td>
<td>1982</td>
<td>211,000</td>
<td>79</td>
<td>5</td>
</tr>
<tr>
<td>National Centre for Distance Learning, France</td>
<td>1939</td>
<td>185,000</td>
<td>56</td>
<td>50</td>
</tr>
<tr>
<td>The Open University, Britain</td>
<td>1969</td>
<td>157,000</td>
<td>300</td>
<td>50</td>
</tr>
<tr>
<td>University of South Africa</td>
<td>1873</td>
<td>130,000</td>
<td>128</td>
<td>50</td>
</tr>
<tr>
<td>Payame Noor University, Iran</td>
<td>1987</td>
<td>117,000</td>
<td>13</td>
<td>25</td>
</tr>
</tbody>
</table>


We recognise and embrace the expansion and diffusion of higher education that is occurring at the same time as the pace of knowledge creation is dramatically accelerating. The categories into which new knowledge falls are becoming increasingly specialized, and a revolution has occurred in people's ability to access knowledge quickly and from increasingly distant locations. (Daniel, 1997; Page, 1996) These changes are fundamentally altering what many nations' economies produce, as well as where and how they produce it. Organizations are changing, as are the skills needed to run them and the way they utilize human capital (USA Today, 2008).

Industrial countries have been by far the greatest contributors to, and beneficiaries of, this knowledge revolution. To the extent that this trend continues, the income gap between industrial and developing countries will widen further. We agree with Daniel and others that higher education institutions, as the prime creators and conveyors of knowledge, must be at the forefront of efforts to narrow the development gap between North and South.

In most developing countries, higher education exhibits severe deficiencies, with the expansion of the system as an aggravating factor. Experts, among them J. S. Daniel, all indicate that a demand for increased access is likely to continue, with public and private sectors seeking to meet it with an array of new higher education institutions. Rapid and chaotic expansion is usually the result, with the public sector generally underfunded and the for-profit sector having problems establishing quality programs that address anything other than short-term, market-driven needs. A lack of information about institutional quality makes it difficult for students to make choices about their education, making it hard to enlist consumer demand in the battle to raise standards.
Developing countries are left with a formidable task – expanding their higher education system and improving quality, all within continuing budget constraints.

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OPEN AND DISTANCE LEARNING FOR SUSTAINABLE DEVELOPMENT: REFLECTIONS ON STRATEGIES FOR THE DEVELOPMENT OF TEACHERS

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Abstract

Evidently, education is the key to human development and progress. Change is necessary in teacher’s attitudes, values, morals and behaviour as the revolution of open and distance education has broken the insidious link. There is now solid evidence that appropriate use of open and distance learning allows increase in access, improve quality and cut cost at the same time. This is an educational revolution with the dramatic potential to accelerate the development that will enhance the freedoms of the masses of teachers. This paper examines open and distance learning for sustainable development with emphasis on the production of teachers. Critical attention was paid to the examination of the existing strategies for the development of teachers.

Keywords: distance learning; sustainable development; teacher education; development strategies; existing teachers; teachers training.

Introduction

In many countries, education has provided one dependable leverage for national development. In Nigeria for example, ignorance is one of the declared national scourges which must be fought against along with poverty and disease. All efforts at education have been prompted by the government’s clear understanding that education plays a pivotal and catalytic role in enhancing national development. Uppermost in the government’s thinking is that the nation’s ability to foster overall social, economic and political development lies in the quality and quantity of its literate and numerate population.

The purpose of this paper is to introduce readers to the subjects of open and distance learning for sustainable development: Reflecting on strategies for the development of teachers. UNDP (1991), describes development programme as a process that goes beyond the improvement of quality of life. It encompasses better education, high standard of health and nutrition, poverty reduction, cleaner environment, increasing access to and equality of opportunity, greater individual freedom, and the facilitation of a richer cultural life, which are all truly desirable ends in themselves.

By breaking the cycles of deprivation and hopelessness that are the first obstacles to every kind of development (UNDP, 2003) aims in developing countries to eradicate extreme poverty and hunger. Schultz (1961, 1-17) stated that education not only improves individual choices available to mankind, but an educated population provides the type of skilled labour necessary for industrial development and economic growth.

Open and distance learning for sustainable development

The past 20 years have seen a growing realisation that the current model of development is unsustainable. In other words, we are living beyond our means. Our way of life is placing an increasing burden on the planet. The increasing pressure put on resources and environmental
systems such as water, and land and air cannot go on forever. Especially as the world’s population continues to increase and we already see a world where a billion people live on less than a dollar a day.

A widely used and acceptable international definition of sustainable development is: ‘development which meets the needs of the present without compromising the ability of future generations to meet their own needs’. Globally, we are not even meeting the needs of the present let alone considering the needs of future generations.

Unless we start to make real progress toward reconciling these contradictions, we face a future that is less certain and less secure. We need to make a decisive move toward more sustainable development. Not just because it is the right thing to do, but also because it is in our long-term best interests. We need to make a decisive move toward more sustainable development. Not just because it is the right thing to do, but also because it is in our long-term best interests. It offers the best hope for the future.

Whether at school, in the home or at work, we all have a part to play. Our small everyday actions add up to make a big difference.

Distance education is an educational process in which a significant proportion of the teaching is conducted by someone removed in space and/or time from the learner. Open learning, in turn, is an organised educational activity, based on the use of teaching materials, in which constraints on study are minimised in terms either of access, time, place, pace, method of study, or any combination of these. The term ‘open and distance learning’ is used as an umbrella term to cover educational approaches of this kind that reach students in their schools, provide learning resources for them, or enable them to qualify without attending college in person, or open up new opportunities for keeping up to date no matter where or when they want to study. Open and distance learning often makes use of several different media. Students may learn through print, broadcasts, the internet and through occasional face-to-face meetings with tutors and with other classmates.

History of Distance Education in Nigeria

The history of education in Nigeria dates back to the practice of correspondence education as a means of preparing candidates for the General Certificate in Education; a pre-requisite for the London matriculation examination. This practice was described by (Belt and Tight, 1999:2) and echoed by (Tait, 2003:2), who said:

... the university of London has been termed the ‘Open University’ because of this move, students all around the world, principally within the British Empire and its domains, were looking for tutorial support to supplement the bare syllabus they received on registration. Wherever they lived...

In this sense, Nigeria was not left out of the opportunities provided by the University of London. Few illustrations take us beyond these clues. Ahmadu Bello University, offered a special training programme called: The Correspondence and In-Service Teacher Training Programme (CISTEP), established in 1976 to prepare middle level teachers for Nigeria’s primary schools.

The Correspondence and Open Studies Unit (COSU), later re-named Distance Learning Institute, was established in 1974 by the University of Lagos to produce university graduates in disciplines necessary to meet national labour needs (e.g. Teachers, nurses etc). The first independent institution dedicated solely to distance education, the National Teachers’ Institute (NTI), which was officially established in 1978 to upgrade unqualified teachers working in the nation’s primary schools and accelerate the preparation of qualified teachers needed for the implementation of the Universal Primary Education Programme in 1976 and the Universal Basic Education Programme introduced in 1999.
The External Study Programme (ESP), that later became the Centre for External Studies (CES) and today called the Distance Learning Centre (DLC) was established by the University of Ibadan’s senate in 1988 under the umbrella of the Nigerian Department of Adult Education to provide opportunities for teachers working in the field to improve their skills and knowledge through on-the-job training. This in-service training enabled them to subsequently raise their status from holders of Nigeria Certificate in Education (NCE) to full fledged university degree holders.

To offer similar programs, after being closed for 16 years, the National Open University was renamed the National Open University of Nigeria (NOUN) in 2001.

Calvert (1986:5) wrote that distance education helps extend the market for education to clientele who have not been previously served. The problem is the satisfied demand for education versus actual supply of educational services contributing to the acceptance, growth, and implementation of distance education programme in Nigeria as a means to bridge the gap between demand and supply (Aderinoye and Ojokheta, 2004, 2-9).

Role of Quality in Teachers Development

The goal of teacher development for all is proving difficult to achieve in many countries, especially in developing countries, yet teacher quality is key determinant of student’s participation rates and achievement levels. Many countries are progressing towards the goals of Education for All, but struggle to achieve ‘teacher quality for All’, especially in rural or remote areas in developing countries. Yet teacher quality is one of the key factors determining the participatory rates of children in schooling and the quality of their education (Verspoor, 2004).

There is a broad consensus that it is the single most important school variable influencing student achievement (UNESCO, 2006:1). It is also an important element in promoting social justice in terms of educational quality in rural and remote areas where teachers tend to be less well resourced and supported in recognition of its importance; support for teachers’ continuing education is receiving attention in the discourse of international and national agencies, for example:

*In our fast-changing world, teachers must be engaged in life-long learning to be able to meet new challenges.*

It is a grave political contradiction that so much emphasis is being given to the importance of education while so little is being done to give teachers quality, support and award. The professional quality and status of teachers should be recognised as one of the most important aspects. It is the responsibility of policy makers and school managers to support and empower the teachers in this important role, and to work toward raising their professional status (Thomas, 2006:2).

Let us look at what is wrong with teacher’s development.

Problem of Teachers’ Development

This is an issue of concern. Teachers are vital. Unless we get more teachers, and better teachers, we will not reach the target of making quality education available for all by 2015. But there are still world shortages of teacher, still large numbers of under qualified teachers, and still many who need further professional education as they work. Conventional approaches to teacher education have not met the demands upon the profession and this has led to an interest in open and distance learning.
Teachers face a widening range of demands everywhere:

Teachers through the world are experiencing an unprecedented Transition in their role and status and demands on them are Becoming increasingly multi- facet.. many teachers do not Have the training or experience to cope with this changing role (European Commission, 2000:40).

In sub-Saharan Africa, problems of teacher supply of four kinds, threatened the attainment of the education targets. First, there are shortages of teachers. While school enrolments generally grew in the 1990s, teacher’s numbers only just kept pace with them; indeed, in Nigeria, pupil’s numbers were growing faster than teacher’s numbers. Meanwhile, AIDS is reducing the life expectancy of teachers and so increasing the numerical demands. Teachers’ shortages continue to dominate the educational landscape. In line with above, (UNESCO, 2000:17) states:

Scarce resources have frequently been used for expanding systems with insufficient attention to quality improvement in areas such as teacher training and materials development. Moreover, even where there are enough teachers, many of them are untrained or under trained, and the quality of training is often insubstantial. A number of studies have found little difference between the effectiveness of trained and untrained teachers. About half of the teachers in developing countries are unqualified in terms of their own country’s formal standards for teacher’s education. Many teachers have little more than secondary education themselves. Teaching methods are often old fashioned, with a focus on rote learning (Hammond, 2000:167) had this to say:

Many people believe that anyone can teach, or at least knowing a subject is enough to allow anyone to teach it well. Others believe that teaching is best learned to the extent that it can be learned at all, by trial and error on the job. The evidence suggests otherwise. Reviews of research over the last 30 years have concluded that even with the shortcomings of teacher education and licensing, fully prepared and certified teachers are generally better rated and more successful with students than teachers without this preparation.

Consequently, in many countries, there is a national desire not just to raise the quality of the teaching force to match the present demands on them but also to change teacher’s job as their host societies are changing. New goals create new demands such as gender parity by 2000 and universal basic education by 2015; inclusive education; education for democracy; peace and social cohesion; multi-grade teaching; increased accountability; achieving learning targets; the development of learners who are self-managing and independent in critical thinking and in problem solving, equipped with life-skills; the preparation of learners who are competent for knowledge-based economies, capable in the use of information technology, and the expansion of teachers’ role to include social work in communities where child-headed households and orphans are common as a result of HIV-AIDS. In transition countries, societies are expecting teachers to change their approach as education itself is being reformulated within the context of social change. And these changes in role and changes in expectation are likely to affect both the initial education of teachers and programmes of continuing professional development (UNESCO, 2002:7).

All of this creates new challenges for teacher education and continuing professional development.
In order to make good planning decisions about teacher education we need to ask in turn: what does it consist of?

Designing ODL for the Education and Training of New and Existing Teachers

Do distance education programmes produce adequately trained teachers? These are questions begging for an answer, and the bone of contention for these papers.

Teacher education has to do with a whole range of different jobs: to enable teacher to develop the potential of their pupils; to serve as role models; to help transform education to the society; to encourage self confidence and creativity. Many educators often hope that student teachers will develop appropriate, and where necessary change attitudes to their job. To meet these hopes, teacher education will include four elements:

i. improving the general educational background of the trainee teachers;
ii. increasing their knowledge and understanding of subjects they are to teach;
iii. pedagogy and understanding of children learning;
iv. the development of practical skills and competences (UNESCO, 2002:8)

The balance between these four elements varies according to the background education of student teachers, to the level at which they will teach and the stage they have reached in their career. Two distinctions should be noted here. The first is between the initial education and training of teachers and their continuing professional development. The second is between pre-service and in-service activities. Many teachers begin work without teaching qualifications so that they may get initial training while they are working in service. Then, in-service programmes come to meet a variety of different needs, such as: from initial training to updating, preparing teachers for new roles to helping reform the curriculum.

See table below for some purposes and distinctions of in-service programmes.

<table>
<thead>
<tr>
<th>Purposes</th>
<th>Sub-categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Initial training of unqualified teachers</td>
<td>Programs leading to certification short induction courses</td>
</tr>
<tr>
<td>2. Upgrading of teachers who already have qualification</td>
<td>For sub-qualified teachers for qualified teachers</td>
</tr>
<tr>
<td>3. Preparing teachers for new roles</td>
<td>As head teacher to work in teachers’ colleges</td>
</tr>
<tr>
<td>4. Training related to content of the school curriculum</td>
<td>For planned curriculum change refresher courses.</td>
</tr>
</tbody>
</table>

Source: based on Graceland, 1983.

Programmes of both initial teacher education and continuing professional development need to match the needs and circumstances of their audience.

One size will not fit all. In designing a programme for teachers, we need to take account of:

i. their educational background. This varies enormously between different countries and different levels of education. In some countries there are many teachers with little more than junior secondary education while in others are graduates with a professional qualification as well. The balance between the different elements in teacher education is likely to affect the content of programmes for them.
gender: It is difficult to recruit enough women teachers in many countries or enough men teachers in some. Programmes need to fit with the rest of teachers’ lives and be sensitive to cultural norms and expectations, which affect their jobs. As in some countries, there are restrictions on women teachers’ mobility that affect their ability to attend initial or updating courses.

their experience as teachers. Again, the content of a programme for say unqualified teachers who have just left school may be very different from one for teachers with limited formal education but long experience as untrained teachers (UNESCO, 2002:9).

The curriculum of teacher education is varied, estab and widely criticised and in many countries it is in a state of flux. Some emphasis and resources should shift from initial to continuing teacher education. Traditional and modern educational institutions should learn from the strengths and weaknesses of the past to provide programmes that meet the needs of teachers. Curriculum should focus on the importance of rethinking and restructuring the curriculum. It should give impression of rethinking and restructuring of the curriculum. Curriculum should stress on the importance of education to help countries compete in global markets; on social transformation; on technology and a shift in teachers’ role; all among the aims of teacher education (Perraton, 2001:2).

Thus, the planner needs to consider methods that fit both the aims of the curriculum and the circumstances of the learners. This, in turn, is likely to mean the use of a variety of different approaches.

Reflections

Reflecting on how distance education has influenced development in teacher education in Nigeria and Africa as a whole and on the Nigerian situation reveals the high degree of influence distance education initiatives have had personal, community, and overall national development. Nigeria can now boast of capable and competent teachers working in its education sector, and improvement in the quality and overall capacity of education managers and school administrators that lead the nation's educational system (Aderinoye and Ojokheta, 2000:8).

In addition, more than 300,000 primary school teachers enrolled in National Teachers’ Institute (NTI), have successfully earned their teacher’s Grade 1 Certificate. NTI has similarly registered serving teachers in its Nigeria Certificate in Education and the pivotal Teacher Training Programmes, thereby improving the quality of those teachers already working in the field (Aderinoye and Ojokheta, 2000).

The power and growing use of information and communication technologies and the resulting trends towards globalization have reduced the world that of a small village (Mcluhan and Powers, 1989:15).

Distance education remains the primary mechanism for the information-driven age, a tool that has bridged the gap between developed and developing communities. People now have access to different forms and channels of communication contributing to more egalitarian growth of the global community at the level of higher education in Nigeria has offered access to many people who would have previously been denied access to educational opportunities based on where they live and work, poor-economic circumstances, social status etc. Thus, we are moving gradually from the exclusivist system mode of "privileged" access to education, towards a more inclusive model, which supports and is reflective of UNESCO’s goal of Education for All for the 21st century. Through various initiatives, such as those undertaken by UNESCO, the British Council, the Literacy Enhancement Assistance Program, and others, the gap between education and world of work that many developing countries have experienced in the past is being narrowed.
In 2001, National Open University of Nigeria was re-established, proving that open and distance learning is not only cost-effective, but also a most appropriate avenue for widening access to education, which has helped to produce skilled workforce, which in turn has led to the growth and development of both local and national economies. Typically, graduates of distance education programmes find it easier to participate in the economic mainstream.

Conclusion

Open and distance learning is important because it allows education to break out of the vectors of access, quality and cost. Attempt has been made to see the use of ODL in training and re-training of teachers. The use of distance education has the potential to distribute opportunities for learning more widely and equally across the teaching force. It has also improved the quality and variety of the resources and support available to teachers, opening up new avenues to professional development. If justice is to be achieved, however, in terms of equity of educational opportunity and access, the provision needs to be planned in ways that make it available, accessible, acceptable and adaptable to all teachers and head teachers, empowering them to make choices in what and how they learn. It also needs enabling policies in support of these aims as well as commitment towards the adequate implementation of these policies.

References


SUSTAINABILITY INDICES AS MEASURES OF SERVICE DELIVERY IN OPEN AND DISTANCE LEARNING INSTITUTIONS IN NIGERIA

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Abstract

Open and Distance Education if well organised is an alternative to conventional education. For it to be so, the public, governments, employees of labour and other stakeholders need to be convinced that ODL institutions are not providing half-baked education. Therefore, for the enthusiasm and interest that are usually hard earned to be sustained, there is need for total commitment to the implementation of some established indices of sustainability. The thrust of this paper is in the appraisal of the extent to which two ODL institutions in Nigeria adhere to the principle of sustainability. A set of questionnaire was developed and used to collect data which were analysed using non-parametric statistics. Suggestions which were aimed at improving the service delivery, in the institutions used for the study in particular and other sister institutions especially in the developed countries were highlighted.

Introduction

Open and Distance Learning (ODL) has come of age. It has metamorphosed from its early confusing stage in terms of what its meaning should be and what it can do to an age in which it has been established as a unique educational discipline as compared to the conventional educational system.

Since 1969 when Open University of United Kingdom (OUK) was established a lot of efforts have been committed to successful implementation of distance learning world wide. All these have, no doubt, yielded dividend. Different and diverse forms of models of distance education practice have evolved. It has also produced a lot in terms of content, strategies and media integration.

In terms of financial commitment, a lot of money has been committed to the provision of open and distance education by nations of the world. Major aspects of open and distance learning where heavy financial commitment are experienced are course material development (online and off-line), integration of ICT, overhead cost, capital expenditure etc. The rewarding aspect of the finances is high rate of interest in Distance Education by learners. We now can talk of some distance learning institutions that go with the name – mega universities. These are universities with at least a minimum of one hundred thousand students. Such universities include: Open
University of United Kingdom (OUUK), University of South Africa (UNISA), Indira Ghandi National Open University (IGNOU) among others.

With all these good development happening to the practice of Open and Distance Education, it is ironical to notice some aspects of it that are worrisome. The rate of attrition in distance learning has reached a dimension that is threatening the promises of distance education.

Globally, there has been much concern for value for the services rendered not only in education but in all facets of economy. In the face of these, there is inadequacy of financial resources that has called for stringent management of resources. In the light of these, such concepts like management by objectives, impact study, quality assurance, total quality management sustainability, sustainability development have emerged. No doubt, there is a need to take stock especially as regards the practice of Distance Education as a developmental process, a discipline and a solution provider.

Distance Education is considered as a solution provider that it is aimed at assisting the society solve some major problems like: provision of equal and equal in educational opportunity, eradication of mass illiteracy, eradication of ignorance, diseases and mass empowerment of the people. In this paper therefore, we would carry an evaluative study to see on how well Nigeria has fared in the provision of distance education.

Statement of the Problem

Distance Education has been undergone a full stage of growth in Nigeria since its inception as correspondence education, through part-time studies to the stage of sandwich programmes and then to its recognition as distance education and the establishment of open and distance learning institutions. In fact, quite a substantial number of Nigerian Universities now operate on dual-mode system. Since the early sixties or thereabout, attention of researchers have been focused on the different aspects of adult education and the use of mass media / educational broadcasting in education. The works of Aderinoye (2005), Ogunmilade (1989), Adeagbo (2004) and Omolewa (1998) among others are worthy of mention here. However, there seems not to be much work done in the area of evaluation of distance education using the parameters of sustainability indices / indicators. This study therefore sets out to assesses the performance of distance learning institutions in Nigeria based on the internationally accepted indices / indicators of sustainability.

Research Questions

The study seeks to find answers to the underlisted research questions:

(1) Are institutions of open and distance learning in Nigeria aware of concepts of sustainability?
(2) In what ways have the open and distance learning institutions in Nigeria applied the sustainability indices in their activities?
(3) What are the hindrances ODL institutions in Nigeria face in the application of sustainability indices?

Purpose of the Study

The study is carried out to specifically:

(1) Find out the degree of self-evaluation that the Nigerian ODL institutions are carrying out;
(2) Establish the areas / aspects of focus of the ODL institutions in Nigeria in terms of provision of sustainable ODL;
Suggest ways by which ODL institutions can be run to assure compliance with sustainability standards.

Research Methodology

This study is to appraise the extent to which institutions of ODL in Nigeria adhere to the principles and indices of sustainability in their service delivery. Therefore, purposive sampling technique was adopted for the selection of the only single mode ODL institutions in the country. These are the National Teachers’ Institute (NTI) Kaduna and the National Open University of Nigeria (NOUN), Lagos.

An open-ended questionnaire was used to collect data from a cross-section of staff (academic and non-academic) of both institutions. The questionnaire was validated by subjecting it to content and face validity. It also underwent pilot usage by administering it on five (5) senior staff whose responses were not utilized in the final analysis of the data. The questionnaire centred on the major aspects of ODL. Thus, the questionnaire addressed various related issues of sustainability in: management and leadership, course material development, ICT, conduct of examinations, partnership, staff development, learner support services, quality assurance etc. The data are subjected to non-parametric statistical analysis.

Brief Literature Review

Sustainability: The concept of sustainability has attracted a lot of interpretations. The reason for this is not far-fetched. As a concept, it has early reference on issues relating to biodiversity and environmental education. However, with UNESCO declaring the years between 2005 and 2015 as Decade for Education for sustainability, the concept has assumed much relevance not only to environmental and biodiversity issues, but also to education practice. According to Wikipedia – the Free Encyclopaedia (2008), the root-word in sustainability is “sustain” which may mean any or a combination of the following options:

- nourish somebody – to provide somebody with nourishment or necessities of life;
- support something from below – to keep something in position by holding it from below;
- provide somebody with moral support: to keep somebody going with emotional or moral support;
- withstand something: to manage to withstand.

According to KLD (2008), sustainability means meeting the needs of the present without compromising the ability of future generations to meet their own need. KLD definition is more applicable to open and distance education. It then means that sustainability of open and distance education is one in which it is operated to meet the needs of the present generation without compromising the ability of future generations to meet their own need. By implication, sustainability in open and distance education is one that is developmental in nature. As Daniels (2004) has opined, “the purpose of open and distance learning, at least for COL, is to facilitate sustainability development.” He went further to stress the need for sustainability in ODL education in his remarks:

When asked to express it simply, I say that education for sustainable development is about education for development but for development that must be sustainable.

Undoubtedly, sustainability has assumed a dimension which will be difficult to undermine in any educational, socio-economic programmes. The seriousness attached to it has been impacted on many activities of international bodies and organisations like the UNESCO, COL, USAID, etc. A good number of projects and attempts at implementing innovations had resulted to failure due...
to lack of potential for sustainability. Daniels (2004) succinctly provides a very good record of such failures. According to him:

Most of those who launched into e-learning during dot.com fancy of 1999 – 2000 thought that they were going to capture a mass market of learners as the UKOU had done. They failed to do so because they had not thought sufficiently about the demand for the service in the environments they were working in. They had also failed to note the obvious point that using mass media tends to bring you mass audiences whereas using individualized media tend bring you individuals.

In Nigeria, several efforts of integrating new ideas that were not long lasting abound. There were early instances of using the radio and television to provide education, both at public and institutional level. These attempts were not sustainable.

The idea of the Open University system was first mooted in Nigeria late in the 1970s. By 1983, the Open University bill had been passed into law. And on February 4, 1984, test transmission was started on the Federal Radio Corporation of Nigeria (Ogunmilade, 1988). The university was intended to rely heavily on the use of the radio, as well as the television. The National Teachers’ Institute, Kaduna (NTI) also made early attempts to provide instruction to the students aspiring to obtain their Grade Two Teachers’ Certificate through the use of television and radio broadcasts and textbooks. Today, the NTI is using only tutorial approach of instructional dissemination. It is also on record that the University of the Air which was established in Enugu in Anambra State in 1979 started with instructional radio broadcasting, however, the project has become moribund. Some of the reasons adduced for the abysmal failure of these attempts include: irregular electricity supply, poor financing, poor planning among others. It is however encouraging to note with satisfaction the improvements in television broadcasting as exemplified by the NTA and other private TV outfits like the African Independent Television (AIT). The question is whether or not the present level of service delivery will be sustained.

Factors of Success and Sustainability

Daniels (2004) identified six factors of success and sustainability. These are:

1. **Clarity of purpose and intention** – The purpose and the intention for embarking on ODL must be well stated in a very clear, specific and unambiguous manner from onset. This is very important in that it will serve as the background towards other steps to be taken. The purpose and the intention of the ODL institution should be well known to the chief executive more than anyone else. Central to the success of an institution is the degree at which it is able to achieve the purpose for which it was established. In modern days, the purpose and the intention are expressed in the institution’s mission statements.

2. **Economic Structure** – Daniels is of the view that any Open University that aspires to be great and provide quality education should be financially buoyant. Some of the first-class ranking Open and Distance Education Institutions that have achieved high reputations for quality, are the OOUK, IGNOU and the SUKHOTHAI THAMATHIRA Open University operate. It is noteworthy that when an open distance learning institutions are economically viable, they depend less on government subvention. The implication of this is far-fetched. In the developing countries, a lot of ideas and innovations cannot be sustained because most of the institutions depend majorly on government subvention. In a situation where institutions are independent of the government, sustainability is best experienced. This also reduces government intervention in the running of the institutions. In such a
situation, creativity, innovativeness and ingenuity is encouraged. A good example of projects in open and distance education that had basically as a result of economic non-viability was that of the United States Open University (USOU). Another example was that of the National Open University (NOU) of Ghana which was first established in 1983 but had its Act suspended in 1984 only to be resurrected in 2002.

(3) Institutional Structure – The third factor of sustainability provided by Daniels is institutional structure. According to him, for open and distance institution to record success worthy of being sustained, there is the need to institute to enjoy institutional autonomy. For him, the failure of Quebec’s Tele-universite to enjoy institutional autonomy was the greatest factor for failure.

(4) Leadership – Another major ingredient of sustainable open and distance learning is an effective and efficient leadership especially at the foundation years. Good leadership, according to Daniels is also crucial at a time of change. Good leadership has the potential of revitalizing and reenergizing institutions that are moribund and less functional. We cannot but mention names of leaders of Open Distance Learning institutions whose achievements have been considered landmarks in the running of ODL institutions in different parts of the world. Again, the names mentioned by Daniels who himself, to say the least, is a respectable name in the management of ODL at the university and international levels. The names include: Walter Perry at the UKOU, Wichit Srisa An at STOU in Thainland, Ram Reddy at both the Andhra Pradesh OU now Dr. B.R. Ambedkar Open University, (BRAOU) and IGNOU, India, Raj Dharajan, Dominique Abrioux, Prof. Surabhi among others.

Good leadership provides an enabling environment for the institution to achieve the purpose for which it was established. The good leader is an embodiment of talent, vision, energy, resources and commitment to achievements and in fact goes beyond attaining the maximum capacity of the system.

We want to add that good leadership should be able to inspire the subordinate and encourage them to work together as a team so effectively they work towards making the system a success. More importantly, it is the responsibility of a good leader to appoint right people to occupy right positions. In a situation where all these are absent, the leadership becomes weak, inactive, insensitive and may risk failure.

(5) An Effective and Balanced Teaching and Learning System – By effective and balanced teaching is meant provision of high quality education that satisfies the aspirations of the learners to the extent that they wish to come back to the institution for further studies and feel proud to recommend the institution to others who are seeking for knowledge. In order to achieve this, there is the need to provide interesting and high quality study materials, effective student support and good logistics, perfect conduct of examinations and almost immediate knowledge of results and terminal examinations, hitch-free registration and effectual communications. Promptness, flexibility, alertness is some of the actions to be taken to ensure that teaching and learning system is not only effective and balanced but sustainable.

(6) Intellectual Excitement – Daniels opines that “students will enjoy their institution, and help to make it sustainable, if they find their institution intellectually or practically exciting…” To achieve intellectual excitement goes beyond accumulation of facts from the textbooks. Students should be made to relate the education they are receiving is to act as a change factor and as a catalyst which propel them to become more enlightened by making them realise that they are entitled to almost unlimited opportunities. It should build confidence in them and spur them to face challenges of life.

The UNESCO (2005) suggested some key elements for sustainability especially at the national level. Although, the elements are focused at the attainment of sustainability at the national level, they have many semblances to the submission of Daniels (2004). The key
elements are: leadership, government structure, administrative support, human resources, financial resources, operating procedure, accountability, evaluation, tracking and reporting, vision-building, and engagement and retention.

Content of Sustainability

Sustainability is a content-laden concept. Sustainability is not done in a vacuum. Therefore, what is to be sustained must be identified and indeed to be extremely valuable and worthy of being sustained. In terms of open and distance learning, even though there are variants of operations and practices, certain elements seem to have a general applicability. We term these as content of sustainable ODL. They include: available programmes in the system, available courses in a programme, leadership styles, examination systems, learner support systems, information and communication technology system, local and international collaborations, study centre management, management of senate and other institutional committees, academic culture, accounting system, registry systems, admission/registration and convocation system, award of degrees and certificate system, library system and study material publication system.

The issue of the worth of what is sustainable leads us naturally to the consideration of such related concepts like: Quality Assurance (QA), Quality Control (QC), Total Quality Management (TQM) and Sustainability. According to UNESCO (2003):

'Quality has become a dynamic concept that has adapted to the world whose societies are undergoing profound social and economic transformation. Encouragement for future oriented thinking and anticipation is gaining importance. Old notions of quality are no longer enough … despite the contents, there are many common elements in the pursuit of a quality education, which should equalize people, women and men, to be fully participating members of their own communities and also citizens of the world' (UNESCO, 2003, p. 1).

Quality is the characteristics of the products and services an organisation offers. Quality in ODL programme thus refers to the quality of graduates it produces and the learning experiences it provides. QA according to Ogunsanya (2007) is a deliberately planned and systematic process of determining and ensuring that adequate and acceptable standards, scholarship, human and material infrastructure are put in place, maintained and enhanced. Quality Assurance is the set of activities that an organisation undertakes to ensure that standards are specified and measures taken to avoid faults (Mohan, 2007). From these various definitions of quality assurance, it becomes apparent that the major concern of quality assurance is determination and enforcement, on the part of the organisation, to meet up with the set standard as a means of satisfying the clients or the consumers of the product or service.

Quality Control refers to the physical efforts of an organisation to ensure compliance with the quality assurance principles while Total Quality Management, on the other hand, is the systematic management of an organisation’s customer-supplier relationship in such a way as to ensure sustainability and steep-sloped improvements in performance. Sustainability in terms of TQM refers to the ability of an organisation to maintain quality performance over time. Not all ODL institutions can. There are cases of ODL institutions which succeeded in making significant gains in one year, only to find out that they are back to square one in the next. Others go on for several years with gradually improving performance, and then have a major setback. Below are possible patterns of institutional performance in terms of sustainability / TQM over time:
Possible Patterns of School Performance over time

Type 1

Type 2

Type 3

Type 4

Type 5

Type 6

Type 7

Type 8

Type 9

Education for Sustainability

Sustainability has its roots in the declaration of Human Rights which assures everyone of the right to basic education. Four decades after, precisely in 1989, at the Convention on the Right of the Child (CRC), it was declared that primary education should be compulsory and available free to all. The convention also emphasized non-exclusion of enjoying any right by all children as a result of race, sex, disability and economic status.

The right to primary education by every child was reinforced in 1990 at the Jomtien Declaration on Education for All (EFA) when it was declared that “basic education should be provided to all children, youths and adults”. Gender inequality is to be eradicated in all levels of education by year 2015.

Education is therefore regarded as an obvious and strategy for all these to be achieved. To make this possible, emphasis is being placed on the roles that the ODL can play in eradicating poverty, ignorance, providing access, equalizing and providing equitable educational opportunities. According to UNESCO (2004), education is central to sustainability. Indeed, education and sustainability are inextricably linked, but the distinction between education as we know it and education for sustainability is enigmatic for many.

Education for sustainable development must be based on ideals and principles such as, intergenerational equity, gender equity, social tolerance, poverty alleviation, environmental preservation and restoration, natural resource conservation and just and peaceable societies. All these are what DE is out to achieve. Indeed, if there is any educational system capable of achieving the ideals and principles of sustainability, that system is ODL.

Why Sustainability in Open and Distance Learning?

There are reasons for the global concern for sustainable ODL development. Further Murgatroyd and Morgan (1993) provided four major reasons why QA has become so important an aspect of all serious and business minded organisations. These reasons are considered relevant and applicable to the adoption of sustainable development approach. They are:

(i) Costs and demands for educational provision by public purse are outstripping the available revenue;
(ii) Tax payers are eager to know what they are benefiting from what they are paying for;
(iii) Parents and governments have been re-defining the expectations of what they expect schools to do for the learners, and
(iv) Government and influential groups in society increasingly expect schools to play their part in national and international economic competitiveness.

Baker (1990) remarked that “there is an epidemic of quality worldwide, which if you don’t catch it may mean you are not in business in ten years. Time is of the opinion that any service that is not sustainable may sooner or later go extinct.

Indices / Indicators of Sustainability
Indicators are as varied as the types of systems they monitor. Sustainability Measures (2008) opines that sustainability indicators are generally quantifiable and not the same thing as an indicator which is generally not quantifiable, just a vague clue. However, there are certain characteristics that effective indicators have in common. These are that:

- effective indicators are relevant, that is, they give you something about the system you need to know;
- effective indicators are easy to understand even by people who are not experts;
- effective indicators are reliable, that is, you can trust the information that the indicator is providing, and
- effective indicator is based on accessible data, that the information can be gathered while there is still time to act.

The four characteristics of an indicator above are in-line with the one that was designed and used by the Australian Government tagged “National Strategy for Ecological Sustainable Development (NSESD) in 2002. According to the report of the NSESD Committee, all the indicators designed for the project are:

- relevant to NSESD’s objectives
- scientifically and statistically credible;
- sensitive to change;
- reliant on data which are already available in other contexts, and
- reasonably easy to understand.

Suffice it to mention here that the sustainability indices used in this study were designed to meet up with the five criteria used by the NSESD. In open and distance learning system, the general indices or parameters by which sustainability could be assessed would include, among others, finding out whether or not the system is:

- meeting the aspirations and expectations of the society, that is, finding out whether the institution is focused as regards its activities being geared towards realization of the objectives for which the institution was established;
- meeting the aspirations and expectations of the labour market;
- meeting the aspirations and expectations of the individual students;
- meeting the expectations and aspirations of the international community especially international organisations / bodies that are deeply committed to the promotion of distance learning.

National Open University of Nigeria (NOUN) Lagos

The National Open University of Nigeria (NOUN) was established on the 22nd July, 1983 as a springboard for open and distance learning in Nigeria (NOUN,2006). Almost a year later, precisely on the 25th April, 1984, the Act establishing the University was suspended by the then Military Government. The University was never to be opened until 1st October, 2002 by then civilian administration. Thus the National Open University made history as one of the few open universities that were first established, closed down and re-opened again.

NOUN remains till date, the only federal government established single-mode tertiary institution in Nigeria dedicated to quality open access education through distance learning. As succinctly put by Jegede (2006), NOUN is set-up “towards taking distance out of education for many Nigerians who would not normally have the opportunity to study through the conventional mode face-to-face, full-time study”. More information about NOUN particularly those that are central to the issue of sustainability shall be provided subsequently.

National Teachers’ Institute (NTI)
The National Teachers' Institute, Kaduna was established in 1976 with the mandate of providing in-service education for teachers through Distance Learning system. The NTI, has since its establishment been running programmes leading to the award of Grade II Teachers Certificates, Nigeria Certificate of Education (NCE) and Postgraduate Diploma in Education (PGDE). More information on NTI, particularly the aspects that are related to sustainable development shall form the basis of the analysis presently.

Findings

Table 1: Availability of Sustainable Elements

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<th>S/N</th>
<th>Sustainable Elements</th>
<th>Institutions</th>
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<td></td>
<td>NOUN</td>
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<tr>
<td></td>
<td>Available</td>
<td>Not Available</td>
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<tr>
<td>1.</td>
<td>Vision, Mission Statements</td>
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<tr>
<td>2.</td>
<td>Curriculum</td>
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<tr>
<td>3.</td>
<td>Learner Support Unit</td>
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<tr>
<td>4.</td>
<td>Study Materials</td>
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<tr>
<td>5.</td>
<td>Internal Efficiency Unit</td>
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<td>6.</td>
<td>External Efficiency Unit</td>
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<tr>
<td>7.</td>
<td>Study Centres</td>
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<td>8.</td>
<td>Tutorial Facilitation</td>
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<td>9.</td>
<td>Examination / Evaluation</td>
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<td>10.</td>
<td>Staffing (Academic / Non-Academic)</td>
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<td>11.</td>
<td>Sufficient Budget Records</td>
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<td>12.</td>
<td>Centre Managers</td>
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<td>13.</td>
<td>ICT Unit</td>
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<td>14.</td>
<td>Publishing Unit</td>
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<td>15.</td>
<td>Programmes on Offer</td>
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<td>16.</td>
<td>Partnership</td>
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<td>17.</td>
<td>Local content</td>
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</table>

Table 1 reveals that all the 17 sustainable elements are available in both the institutions used for the study. This is considered a good development as it portends good enabling environment for ODL to thrive in Nigeria. However, the availability of the sustainability elements may not guarantee their being sustained. Naidu (2004) warned that it is erroneous to assume that quality (sustainability) is guaranteed on the assumption of availability of quality (sustainability) indicators. He cited with example of the acquisition of academic qualifications of teachers as well as the use of established criteria in the production of study materials. According to him, it may be wrong to assume that the quality is guaranteed on the academic qualifications of teachers. This is not essentially true as the presence of required number of qualified teachers need not always ensure effective learning process in the classroom. Also, course materials developed mechanically following ID template as well as adequate opportunity for learner support need not necessarily lead to effective teaching.

Table 2: Staff Evaluation of Sustainability Elements in NOUN and NTI

<table>
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<th>S/N</th>
<th>Sustainable Elements</th>
<th>Institutions</th>
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<td></td>
<td></td>
<td>NOUN</td>
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<tr>
<td></td>
<td>Satisfactory</td>
<td>Not Satisfactory</td>
</tr>
<tr>
<td>1.</td>
<td>Vision, Mission Statements</td>
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<td>3.</td>
<td>Learner Support Unit</td>
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<tr>
<td>4.</td>
<td>Study Materials</td>
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</tbody>
</table>

201
To further probe into the responses of non satisfaction by the respondents, the reasons given are discussed on the basis of institutional and item by item analysis.

**NOUN**

Learner Support:
- Although each study centre has at least two student counsellors, they are not enough to cater for the needs of the large number of students.
- Student counsellors are made to do more administrative work; thus, it does not make them effective in terms of performing their primary task of counselling and guidance. In fact, most of what they do present are more of guidance but not counselling.

**NTI**

Learner Support:
- The NTI facilitators combine counselling with facilitation and as many of them are not specialists in that area, guidance and counselling done on the basis of individual experiences.
- Not much of learner support is attended to as there is no separate unit for that at the NTI study centres across the country. Students hardly request for guidance and counselling services.

**NOUN**

Study Materials:
- Although the quality of study materials is considered to be very high, the quantity is not adequate.
- Most compounding problem confronting NOUN is the unavailability of study materials.

**NOUN**

Internal Efficiency:
- The SERVICOM Unit emphasises attendance rather than quality control of the entire sections of the university.
- There seems not to be consistent internal efficiency system put in place. It is like a trial and error kind of internal efficiency mechanisms.

**NTI**

Internal Efficiency:
- The Federal Government directive on service delivery, simply SERVICOM is in place but it is not as effective as expected. Something drastic has to be done especially at the State Offices. However staff are trying.

- Much still need to be done in the area of personnel management.

NOUN
External Efficiency:
- The university expects NUC to accredit its program very soon.
- NOUN is well known all over the world.
- Externally, the university needs to feel the pulse of all stakeholders particularly the employers of labour for it to really say that it is externally efficient as a university.

NOUN
NTI
External Efficiency:
- The institute is making efforts to carry along the stakeholders on matters like: curriculum development, course material development, marking of scripts etc. It also has problem of its product being discriminated against it comes to appointment.

NOUN
Tutorial Facilitation
- Many of the facilitators engage themselves in teaching and not providing tutorial facilitation.

NOUN
Learner Support
The university is grossly understaffed. This has made staff particularly the academic staff to be over burdened with work.

NOUN
Finance
The university is experiencing a lot of problems especially in the areas of course material development and provision of ICT related facility and equipment both at the Headquarters and Study Centres due to lack of fund. Government should provide enough fund to the university to enable her achieve the objectives for which it was established.

NTI
Although the Federal Government is actually trying in terms of financing the institute, more financial assistance is required.

NOUN
Management of Study Centres
Centre Managers are working at cross purposes to the aspiration and objectives of the Headquarters. Although the Centre Managers seem to be putting their best, their efforts are still not satisfactory.

NOUN
ICT Unit
The number of personnel is not commensurate with volume of work at the Headquarters; therefore, there are series of requests and complaints from students in particular. The e-learning unit should be improved.
By now, delivery of instructions through the Internet as a distance learning provider should be in full swing.

The Course Materials Development Unit (an arm of the Directorate of Instructional Resources Development) is really trying but much still has to be done. The university has to have its own functional publishing outfit that can match the best in Africa at least.

There seems to be too many programmes on offer – it is like the university is biting more than it can chew. There seems also to be lack of coordination among various schools and some academic units. There is lack of coordination between Learner Support and other academic units. This kind of lopsided arrangement is not only demoralizing but equally debilitating.

Suggestions
To allow for sustainable development of ODL in Nigeria, we suggest that:

- ODL institutions in Nigeria should continue to add to themselves strictly to the vision and mission statements.
- Programme curriculum must be regularly reviewed to accommodate new knowledge and reflect societal dynamic needs.
- The learner support unit should be strengthened in personnel and working tools. Institutions that don’t have the learner support as a separate unit may wish to reconsider their decisions.
- Study materials are the backbone of any ODL institution especially those using it as the major source of instructional delivery. They should be provided with strict compliance to such ideals like – learner friendly, update of content, validity of content etc. Students should not be made to suffer before they receive study materials. Adequacy of study materials in each of the study centres must be ensured.
- In order to ensure high quality tutorial facilitation, qualified staff should be engaged while efforts should be made to ensure compliance with facilitation principles rather than lecturing/teaching.
- The sanctity of examination ethics are essential to acceptance of degrees and certificates awarded by the ODL institutions, therefore efforts should be made to conduct acceptable examinations and Tutor-Marked Assignments.
- The efforts of the ODL institutions used for the study in the integration of local content is good for sustainable development. This should be encouraged.

Conclusion
The study has provided an insight into some degree of compliance to sustainability indices by two major ODL institutions in Nigeria as perceived by institutional staff. The findings are quite revealing and hopefully, the suggestions, if implemented, will help in achieving sustainable development in ODL practice in Nigeria.
References:


EMPOWERMENT OF WOMEN THROUGH DISTANCE EDUCATION IN PAKISTAN

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Abstract

The present study was undertaken to highlight the gender disparities of Pakistan, regional and international levels. The study, measured the comparative outcome of formal and non-formal system of education in Pakistan. To achieve the desired goal, survey research was considered appropriate. The number of schools and enrollment during the years 2001 to 2004 of the formal system for primary, middle and high levels was considered and enrollment during the year 2004 for Secondary School Certificate to Ph.D level of non-formal system of Allama Iqbal Open University Islamabad, Pakistan was considered. Data was analysed in term of percentage and average. It was found that enrollment of female is less than male in formal system while enrollment of female is higher than male in non-formal system of education in Pakistan.

Key words: Distance Education, Allama Iqbal Open University, Women Education, Gender gap, Illiterates, South Asia, Institutions, Enrollment, Formal System, Non- Formal System

L'EMANCIPATION DES FEMMES À L'AIDE DE L'ENSEIGNEMENT À DISTANCE AU PAKISTAN

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Résumé

Cette étude vise à mettre en lumière les inégalités de genre aux niveaux régional et international au Pakistan. Elle a comparé les résultats des systèmes formel et non formel d'enseignement au Pakistan. Pour arriver au but escompté, on a utilisé la méthode des enquêtes. On a analysé le nombre d'établissements et les effectifs au cours des années 2001 à 2004 dans le système formel au niveau primaire, secondaire et supérieur et les effectifs en 2004 du 'Secondary School Certificate' (baccalauréat) au Doctorat dans le système non formel à Allama Iqbal Open University à Islamabad (Pakistan). Les données ont été analysées en termes de pourcentages et de moyennes. On est arrivé à la conclusion que les effectifs du sexe féminin étaient moins importants que ceux du sexe masculin dans le système formel tandis que c'est l'inverse qui se produit dans le système non formel.

Mots clés: Emancipation, femmes, enseignement à distance, Pakistan, enseignement formel, effectifs.
Introduction

Distance learning is any type of education that occurs when location, time, or both separate the participants. In distance learning, the teacher, through the use of technology, delivers instructions to a student at a separate location (Siddiqui, 2004). The term open and distance learning represents approaches that focus on opening access to education and training provision, freeing learners from the constraints of time and place, and offering flexible learning opportunities to individuals and groups of the learners (Talesr, 2004). Distance education, structured learning in which the student and instructor are separated in time and space, is currently the fastest growing form of domestic and international education (Mats & Gunawardena, 1996).
Scope of Distance Education

Distance education serves the persons living in isolated areas with inadequate facilities of formal education system as presented by Rai, (2000) “Distance education has taken systematic teaching-learning process to persons living in isolated areas where facilities of traditional form of classroom teaching cannot be developed. Further, as distance learning addresses the needs of specific target groups, there is a great variation in the range of programmes offered.” Distance education also serves the dropouts, older students and disadvantaged groups. Distance system also serves the persons involved in community commitments as indicated by Manjulika and Reddy (2000) “The open universities have also increased access for other disadvantaged groups including older students, who be geographically isolated or excluded from regular classes because of shift patterns, seasonal or other kinds of work and family and community commitments.” Distance education provides the desired education as highlighted by Ramaiah (2001):

Distance education provides at least necessary technical and organizational preconditions for a universal admission to continued higher education. An analysis of statistics about distance education reveals that millions of students indeed profit from this industrialized way of education. Often enough they are the only way towards the desired education as all other ways are barred by lack of funds or other circumstances.

Almost all types of the education are projected through distance education and distance education becomes the host of education and training. As posited by Panda, (2005) “Today, a host of educational and training forms and processes are presented under the banner term ‘distance education’. It is practised through single-mode distance teaching institutions, distance learning/educational development/flexible learning.”

Distance Education System in Pakistan

The distance system of education in Pakistan started with the establishment of Allama Iqbal Open University (AIOU) which was established in 1974 under the name, People’s Open University but renamed Allama Iqbal Open University in 1977 in honour of the national poet and philosopher, Allama Muhammad Iqbal. Allama Iqbal Open University was established by an act of parliament. It was the second Open University in the world, the first such university was established in UK in 1969. In many ways it is a unique institution, particularly in terms of employing distance education as its basic teaching methodology. Distinctive features of the university are:

- develops specialised textbooks and reading material able the students to study on the basis of self-learning.
- recent innovations in the field of information and technology are making the system of distance education more effective. AIOU is utilizing the in formation technology for distance education.
- qualified teachers from all over the country are mobilized as part time tutors for students. The students study their material under the tutor’s guidance and submit their assignments for periodic evaluation.
- the outreach system of the University in the form of its Regional Campuses/Centers is the backbone of the methodology. The University presently has 36 Regional Campuses and centers.

Gender Gap and Women Education

World Bank (2000) presents horrible situation of world as:

- 880 million or more illiterate adults and youth, 60% of them women
- 130 million out-of-school children aged 6-11, about 60% of them girls
- Several million functional illiterates whose education is not sufficient to cope with social and economic transformation.
This undeniable huge number of illiterates, larger number of out-of-school children and disparity between male and female is advocated by UNESCO Institute of Statistics, 2006. “According to the most recent United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute of Statistics (2006) “The adult literacy rate for South Asia during the year 2002-04 was 53.8% for both sexes, for male 70.5% and for female 46.3%. Literacy constitutes a hindrance to the development of the nations. The gender gap in the year 2002-04 is 24.2. This fact indicated the underprivileged and unfavorable situation for females literacy in South Asia. Sri Lanka and Maldives are not gender biased, result, in Sri Lanka female literacy rate is more than the male. According to EFA global monitoring report 2005/06:

Women’s literacy is of crucial importance in addressing wider issues of gender inequality. Yet, women still account for the majority of adult illiterates in most of the E-9 countries, with some of them are showing substantial gender disparities in literacy. In Bangladesh, Egypt, India and Pakistan- the E-9 countries with lowest over all literacy rates-less than 70% are literate for every 100 literate men.

In South Asia there is a huge gender gap with literacy of female. As indicated by Khan (1993) girls in Asia is the region, along with sub-Saharan Africa, in which girl’s education lags behind boys education most dramatically. At secondary and tertiary levels, Asia has the largest gender gap of any developing region.” The present picture of gender gap in South Asia indicates a big challenge in female literacy. countries where over all literacy rates are comparitively low, male/female and urban/rural disparities also large.

Situation Analysis of Women Education and Gender Gap in Pakistan

Female literacy rate was 36% while male literacy rate was 63% and female to male ratio was 0.57%. The enrollment in primary education for female was 56% while for male was 76% and enrollment ratio of female to male was 0.73%. Similarly enrollment ratio of female to male at secondary level was 0.73%. The enrollment in tertiary education for female was 3% while for male was 4% and enrollment ratio of female to male was 0.80% (Gender Gap Report, 2006). The Report of the Government of Pakistan, 1998 reflects the huge gender gap in literacy rate. Gender Gap Report 2006 indicated: the literacy rate for female was 52.2% and for male was 74.3% in urban areas while literacy rate of male was 48.6%. The gender disparities also presented with number of institutions at primary, middle and high levels. Table below shows the institutions by gender. It reflects that there exists a gender imbalance in the number. Azam, Z (1993) pointed out that exploitation of the women in different ways exists in both the east and west and indicate an important point that the country remains backward if the half of the population is not playing its role in the national development.

Women are about 50% of humanity. In Pakistan they over 50% (52%) of the total population. It is but logical to state that no society can progress where half of its population is kept backward-prevented from playing its due social change, human development and social progress. Yet the reality remains that women continues to be exploited in the different ways, both in the east and west. The situations and circumstances vary and the methods of exploitation are different.

This backwardness of the women is due to the unequal chances to education of the women. There may be economic revolution in the country, if the gender disparities in the literacy rate is minimised to zero as in Sri Lanka.

The above data presents the picture that the formal system of education is providing inadequate facilities for female education as the number of institutions is less than for boys. The enrollment of girls is less than boys at primary, middle and high levels. This unequal situation in the country places the women in the rear. There is need for another system of education with equal opportunities for both male and female. There is need for gender balance which the Distance System of Education provide.
Objectives of the Study

The objectives of the study include:

- To analyse gender disparities in education at national and international levels.
- To evaluate the outcome of formal and non-formal systems of education in Pakistan.
- To access the root causes of gender disparities in education in Pakistan.
- To suggest the solution to minimise the gender disparities in education in Pakistan.

Research Methodology

A survey research was conducted to determine the number of schools and enrollment of the formal system of education during the year 2001 to 2004 in Pakistan. The enrollment of the non-formal system of education during the year 2004 from secondary to Ph.D level was considered to achieve the said end.

Data Analysis

The data was analysed in terms of percentage and average.

Findings

Data was analysed in terms of percentage and average. The findings from the data analysis are given below:

During the years 2001-2004, the number of boys’ schools at primary level was 299641 with an average of 52% while the number of girls schools was 177121 with an average of 30.7%. At middle level, the number of boys schools were 27488 with an average of 25% while the girls’ schools were 25033 with an average of 23.01%. At high school level, the number of boys schools had an average of 41.2% while the number of girls’ schools was 11244 with an average of 40.6% (Table 1).

During the years 2001-2004, the enrollment of boys at primary level was 40216821 with an average of 59.01% while the enrollment of girls was 97933880 with an average of 40.98%. At middle level, the enrollment of boys was 9168817 with an average of 59.10% while the enrollment of girls was 6355122 with an average of 40.89%. At high school level, enrollment of boys was 3751574 with an average of 58.49% while the enrollment of girls was 2661384 with an average of 56.6% (Table 2).

At SSE level in the selected course codes during the year 2004, the average male enrollment was 14.46% and the average of female enrollment was 85.52% (Table 3).

At HSSE level in the selected course codes during the year 2004, the average male enrollment was 37.3% and the average of female enrollment was 62.7% (Table 4).

It is evident from Table 5 that at B.A level in the selected course codes during the year 2004, the average male enrollment was 41% and the average female enrollment was 59%.

At B.Ed level in the selected course codes during the year 2004, the average male enrollment was 41% and female enrollment was 68.38% (Table 6).

At M.Ed (Special Education) level in the selected course codes during the year 2004, the average male enrollment was 40.78% and the average female enrollment was 52.21% (Table 7).

At M.Ed (Distance and Non-Formal Education) level in the selected course codes during the year 2004, the average male enrollment was 43.64% and the average female enrollment was 56.35% (Table 8).

At the level of M.Sc Pakistan Studies, in the selected course codes during the year 2004, the average male enrollment was 39% and average female enrollment was 61% (Table 9).

At the level of M.A Islamic Studies in the selected course codes during the year 2004, the average male enrollment was 30.88% and the average female enrollment was 69.12% (Table 10).
At the level of M.A Urdu in the selected course codes during the year 2004, the average male enrollment was 35.52% and the average female enrollment was 64.47% (Table 11).

At the level of M.A (EPM) in the selected course codes during the year 2004, the average male enrollment was 40.54% and the average female enrollment was 59.46% (Table 12).

At the level of M.A (Secondary Teacher Education) in the selected course codes during the year 2004, the average male enrollment was 23% and the average female enrollment was 76.23% (Table 13).

At the level of M.Phil Economics in the selected course codes during the year 2004, the average male enrollment was 40.27% and the average female enrollment was 59.72% (Table 14).

At the level of M.Phil Food and Nutrition in the selected course codes during the year 2004, the average male enrollment was 00% and the average female enrollment was 100% (Table 15).

At the level of Ph.D Chemistry in the selected course codes during the year 2004, the average male enrollment was 00% and the average female enrollment was 100% (Table 16).

Discussion

In Public Sector Universities, Allama Iqbal Open University, Islamabad is competing with the international standards. It has well established network of regional campuses/centers and expert tutors and resource persons. The study reflects the comparative enrollment in formal and non-formal system of education in Pakistan. The female average enrollment in the formal system was 41.5% (Table 2) while the average enrollment of female in the non-formal system of education was 85.52% (Table 3). The number of institutions for male at primary, middle and high levels was more as compared to institutions for females. The average enrollment of the girls was less than that of boys at all levels in formal system of education. The female enrollment in distance system of education is higher from SSC to Ph.D level of Allama Iqbal Open University, Islamabad, Pakistan.

Conclusion

There exist gender disparities in formal system of education with respect to number of institution and enrollment in Pakistan.

In formal system of education there are inadequate schooling and facilities for female education in Pakistan.

There is openness to every one in the distance system of education.

Females have greater number of chances for education through distance education than the formal system education in Pakistan.

The enrollment ratio of the girls in formal system is less than the boys at all levels in Pakistan.

The enrollment ratio of the girls is higher than that of boys at all levels in distance system of education in Pakistan.

Recommendations

To minimize the gender gap in Pakistan, the number of male and female institutions in the formal system of education should be equal.

The number of Distance Learning institutions in Pakistan should be increased as at present there are only two public sector universities in the country to serve the large illiterate masses.

The Distance Learning institutions should be established at provincial level to minimize the gender gap in education in Pakistan.
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Annexure-1 Table 1: Total public and private institutions

<table>
<thead>
<tr>
<th>YEAR</th>
<th>PRIMARY</th>
<th></th>
<th>MIDDLE</th>
<th></th>
<th>HIGH</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
<td>Mixed</td>
<td>Total</td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>2000-01</td>
<td>73796</td>
<td>42870</td>
<td>31070</td>
<td>147736551</td>
<td>5875</td>
<td>13046</td>
</tr>
<tr>
<td>2001-02</td>
<td>73788</td>
<td>43525</td>
<td>31773</td>
<td>149085834</td>
<td>6257</td>
<td>13699</td>
</tr>
<tr>
<td>2002-03</td>
<td>75272</td>
<td>44411</td>
<td>32864</td>
<td>152546978</td>
<td>6385</td>
<td>14370</td>
</tr>
<tr>
<td>2003-04</td>
<td>76785</td>
<td>46315</td>
<td>3400</td>
<td>156107125</td>
<td>6516</td>
<td>15075</td>
</tr>
<tr>
<td>Total</td>
<td>299641</td>
<td>177121</td>
<td>99107</td>
<td>6054627488</td>
<td>25033</td>
<td>56190</td>
</tr>
<tr>
<td>Percentage</td>
<td>52.0</td>
<td>30.7</td>
<td>17.20</td>
<td>25.2</td>
<td>23.1</td>
<td>51.68</td>
</tr>
</tbody>
</table>

Annexure-2 Table 2: Total public and private Enrolment by Gender

<table>
<thead>
<tr>
<th>YEAR</th>
<th>PRIMARY</th>
<th></th>
<th>MIDDLE</th>
<th></th>
<th>HIGH</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
<td>Mixed</td>
<td>Total</td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>2000-01</td>
<td>9898232</td>
<td>6735775</td>
<td>16634002053767</td>
<td>1705558</td>
<td>3759325</td>
<td>889459</td>
</tr>
<tr>
<td>2001-02</td>
<td>9962751</td>
<td>6968109</td>
<td>1693082315127</td>
<td>1506088</td>
<td>3821215</td>
<td>929821</td>
</tr>
<tr>
<td>2002-03</td>
<td>10105266</td>
<td>7065387</td>
<td>171706522377011</td>
<td>1549347</td>
<td>3926359</td>
<td>953789</td>
</tr>
<tr>
<td>2003-04</td>
<td>10250631</td>
<td>7164609</td>
<td>174152402440912</td>
<td>1594129</td>
<td>4035040</td>
<td>978505</td>
</tr>
<tr>
<td>Total</td>
<td>40216880</td>
<td>27933880</td>
<td>68150759</td>
<td>9168817</td>
<td>6355122</td>
<td>15541939</td>
</tr>
<tr>
<td>Percentage</td>
<td>59.01</td>
<td>40.98</td>
<td>59.10</td>
<td>40.89</td>
<td>58.49</td>
<td>41.5</td>
</tr>
</tbody>
</table>
Annexure-3: Table 3
Gender Wise, Level Wise Course Enrollment of Secondary School Certificate (SSC) for the Year 2004 of AIOU

<table>
<thead>
<tr>
<th>S.No</th>
<th>Courses</th>
<th>Code</th>
<th>Male %</th>
<th>Female %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Food and Nutrition</td>
<td>217</td>
<td>08</td>
<td>1214</td>
<td>99.34</td>
</tr>
<tr>
<td>2</td>
<td>Functional English II</td>
<td>221</td>
<td>342</td>
<td>3186</td>
<td>90.30</td>
</tr>
<tr>
<td>3</td>
<td>General arithmetic</td>
<td>214</td>
<td>288</td>
<td>2824</td>
<td>90.7</td>
</tr>
<tr>
<td>4</td>
<td>Functional English I</td>
<td>207</td>
<td>426</td>
<td>3259</td>
<td>88.43</td>
</tr>
<tr>
<td>5</td>
<td>Family Health Care</td>
<td>206</td>
<td>13</td>
<td>1695</td>
<td>99.32</td>
</tr>
<tr>
<td>6</td>
<td>Arabic</td>
<td>205</td>
<td>04</td>
<td>195</td>
<td>97.98</td>
</tr>
<tr>
<td>7</td>
<td>Urdu for daily use</td>
<td>204</td>
<td>4017</td>
<td>4104</td>
<td>50.52</td>
</tr>
<tr>
<td>8</td>
<td>General Science</td>
<td>203</td>
<td>289</td>
<td>2638</td>
<td>90.12</td>
</tr>
<tr>
<td>9</td>
<td>Pakistan Studies</td>
<td>202</td>
<td>3897</td>
<td>4112</td>
<td>51.34</td>
</tr>
<tr>
<td>10</td>
<td>Islamiat</td>
<td>201</td>
<td>82</td>
<td>2896</td>
<td>97.24</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td></td>
<td></td>
<td></td>
<td>14.46</td>
</tr>
</tbody>
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Annexure-4: Table 4
Gender Wise, Level Wise Course Enrollment of Higher Secondary Certificate (HSSC) for the Year 2004 of AIOU

<table>
<thead>
<tr>
<th>S.No</th>
<th>Courses</th>
<th>Code</th>
<th>Male %</th>
<th>Female %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Plant protection</td>
<td>1249</td>
<td>1258</td>
<td>1381</td>
<td>52.33</td>
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<tr>
<td>2</td>
<td>Home Management</td>
<td>1245</td>
<td>361</td>
<td>4502</td>
<td>92.57</td>
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<tr>
<td>3</td>
<td>Islamiat (Elective)</td>
<td>1243</td>
<td>10394</td>
<td>11509</td>
<td>52.54</td>
</tr>
<tr>
<td>4</td>
<td>Child Care</td>
<td>1238</td>
<td>906</td>
<td>5115</td>
<td>84.95</td>
</tr>
<tr>
<td>5</td>
<td>Education</td>
<td>1221</td>
<td>9271</td>
<td>10795</td>
<td>53.79</td>
</tr>
<tr>
<td>6</td>
<td>Arabic</td>
<td>1218</td>
<td>874</td>
<td>991</td>
<td>53.13</td>
</tr>
<tr>
<td>7</td>
<td>Health and Nutrition</td>
<td>1253</td>
<td>1877</td>
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</tr>
<tr>
<td>8</td>
<td>English</td>
<td>1288</td>
<td>33</td>
<td>49</td>
<td>59.7</td>
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<td>9</td>
<td>Action for health</td>
<td>1292</td>
<td>21</td>
<td>25</td>
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<td>10</td>
<td>Chemistry-1</td>
<td>1296</td>
<td>29</td>
<td>31</td>
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<td></td>
<td>Average</td>
<td></td>
<td>37.3</td>
<td>62.7</td>
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Annexure-5: Table 5
Gender Wise, Level Wise Course Enrollment of Bachelor Degree Programme (B.A-General) for the Year 2004 of AIOU

<table>
<thead>
<tr>
<th>S.No</th>
<th>Courses</th>
<th>Code</th>
<th>Male %</th>
<th>Female %</th>
<th>Total %</th>
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<tbody>
<tr>
<td>1</td>
<td>Urdu</td>
<td>404</td>
<td>10329</td>
<td>12330</td>
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<tr>
<td>2</td>
<td>Sociology-1</td>
<td>411</td>
<td>3816</td>
<td>5402</td>
<td>58.61</td>
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<tr>
<td>3</td>
<td>Pakistan Studies</td>
<td>417</td>
<td>18139</td>
<td>20218</td>
<td>52.72</td>
</tr>
<tr>
<td>4</td>
<td>Education</td>
<td>419</td>
<td>9954</td>
<td>13827</td>
<td>58.15</td>
</tr>
<tr>
<td>5</td>
<td>Functional English</td>
<td>435</td>
<td>19351</td>
<td>21426</td>
<td>52.55</td>
</tr>
<tr>
<td>6</td>
<td>Islamic Studies</td>
<td>437</td>
<td>10724</td>
<td>13660</td>
<td>56.12</td>
</tr>
<tr>
<td>7</td>
<td>History of libraries</td>
<td>466</td>
<td>299</td>
<td>304</td>
<td>50.50</td>
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<td>8</td>
<td>Food microbiology</td>
<td>482</td>
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<td>77</td>
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<tr>
<td>9</td>
<td>Food and Nutrition</td>
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<td>4999</td>
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<td></td>
<td>Average</td>
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<td>59.0</td>
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</table>
### Annexure-6: Table 6
Gender Wise, Level Wise Course Enrollment of Bachelor of Education (B.Ed) for the Year 2004 of AIOU

<table>
<thead>
<tr>
<th>S.No</th>
<th>Courses</th>
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<th>Male</th>
<th>%</th>
<th>Female</th>
<th>%</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Perspective of Education of Pakistan Teaching</td>
<td>512</td>
<td>14632</td>
<td>30.99</td>
<td>32573</td>
<td>69.01</td>
<td>47205</td>
</tr>
<tr>
<td>2</td>
<td>Studies</td>
<td>517</td>
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<td>Islam, Pakistan and Modern world</td>
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### Annexure-7: Table 7
Gender Wise, Level Wise Course Enrollment of M.Ed (Special Education) for the Year 2004 of AIOU

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<th>Female</th>
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<td>Educational Psychology Perspectives of Special</td>
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<td>Education Handicapped persons in community</td>
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<td>46.15</td>
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<td>Perspectives of Special Handicapped persons in</td>
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<td>53.44</td>
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<td>General introduction of Hearing impairment</td>
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<td>38.46</td>
<td>40</td>
<td>61.54</td>
<td>65</td>
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<td>Psychology of deafness and child development</td>
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Gender Wise, Level Wise Course Enrollment of M.Ed Distance and Non-Formal Education for the Year 2004 of AIOU

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<th>S.No</th>
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<td>Educational research</td>
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<td>61</td>
<td>43.57</td>
<td>79</td>
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<td>Curriculum Development and Instruction</td>
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<td>79</td>
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<td>Broadcast Media in DNFE</td>
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### Annexure -9: Table 9
Gender Wise, Level Wise Course Enrollment of M.Sc Pakistan Studies for the Year 2004 of AIOU

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<th>S.No</th>
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<th>Female</th>
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<td>Geography of Pakistan</td>
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<td>561</td>
<td>55.99</td>
<td>100</td>
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<td>Pakistan Languages and Literature</td>
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<td>46.99</td>
<td>414</td>
<td>53.01</td>
<td>781</td>
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<td>Economic Development in Pakistan</td>
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<td>Pakistani Society and culture</td>
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<td>203</td>
<td>55.77</td>
<td>364</td>
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<td>Foreign policy of Pakistan</td>
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<td>157</td>
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<td>202</td>
<td>56.2</td>
<td>359</td>
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<td>618</td>
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<td>Research Methods</td>
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<td>Social Change</td>
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<td>142</td>
<td>43.16</td>
<td>187</td>
<td>56.84</td>
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<td>33.91</td>
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### Annexure-10: Table 10
Gender Wise, Level Wise Course Enrollment of M.A Islamic Studies for the Year 2004 of AIOU

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<th>S.No</th>
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<td>309</td>
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<td>Al-Hadith</td>
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<td>513</td>
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<td>Islamic Fiqh</td>
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Average: 30.88 Male, 69.12 Female

### Annexure-11: Table 11
Gender Wise, Level Wise Course Enrollment of M.A Urdu for the Year 2004 of AIOU

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<td>Urdu Criticism</td>
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<td>71</td>
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<td>Urdu Poetry</td>
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<td>49</td>
<td>40.83</td>
<td>71</td>
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Average: 35.52 Male, 64.47 Female

### Annexure-12: Table 12
Gender Wise, Level Wise Course Enrollment of M.A (Education Planning and Management) for the Year 2004 of AIOU

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<td>Plan implementation and Educational management</td>
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<td>Female</td>
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Annexure-14: Table 14
Gender Wise, Level Wise Course Enrollment of M.Phil Economics for the Year 2004 of AIOU

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Annexure-13: Table 13
Gender Wise, Level Wise Course Enrollment of M.A (Secondary Teacher Education) for the Year 2004 of AIOU
### Annexure -15: Table 15
Gender Wise, Level Wise Course Enrollment of M.Phil Food and Nutrition for the Year 2004 of AIOU

<table>
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<th>S.No</th>
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<th>Female</th>
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<td>00</td>
<td>3</td>
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### Annexure -16: Table 16
Gender Wise, Level Wise Course Enrollment of Ph.D Chemistry for the Year 2004 of AIOU

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INCREASING TEACHER QUANTITY AND QUALITY USING SCHOOL-BASED ODL INSTRUCTIONAL DELIVERY MODE: A CASE STUDY OF TEACHER TRAINING AT EGERTON UNIVERSITY

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Abstract
Kenya is a signatory to the Education for All (EFA) Declaration, which sets specific targets to be fulfilled by all member countries by 2015. Towards the realisation of the said targets, the Kenyan government joined other African countries in declaring primary education free for those eligible starting from January 2003. This move has prompted an unprecedented demand for education across the country, and gender lines. Not surprising, the move has elicited numerous challenges, notably inadequacies with teachers, books, infrastructure and related facilities. At the same time the Kenyan government has continued to re-examine the primary school curriculum with a view to making it responsive to the societal values and objectives. These dynamics call for support and contribution from public and related institutions, especially in terms of human resource (teacher) training, as well as professional advice that is critically required for the attainment of the targets. It is in view of this challenge that Egerton University, alongside other public universities in Kenya, embarked on a programme to upgrade the knowledge and skills of primary school teachers. This paper, based on a desk review of experiences and policy documentation, describes the approach that has been used by this institution in training of hundreds of primary school teachers, who under normal circumstances may have experienced serious difficulties not only in accessing but eventually acquiring university education and degrees. The approach is christened “school-based”, since the students (primary school teachers) use their school holiday time to pursue their studies in the science languages, and humanities. This is an innovative approach to ODL, a kind of in-service/continuing education that works to the multiple advantages of the learners, the University, the Kenyan government, and the larger community. It is a model worth emulating by countries that are pressed with inadequacies of both capital and human resources, but with targets such as EFA to realise.

Key words: Education For All, Distance Education, Human Resources, quality education,

ACCROISSEMENT DE LA QUANTITE ET AMELIORATION DE LA QUALITE DES ENSEIGNANTS A L’AIDE DE L’ENSEIGNEMENT A DISTANCE AU SEIN D’ETABLISSEMENTS : ETUDE DU CAS DE LA FORMATION D’ENSEIGNANTS A EGERTON UNIVERSITY

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Résumé
Le Kenya a signé la Déclaration sur l’Education pour tous (EFA), qui fixe des objectifs spécifiques à tous les pays membres d’ici 2015. Pour la réalisation desdits objectifs, le gouvernement kenyan a, comme les autres pays africains, déclaré la gratuité de l’enseignement primaire à compter de janvier 2003. Cette décision a provoqué une demande sans précédent dans tout le pays et de la part des deux genres. Comme on devait s’y attendre, elle a soulevé de nombreuses difficultés, notamment l’insuffisance du nombre d’enseignants, le manque d’ouvrages, d’infrastructures et autres équipements. Au même moment, le gouvernement kényan a continué à réviser les programmes de l’enseignement primaire en vue de les adapter aux valeurs et aux objectifs de la société. Cette dynamique exige le soutien et la contribution des organismes publics et connexes, surtout en termes de formation de ressources humaines (enseignants) et de conseils professionnels très nécessaires à la réalisation des objectifs. C’est au vu de ces difficultés que Egerton University, en collaboration avec d’autres universités publiques au Kenya, a lancé un programme d’amélioration des connaissances et des compétences des enseignants du primaire. Ce papier, fondé sur une analyse des expériences et des politiques, essaie de décrire l’approche utilisée par cette institution pour former des centaines d’enseignants du primaire qui, dans des circonstances normales, auraient pu connaître de sérieuses difficultés pour avoir accès à l’enseignement supérieur et obtenir des licences. On dit que l’approche se passe “au sein des établissements” parce que les étudiants (les enseignants du primaire) consacrent leurs vacances à ces études en sciences, langues et lettres. Il s’agit d’une approche innovante en enseignement à distance, une sorte de formation sur le tas qui profite, à maints égards, aux apprenants, à l’Université, au gouvernement kényan et à la communauté en général. C’est un modèle que l’on peut conseiller aux pays souffrant du manque de fonds et de ressources.
Background and Introduction

Socio-economic progress and socio-cultural development all over the world has, and continues to depend upon education (Teferra and Skauge). The important role that education plays in the process of socio-economic and socio-cultural development has been further catapulted by what has been referred to as the “knowledge era”. Evidence suggests that the said importance has been well embraced by the developed and with increasing vigour by the “emerging economies”. The same, however, cannot be said about Africa, which by all indications continues to grapple with multifarious problems which particularly confound its education systems.

A critical link in the education-development nexus and more specifically the transition between basic and higher education and related research is teacher education. According to Teferra (2002) teacher education lies at the heart of all development schemes. More than any other sector, teacher education has been known to play a critical role in poverty reduction, economic progress and social and cultural development. Teachers also play a key part in the fight against some of the emerging problems in our times, namely HIV/AIDS and environmental degradation. It is thus not surprising that UNESCO’s Education for All (EFA), UN’s Millennium Development Initiatives, NEPAD, the Commission for Africa, development partners, funding and monetary institutions all affirm the critical importance of education and the role played by teachers.

More than any other stakeholder, teachers play a vital role in the education-led development process. This role was accurately captured by the UN Secretary, Kofi Annan in his inaugural re-launching remarks during the Partnership for Higher Education in Africa in September 2006. Said Annan:

“...we need to train teachers and build up research capacity; we need to strengthen open universities and distance learning programmes. And we need to ensure that African institutions have access to the latest technologies...”

Whilst the vital importance that teachers play has been well recognised, teacher education has continued to be treated, in the language of (Teferra and Skauge, 2002), as “a step-child” of the education sector. The actions taken so far in terms of educational research, knowledge production and publication on teacher education have been poor. More importantly, teacher education has not attracted adequate policy attention commensurate with its importance in the development process.

These challenges, however, do not and should not detract us from pursuing the goal of increasing the quantity and quality of teachers. This is because teachers as shown above are central to the socio-economic transformation that our nations so desperately need. Dladla and Moon (2002) present two interrelated arguments: on the one hand the nature and quality of teacher education and training is a key element in the expansion of educational systems needed to achieve universal primary education (UPE). The second argument is that existing institutions of teacher education mostly created in the mid years of the nineteenth century will be unable to meet the needs of the twenty first century. These arguments hold ground for virtually every country in sub-Saharan Africa, and suggest radical changes in the training of teachers.

It is thus clear that there is an urgent need to increase the supply of adequate numbers of quality teachers required to provide quality education in Africa. This noble objective is, however, faced with serious challenges. According to Anamuah-Mensah and Erinosho (2002), these include but are not restricted to the following. First, is the tremendous upsurge in school enrollment since the 1990s following the global declaration on “Education for All” and the Millennium Development Goals, and the related adoption of the policy of Universal Primary Education (UPE).

Second, teacher numbers across most sub-Saharan countries are generally too low, and pupil-
teacher ratios very high (for instance, the median are 43 in SSA in comparison to 14 in developed countries). In addition, education systems face the problem of inadequate teacher qualifications and training. UNESCO (2000) argues instance, that large proportions of primary school teachers in developing countries lack adequate academic qualifications, training and mastery of content.

Inadequacies in teacher numbers is further compounded by the high turnover which is occasioned and exacerbated by the increasing migration of teachers to more lucrative jobs, and the impact of HIV/AIDS which has taken heavy toll on the teaching workforce. Estimates indicate that 860,000 pupils in SSA lost their teachers to HIV/AIDS in 1999, and that 260,000 teachers could be lost to the pandemic in the present decade (UNICEF, 2000).

It is further argued that budgets in many developing countries have not adequately responded to these trends in terms of increasing allocations commensurate with expansion in teacher training in such a manner as to match and/or cope with schools expansion. Moreover, lack of resources has constrained untrained teachers in terms of allowing them time off their teaching schedules for training.

What therefore is the way forward given the above scenario? In a paper “Teacher Education Beyond University Four Walls” Anamuah-Mensah and Erinsho (2002) argue that if Africa is to meet the challenge in the supply of adequate teachers required to provide quality education for all children, then it must emphasize a shift in the conventional approaches to teacher training. The authors suggest moving the university out of its four walls to reach larger audience. Open and distance education offers the way out for teachers to receive higher education and/or upgrading their professional status as well as a flexible pathway to teacher training without causing interruptions in the school system. One approach seems to be attractive across many countries in Africa is the “school-based”.

In corroboration, Dladla and Moon (2002) argue that school-based is essential for all teachers. The unqualified and under qualified clearly need training opportunities. They argue further that the qualified need career-long opportunities, need to understand how to implement the new curriculum policies being pursued by most countries. Indeed, in the primary sector, the increasing emphasis on literacy, numeracy and general life skills is making new demands on teachers. In this regard, they suggest key elements must be included:

- The need for a clear articulation of the expectations of training with a clear focus on the improvement of classroom practice.
- School-based support from more experienced staff.
- Clear assessment and quality assurance structures so the teachers know what they have to do and the system is self-monitoring of effectiveness.
- Material resource support that explicitly guide teachers in trying out and experimenting with improved strategies within the classroom.
- School and principal guidance to ensure that teacher training contributes not just to individual performance but to school improvement as a whole.

The Challenge of Education in Kenya

Like in other countries, Kenya considers education training as fundamental to the success of its overall development strategy (RoK, 2005). The long-term objective of the government is to provide every Kenyan with basic quality education and training. Further, education aims at enhancing the ability of Kenyans to preserve and utilise the environment for productive gain and sustainable livelihoods. In addition, the development of quality human resource is central to the attainment of national goals for industrial development. Moreover, the realisation of universal access to basic education and training ensures access to education and training for all children. Education is also seen as a requirement for the development and protection of democratic institutions and human rights.
These objectives have been underscored by education policies enunciated through Commissions, Committees and Task Forces established by the Kenyan government from 1964; a year after independence through to 2000 (c.f. The Ominde Report, 1964; The Gathachi Report, 1976; The Mackay Report, 1981; The Kamunge Report, 1988; The Koech Report, 2000). The thread that runs through these reports is the desire to have education playing specific and concrete functions towards societal transformation. These reports underscore the core values of education for national unity, human resource development and economic and social transformation.

The current policy thrust in education in Kenya is to achieve EFA in order to give every Kenyan the right to education and training. It is the government’s expectation that this goal will be achieved through the provision of an all-inclusivity education which is accessible and relevant to Kenyans. This policy goal is in tandem with the Economic Recovery Strategy (ERS). The latter is a framework that provides a rationale for major reforms in the current education system in order to enable all Kenyans have access to quality lifelong education and training.

In pursuit of EFA, the Narc government in 2003 declared primary education free starting with standard one. This move ushered in tremendous hope especially among the poor households whose children had been closed out of formal education given the high cost of schooling. In doing this, the Kenya government was signalling its intent to abide by the declaration it had signed against the backdrop of the EFA, and the Millennium Development Goals. However, as it has turned out to be, this decision has ushered in a host of challenges, not least of which are: inadequate space and facilities, inadequate teacher to cope with increased pupil numbers, insufficient learner support. The combined effect of these problems has been a decline in the quality of learning, especially among public primary schools where these problems have been most felt.

The Kenyan government is well aware of these challenges (RoK, 2005 p.12). It is clearly admitted here that “the sector (education) still faces major challenges especially access, equity, quality, relevance, efficiency in the management of education resources, cost and financing of education, gender and regional disparities, and least teacher quality and teacher utilisation.

Part of the solution to the challenges mentioned is the provision of Open and Distance Learning programmes. About fifty thousand secondary school Leavers qualify for university admission annually in Kenya. However, public universities admit about ten thousand students. A similar number joins private universities, which however experience serious limitations in physical facilities such as laboratories, capacity lecture halls and in some cases accommodation. Admission into distance learning programmes is not subject to these limitations and would hence expand access to higher education at a more affordable cost compared to residential programmes.

In the particular case of teacher education, distance learning has the potential to raise the number of teachers trained annually and thus contribute to raising the number of qualified teachers desperately needed. This also provides an alternative pathway to initial teacher education and would improve the quality and access to education. These suggestions are of course underpinned by appropriate investments by universities in desirable and relevant technologies such as elearning as well as other media teaching approaches including print and audio-visual to support distance learning programmes.

It is in the context of the said limitations that initiative by The African Development Bank (ADB) is most welcome. The Bank is in the process of funding Teacher Education through Open, Distance and eLearning (ODEL) in 10 African countries, Kenya included. The objective is to enhance the capacity of teachers in the use of Information Communication Technology (ICT) in the teaching and learning of mathematics and science. Distance learning education programmes are a panacea to the challenges facing education in Africa today and in the future.
Teacher Education in Kenya and Experiences from Egerton University

The training of teachers in Kenya is undertaken at three different levels: Certificate; Diploma and Degree level. Teacher training programmes include pre-service, in-service and professional development of teachers at the three levels. Those qualifying at certificate level end up teaching in primary schools while those qualifying with diploma and degree are recruited to teach in secondary schools.

Currently, Kenya has twenty one (21) Public Primary Teachers' Colleges and four (4) Diploma Colleges. There are also nine (9) Private Primary Teachers' Colleges. Graduate teachers are trained in the Faculties of Education in nearly all public and some private universities.

Admission into the 2-year teacher education programmes open to students who have a pass at Kenya Certificate Secondary Education (KCSE). Trainees are exposed to all the academic subjects taught in primary schools and are expected to teach all of them upon successful completion of their course. Students admitted into the three (3) year Diploma and four (4) year Degree teacher education programmes, specialise in one or two teaching subjects.

Institutions that award teaching certificates and diplomas are controlled by Ministries of Education or government agencies. These institutions lack flexibility in admission criteria, teacher education curriculum design and assessment procedures. These limitations have potential to negatively impact quantity as well as the quality of teachers. University-based teacher education on the other hand is more flexible owing to the autonomy of universities in deciding on admission criteria, teacher education curriculum and assessment procedures. Undergraduate teacher education programmes take four years, Diploma take 3 years and certificate courses take 2 years in Kenya. The length of teacher education influences the supervision of student-teachers during practicum, curriculum to be covered, and the training process (Avalos, 1991).

Egerton University is one of the 7 public universities in Kenya, and a major player in the training of teachers. In the past, teacher training was focused on producing secondary school teachers. However, the accelerated demand for teachers at primary school level has prompted an increased demand for primary school teachers. This, in turn, there is the emerging concomitant requirement for quality and relevance which places demands for re-training and equipping of teacher in new content and skills.

Broadly, teacher education seeks to contribute towards the following objectives: improvement of the general educational background of trainee teachers, increase the knowledge base and broad understanding of the subject matter of the trainee teachers, increase of the pedagogy skills, provide a deeper understanding of the pupils, improve instructional skills and thus contribute to better and effective learning. Teacher training seeks to contribute towards the development of practical skills and competencies of the trainee teachers.

These objectives are achieved through the following programmes: Bachelor of Education, Bachelor of Education (Science or Arts), Bachelor of Science in Agricultural Education and Extension, Diploma in Agricultural Education and Extension, and Postgraduate Diploma in Education (PGDE). Each of these programmes is discussed below.

Bachelor of Education (Primary Option)

This is a unique programme in Kenya in that it is the only teacher education programme that prepares graduate teachers for primary schools. The programme is designed to last for the equivalent of four (4) academic years and seeks to prepare graduate teachers for teaching at the primary school. Teacher trainees are expected to specialise in either of the following four options: Mathematics, Science and Agriculture, Language (English or Kiswahili) or Social Studies. This programme is designed to prepare an efficient and effective primary school teacher, leader and manager capable of adapting to the ever-changing environment. The programme prepares the students to think deeply in the practice of their profession and explore opportunities for further preparation.
education and training.

The programme is currently offered in a semi-distance education mode. They also cover some of the work on their own during the school term. This mode is now termed a School-Based Teacher Education Programme. The teacher trainees attend lectures (face to face) during the school holidays in April, August, and December. This school-based programme was started as a transitory phase towards launching full-fledged distance education programmes.

The College of Distance Education (CDE) is at an advanced stage in developing learning materials for this programme. Since its inception in 2002 it has attracted well over 1500 primary school teachers who hold Primary One (P1) Teaching Certificate. For the first time in Kenya, this programme allows primary school teachers to specialise in either one or two subjects. This is a most welcome departure from the traditional training in which primary teacher trainees do not have the opportunity to specialise. It is expected that such specialisation will greatly contribute towards raising the quality of education in primary schools.

Enthused by quality of the first product, the Teacher Service Commission (TSC), the major employer of teachers in the public schools, has recently recruited some of the initial crop of graduates from this programme to boost its inspection and supervisory divisions for ensuring quality in the teaching and management of schools.

Bachelor of Education (Science or Arts)

This is an undergraduate teacher education programme in which students take four years of study and specialise in two teaching subjects in either Sciences or Arts. They also study all the professional components of teacher education. These programmes equip the trainee-teachers with appropriate technical and professional knowledge and attitudes in either Sciences or Arts; thus enabling them to teach two academic subjects in secondary schools, teacher training colleges or work in the Ministry of Education Science and Technology (MOES & T) departments. Some primary school teachers with the necessary credits from KSCE are eligible for admission into this programme.

Bachelor of Science in Agricultural Education and Extension

This programme prepares teachers of agriculture in secondary schools and extension staff for a period of four years. Students study content in agriculture, basic Sciences, professional courses in education and extension. Egerton University is the one offering this degree programme in Kenya and has attracted students from many other parts of Africa. This programme equips trainees in technical and professional knowledge and attitudes in both agriculture and extension. It enables them to teach agriculture and biology in secondary schools, Institutes of Agriculture and carry out research and plan and execute extension programmes.

Diploma in Agricultural Education and Extension

The diploma programme is a three-year training that seeks to equip teacher trainees with competencies in the following areas:

(a) Teaching agriculture and biology in secondary schools and other tertiary institutions.

(b) Planning and executing Agricultural Extension Programmes.

In addition, the programme lays a foundation for those who may wish to pursue further education in Agriculture, Agricultural Education and Extension at bachelor’s level.
Postgraduate Diploma in Education (PGDE)

Students who hold a BA or B.Sc. degree and who wish to teach in secondary schools are admitted to the University's Faculty of Education and Human Resources to undertake a one-year Diploma in Education Programme. The course covers professional education courses including Educational Foundations, Educational Psychology, Educational Management, Curriculum Theory, Design and Development, Instruction and Research Methodology.

Challenges and Implications

Egerton University has been training primary and secondary school teachers on the school-based model for the past six (6) or so years. So far two cohorts of trainees have graduated and re-absorbed into the teaching or administrative echelons of the Ministry of Education, Science and Technology. In this section we examine the experiences gained and the challenges for the future.

We observe in the first instance that if well coordinated the school-based model can significantly contribute towards increase in the quantity and quality of teachers. It is important to note that there is a large pool from which to recruit potential trainees. Many of these ended up training at PI Certificate level mainly because of the limited space in both public and private universities. The response from primary school teachers desirous of increasing their knowledge and skills is enormous. This is fueled partly by the desire for university education, as much as better remuneration and better conditions of service for those who successfully go through degree work.

Having stated this, it is noted that for the time of its existence, the school-based programme has tended to rely rather too heavily on the model and structures used in the traditional pre-service teacher training approaches (Dladla and Moon, 2002) instance, translating a 45-credit hour course into a school-based model has presented a number of logistical problems. Attempts to overcome this hurdle at Egerton have included compulsory and voluntary consultations as well as take-home assignments to make up for the “lost” time.

It is further observed that the knowledge that teachers bring in from their teaching experiences is not adequately incorporated in the planning and design of courses they undertake in their university training. Instead, there has been a tendency for universities, Egerton included, to indiscriminately apply their conventional university-based courses to school-based courses. Trainee teachers have enormous experience that should be recognised and built upon at the university level.

Another challenge relates to the relevance of the materials used for teaching. Far too often, educational theory or subject matter is taught without making it meaningful to the daily task of the teacher. This is another opportunity lost in building upon the teachers’ experience and increasing the relevance of the programme.

Further, it is observed that there have not been enough efforts geared towards increasing the range of media choices available for training teachertrainees associated with ICT have precluded the use of computer-based media in increasing and improving on the quality of teaching. According to Filip (2000), 53 countries in Africa have access to the internet but with confinement to the capital cities. The Africa ratio of 1:5,000 internet users compares poorly to the 1:40 worldwide ratio, 1:6 ratio in Europe and North America. Moreover, the average total cost of using a local dial-up internet account for five hours a month in Africa is about $ 60 without telephone rental. Internet Service provider (ISP) charges vary greatly between $ 10 and $100 per month reflecting different levels of maturity of e-markets, the presence or absence of competition, varying tariff policies, and differential policies on access to international

Conclusions

There is no doubt that the school-based model represents an innovative approach in using limited resources to contribute towards increased numbers of teachers and in raising the quality of their
training. Egerton University and other universities keen on training teachers using this model will do well to seriously consider these challenges as they plan for the future. In designing the curriculum for the primary school teacher serious efforts should be made in incorporating the knowledge, skills and experiences of the trainee teacher. In addition, the training will greatly benefit from use of valuable learning materials available on the internet. Universities should therefore work closely with relevant government ministries and private sector organisations to make available affordable and reliable internet services to the trainee teachers.

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Anamuah-Mensah and Erinosho (2002). “Teacher Education Beyond University Four Walls”


AN APPRAISAL OF ODL MODEL FOR PREPARING SCIENCE AND LANGUAGE TEACHERS IN NIGERIA.

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Abstract

Open and Distance Learning (ODL) Programme is a very important growth point in teacher education in terms of access, flexibility, lifelong learning, support service, learner-centered methods, quality assurance and appropriate use of variety of media. Research attempts to appraise the Open and Distance Learning models for preparing science and language teachers in institutions of higher education in Nigeria vis-à-vis the National University Commission’s minimum standards. Using a qualitative and quantitative approach in data sourcing, sixty facilitators and thirty students from three universities defined as Univ-A, Univ-B, and Univ-C were purposely selected for the study. Data analysis involved simple percentages and frequencies. Findings revealed discrepancies in all areas of implementation in science and language teacher preparation in ODL. Though Univ-A has made some achievement in the areas of research awareness, increased student population and well-accredited programme, Univ-B is sustained with some application of media technologies and manageable student size while Univ-C is striving to exist amidst partial accreditation. The need for a largely technology-driven and integrated ODL science and language teacher preparation programme is called into play. More importantly, the study recommended that dual mode higher institutions in Nigeria need to be repositioned, re-energised and re-sustained to face the challenges of best practices in ODL teaching and learning in the 21st century.

Keywords:

Open and distance learning, Teacher preparation, Implementation, Re-positioned, Lifelong learning, Technology-driven.
Introduction

In the last decade, the issue of capacity building aimed at enhancing the abilities and capabilities of teachers has drawn attention worldwide. The teacher thus remains the main actor in the successful implementation of any curriculum, be it science or language. Adegoke (2003) observes that out of the whole education system, pre-school, primary, secondary, and tertiary, the teacher has a crucial role to play bringing about true learning for empowerment, which transcends mere acquisition of knowledge. Besides, global challenges in terms of the digital age and current technological developments, has created new demands and increased investments requiring the maintenance of critical pedagogy through best possible classroom practices. As Obebe (2005:40) succinctly puts it:

“In the new century, the 21st century, the capacity to educate will depend upon our ability to attract, train, and train competent, committed and caring teachers.”

Much of literature such as (Ajeyalemi, 2002; Bamide, 2003; Owhotu, 2007) continue to express the view that the process of global modernity, innovations and day to day realities have prompted the need for a rethinking on how teacher preparation should be carried out in meeting societal goals in a more sustainable manner. Delors report to UNESCO (1996) focusing on the four pillars constituting the principles of qualitative education in teacher preparation in the 21st century as learning to know; learning to do; learning to be; learning to live together. Unfortunately, many communities around the world lack quality education programmes needed to build a sound foundation for a more peaceful and prosperous future. This paper therefore aims to appraise ODL programmes in Nigerian higher education in terms of science and language teacher preparation.

Some related works on open distance learning

In discussing some of the conceptions of ODL, (Baehrd, 1998; Searcy et al., 1993; Aderinoye, 2002; Adesina, 2002; Darkwa & Mazuko, 2000) and others have offered considerations in learning knowledge in ODL in terms of definition, programme design, course development, learner support services lifelong learning and online education. Katz (1998) suggests that distance learning frees the learner from time and place and meets his or her specific needs and expectations. According to him, distance learning is best administered in an institution referred to as Open University.

Idrus and Lateh (2000) view distance education as an educational process in which a significant teaching is conducted to someone removed in space and/or time from the learner. Open learning on the other hand is viewed as an organised activity based on the use of teaching materials, in which the constraints on study are minimised in terms of either access or of time, place, method of study, or a combination of these. Further expanding the conception of ODL, Gabriel (2000) cited (Ayidi & Ikem, 2005) argues that distance learning is not synonymous with elearning. According to her, distance learning is a generic term that describes any form of learning other than the traditional instructor-led face to face mode. It includes correspondence courses delivered through the mail as well as electronically.
In discussing the potentials of ODL, Ayadi and Adeyeye (2005) assert that African academics and opinion leaders can use open and distance education outfits and outlets to help solve the educational problems currently confronting and threatening the future of the African continent. They confirmed that establishing and sustaining distance partnerships will assist in fostering the actualisation of the much needed jump-starting of the ailing teaching and learning enterprise in Africa. They noted that this could ultimately, and in many ways, a prescription for major African illness-poverty.

Darkwa and Mazibuko (2000) acclaim that the majority of distance learners in Nigeria are goal-oriented working adults seeking degree or specialised training. ODL therefore serves learners whose life circumstances may not allow traditional classroom setting. Anakwe (1999) agrees with Darkwa and Mazibuko when he suggests that Open University system can help expand opportunities to learners through open learning. According to him, distance learning/virtual learning, as such, today’s university is not restricted to specific time, place, number and rigid programme.

In the area of technologies utilised in ODL instruction, Brey (1993) reports that the two primary forms of communication utilised to deliver instruction in ODL education are synchronous and asynchronous. Distance learning based on asynchronous methods uses recorded instructional materials. These types of materials allow learners to be separated in time and distance from the delivery of instruction. Thus, telecommunication systems such as broadcast television electronically stored media such as video conferencing, audio, CD-ROM, cassette recordings and other curriculum resources are among technologies utilised in asynchronous communication. On the other hand, distance education programmes of a synchronous nature use technologies that offer live interactive instruction. The system interactive because the instructor can see and hear the students at all sites. The students are also able to see and hear one another as well as their instructor (Blakesley & Zahn, 2001).

ODL initiatives in Nigeria

Developing nations like South Africa, Botswana, Tanzania, Kenya, Ghana to name a few have engaged in initiatives and policies to maximise and explore the potentials of ODL as alternate avenues to serve the educational needs of non traditional students and working adults. Nigeria is not an exception. The history of ODL in Nigeria is legendary, spanning from the early correspondence initiatives like that of the University of London, etc. and subsequent formal establishment of the Open Studies Unit (COSU) in 1973-74 academic session. Correspondence Open Studies Institute (COSU) was upgraded to an Institute in April 1983 and then became Correspondence and Open Studies Institute (COSIT) in 1997. COSIT was renamed Distance Learning Institute (DLI). The Universities of Ibadan and Abuja operate open distance learning programmes. The National Open University of Nigeria is the only exclusively dedicated Open University in Nigeria. Some other Nigerian Universities are already showing interest in open distance learning.

The open and distance learning programmes in Nigerian Universities are also subject to the National Universities Commission accreditation requirements. All in all, distance education enrolment at universities in
Nigeria has witnessed phenomenal growth over the last decade suggesting that ODL continues to offer an alternative to learner individual circumstances and educational needs. Against this background, this study attempts to appraise the actual operations of ODL teacher preparation programmes as means of describing, understanding, as well as making judgments and decisions related to its appropriateness and effectiveness. A curriculum that is worth its salt should be relevant, balanced, timely, responsive, flexible, and competency based. (Adenok 1987).

Theoretical framework

The National Universities Commission Programme Evaluation Model for Open Distance Learning will be adopted. This model useful in explaining the present challenges facing ODL teacher preparation in Nigerian higher education. The theoretical components of this model comprise the various aspects of distance education terms of:

- Philosophy, vision, mission and objectives
- Admission requirements
- Curriculum design
- Course Materials
- Staffing
- Learner Support
- Administration
- Internal Efficiency
- External Efficiency
- Students Welfare and Counseling
- Funding Evaluation
- Quality assurance
- Use of Information and Communication Technologies

Statement of the problem

Empirical evidence by Bamidele (2003); Dibiase (2000); Ayade and Ikem (2005) suggest that there has been a perceptible decline in the quality of teacher preparation in ODL in Nigeria over the past decade. They claimed that there exists a dangerous mismatch between society's investments in ODL teacher preparation and society's expectations from it. This view is further echoed by Obebe (2005:46) who confirms that teacher preparation for schools in subject areas such as Sciences, Arts and Social Sciences should be looked into. Such informed statements give strong indication that a call for the assessment of ODL programmes in Nigerian higher education is not only imperative but urgent. More so, the acquisition and sustainability of knowledge along with learning skills and attitudes in Science and Language preparation of crucial importance to technological advancement and national development. To the best of our knowledge, it is important to note that a comprehensive appraisal of teacher preparation in ODL programmes with identical focus has not been undertaken in Nigeria.
Purpose of the study

The purpose of this study is to:

Appraise the extent to which effective implementation of Science and Language teacher preparation has been achieved in Nigerian universities through distance learning programmes.

RESEARCH QUESTIONS

The research questions which this study addressed are:

In broad terms:

a. How effective is the implementation of teacher preparation in ODL programme based on NUC standards?

More specifically:

a) Will there be a significant difference in NUC standardization and ODL Science and Language teacher preparation programmes?

b) How adequate are the curricula contents in ODL Science and Language teacher programmes in Nigerian universities?

c) How adequate are the quantity and quality of resources (human and material) in use in ODL teacher preparation?

d) What are the most crucial constraints to effective implementation of ODL teacher preparation?

e) How adequate are the methods of ODL teacher preparation in Nigerian universities?

Methodology

The study utilised a qualitative approach in data sourcing, but also used interpretative perspective in the study analysis (Berg, 1989). Demographically, there were thirteen universities in Nigeria operating full distance learning programme and those constituted the population of the study. The study focused on the universities that have a fairly similar type of implementation structure i.e. the dual mode universities. Out of the thirteen universities, three were purposely selected for detailed survey as follows:

- University of Lagos, Lagos referred to as (Univ-A)
- University of Ibadan, Ibadan referred to as (Univ-B)
- University of Abuja, Abuja referred to as (Univ-C)

The first two universities are first generation universities while the last one is a third generation university in the country. Apart from the long history of operating ODL in these two first generation universities, they have the largest number of students' enrollment in the country and the largest staff strength. The University of Abuja was included in this study to provide comparative data on new and old universities.
Sample and sampling technique

The researchers used a stratified random sampling technique in selecting thirty course facilitators/staff in each of the named universities during the 2007/2008 session. This gave a total of sixty respondents selected from three universities. The total number of students involved in the study was thirty out of which ten were randomly selected from each university. The choice of the sample was informed by the awareness of the peculiarity of problems based on location and age of the institutions. Comparisons from these divergent geographical settings will enhance the generalisation of the study to other contexts.

Instrumentation

A questionnaire designed by the researchers consisted of three sections. Section A contained demographic information. Section B contained nine sub-heading with 34 items rated on a 5 point Likert scale) ranging from strongly agree, agree, undecided, strongly disagreed, disagree. Section C consisted of two open-ended questions that related to the respondents thinking about the way forward for the teacher preparation programme. Also, secondary data were obtained from the following sources: records and documents; direct observation; in-depth interviews and focus discussions with students and principal officers from National Open University of Nigeria (NOUN) Headquarters, Lagos. These secondary data were supplemented with data from the files in selected departments and in some of the universities selected for detailed study. To collect information on the financial status of the selected universities, some selected university bursars were interviewed. Overall, in-depth interviews were conducted with the following people: directors, facilitators, some staff and students.

Reliability and validity of the Instruments

The content validity was employed to validate the items using two lecturers in English Education and two facilitators in ODL in one of the universities. The instrument was pilot tested on twenty subjects. The instrument was administered twice to the respondents within a space of two weeks interval in between the administration. The co-efficient obtained gave a scale of 0.82 which was considered to be reasonably stable overtime hence, acceptable for use in the study.

Procedure

There were five stages in the study:

- Initial visits to institutions to establish rapport
- Subsequent visits to administer questionnaire, interviews to the sample.
- General discussions.
- Transcription of recorded information for comparative analysis.
- Observation of the classes to determine the quality of infrastructure.

It should be noted that there was a lot of resistance and lack of support in collecting the data in some universities.
Data analysis

Both quantitative and qualitative data were collected. The responses from sixty facilitators from three universities were dated and analysed accordingly using simple percentages and frequencies.

Results

Table 1 Comparison of the ratings of the philosophy and objectives of ODL in the universities

<table>
<thead>
<tr>
<th>S/N</th>
<th>Philosophy &amp; Objectives of ODL</th>
<th>UNIV- A</th>
<th>UNIV- B</th>
<th>UNIV- C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>P  U</td>
<td>N  P</td>
<td>U  P</td>
</tr>
<tr>
<td>1</td>
<td>Philosophy and vision (100%)</td>
<td>20</td>
<td>20</td>
<td>20 (100%)</td>
</tr>
<tr>
<td></td>
<td>well understood and well defined</td>
<td>-</td>
<td>-</td>
<td>(100%)</td>
</tr>
<tr>
<td>2</td>
<td>Mission and object (10%)</td>
<td>18</td>
<td>1 (50%)</td>
<td>1 (5%)</td>
</tr>
<tr>
<td></td>
<td>clearly understood</td>
<td></td>
<td></td>
<td>(100%)</td>
</tr>
<tr>
<td>3</td>
<td>Philosophy, mission, vision and objective of ODL</td>
<td>20</td>
<td>20</td>
<td>16 (100%)</td>
</tr>
<tr>
<td></td>
<td>are attainable within the time</td>
<td></td>
<td></td>
<td>(100%)</td>
</tr>
</tbody>
</table>

NOTE:

P = Positive rating     N = Negative rating     U = Undecided

* Percentages in brackets

Table 1 above shows that the philosophy, vision, mission and objectives of ODL are clearly defined and understood by all stakeholders in the three universities sampled. The table showed that the three universities rated all the items high with only 20% at Univ-C having a divergent opinion about the clarity of the philosophy and objectives of ODL programme.
Table 2 comparison of admission requirements for the ODL teacher preparation programme

<table>
<thead>
<tr>
<th>S/N</th>
<th>Admission Requirements</th>
<th>UNIV-A</th>
<th>UNIV-B</th>
<th>UNIV-C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>P  U  N</td>
<td>P  U  N</td>
<td>P  U  N</td>
</tr>
<tr>
<td>1</td>
<td>Requirement clearly defined</td>
<td>15 (75%) 3 (15%) 2 (10%)</td>
<td>17 (85%) 3 (15%)</td>
<td>- 3 (15%)</td>
</tr>
<tr>
<td>2</td>
<td>Allow learners to be separated the time and distance</td>
<td>12 (60%) 8 (50%)</td>
<td>- (85%) 3 (15%)</td>
<td>20 (100%)</td>
</tr>
<tr>
<td>3</td>
<td>Oriented towards working adult</td>
<td>16 (80%) 3 (15%) 1 (5%)</td>
<td>14 (70%) 4 (20%)</td>
<td>2 (20%) 19 (95%) 1 (5%)</td>
</tr>
<tr>
<td>4</td>
<td>Helping to solve Nigeria educational problems</td>
<td>10 (50%) 3 (15%) 7 (35%)</td>
<td>8 (40%) 6 (30%) 6 (30%)</td>
<td>16 (80%) 4 (20%)</td>
</tr>
</tbody>
</table>

Table 2 shows the frequencies and percentages of the ratings of the admission requirements for students for ODL teacher preparation programme.

Research Question (a)

Will there be a significant difference in NUC standardisation and ODL science and language teacher preparation programmes?

To answer research question (a), results in Table 2 were used. The results show that all the three universities rated the entry requirements as adequate as each of the items recorded at least 50% positive rating by the respondents.

Ratings of item 4 positively at both Univ-A and Univ-B are not as high as that of Univ-C depicting that the respondents do not subscribe totally that standardisation by NUC will help solve Nigeria educational problem.
Table 3 Comparison of the ratings of the adequacy of the curriculum of ODL by the universities

<table>
<thead>
<tr>
<th>Item S/N</th>
<th>Rating of ODL Curriculum</th>
<th>UNIV-A</th>
<th>UNIV-B</th>
<th>UNIV-C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ODL curriculum too restricted</td>
<td>18 (50%)</td>
<td>3 (15%)</td>
<td>16 (80%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 (40%)</td>
<td>1 (5%)</td>
<td>5 (25%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 (10%)</td>
<td>3 (15%)</td>
<td>8 (40%)</td>
</tr>
<tr>
<td>2</td>
<td>Philosophical principle behind ODL programme outdated</td>
<td>9 (45%)</td>
<td>4 (20%)</td>
<td>14 (70%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7 (35%)</td>
<td>2 (10%)</td>
<td>4 (20%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 (20%)</td>
<td>14 (70%)</td>
<td>8 (40%)</td>
</tr>
<tr>
<td>3</td>
<td>Curriculum is largely technology-driven</td>
<td>11 (55%)</td>
<td>5 (25%)</td>
<td>12 (60%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 (20%)</td>
<td>5 (25%)</td>
<td>7 (35%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 (5%)</td>
<td>12 (60%)</td>
<td>2 (10%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7 (35%)</td>
<td>8 (40%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10 (50%)</td>
<td></td>
</tr>
</tbody>
</table>

Table 3 shows in percentages and frequencies the opinions of the respondents from the three universities on the adequacy of the curriculum of ODL.

Research Question (b): How adequate are the curricula contents in ODL science and language teacher programmes in Nigerian universities?

Results in Table 3 were used to answer research question (b). Table 3 showed that the opinions of the respondents as regards the adequacy of the curriculum differ from one university to the other. 50% of the respondents in Univ-A rated the curriculum as too restricted while the majority of respondents in Univ-B, i.e. 80% think otherwise while the respondents in Univ-C were mainly indifferent on the restrictiveness of the curriculum. Similarly, while the majority of the respondents (45%) from Univ-C believed that the philosophical principles behind the ODL programme are adequate, the respondents from Univ-B and Univ-C pooled 70% and 40% respectively in support of the principles as it is currently. The opinions of respondents on item 3 in Table 3 were also divergent. While 55% of Univ-A respondents agreed that the curriculum is largely technology driven, 50% of respondents from Univ-C agreed and 60% of Univ-B respondents were not certain. It can therefore be concluded from results in Table 3 that the adequacy of the ODL curriculum in science and language teacher programmes in Nigerian universities is contentious and viewed differently by individual university.
Table 4 Rating of adequacy of ODL course materials

<table>
<thead>
<tr>
<th>Item</th>
<th>Rating of Course Materials</th>
<th>UNIV-A</th>
<th>UNIV-B</th>
<th>UNIV-C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Institution provided adequate materials for ODL learners</td>
<td>11 (55%)</td>
<td>6 (30%)</td>
<td>10 (50%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 (25%)</td>
<td>4 (20%)</td>
<td>5 (25%)</td>
</tr>
<tr>
<td>2</td>
<td>Textbooks, CD-Rom, Audio-video tapes &amp; compact discs are designed by the institution</td>
<td>19 (95%)</td>
<td>1 (5%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 (20%)</td>
<td>16 (80%)</td>
<td>19 (95%)</td>
</tr>
<tr>
<td>3</td>
<td>ODL delivers lectures through radio and television with study materials from audio, radio tapes and discs.</td>
<td>20 (100%)</td>
<td>1 (5%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 (15%)</td>
<td>17 (85%)</td>
<td>19 (95%)</td>
</tr>
<tr>
<td>4</td>
<td>Recommended textual materials are not readily available.</td>
<td>19 (95%)</td>
<td>5 (25%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 (15%)</td>
<td>2 (10%)</td>
<td>5 (25%)</td>
</tr>
</tbody>
</table>

Table 4 shows the rating of ODL course materials availability in the three universities in terms of frequency and simple percentages.

From Table 4, 55% of Univ-A respondents stated that adequate text materials are available for ODL learners while respondents from Univ-B and Univ-C disagreed as the recorded 50% and 75% respectively stating that adequate materials are not available to ODL learners. Table 4 also shows that 80, 95 and 95% of the respondents from Univ-A, Univ-B and Univ-C respectively stated that the institutions do not design study packs, textbooks, CD-Rom, Audio-video tapes and compact discs for the ODL programme. It shows that the respondents were unanimous on this item that the institutions do not have inputs in designing the materials. Respondents were also unanimous in their responses to items 3 and 4 in Table 4 as shown by the corresponding high percentages. On item 3 in Table 4, it was observed that 85, 100 and 95% of Univ-A, Univ-B and Univ-C disagreed that ODL delivers lectures through radio and television using study materials from tapes interactive multimedia and discs. In a similar manner, the respondents from the three universities disagreed that recommended textual materials are readily available as depicted by 75, 95 and 75% recorded respectively by Univ-A, Univ-B and Univ-C under negative rating (N) in Table 4.
Table 5 shows the rating by respondents of the staff for ODL teacher programme in terms of frequency and percentages.

Research Question (c): How adequate are the quantity and quality of resources (human and materials) in use in ODL teacher preparation?

On the adequacy of staff for ODL programme, Table 5 shows that while 55% of Univ-A respondents said adequate numbers of staff are available, only 30% of the Univ-B respondents shared same view while those of Univ-C said there is gross inadequacy of teaching staff depicted by 65% of them opining negative rating to item 5 in Table 5. Table 5 also shows that the quality of staff is low as depicted by the high negative ratings of item 1 of 65% and 55% respectively of respondents of Univ-A and Univ-B while 55% of respondents in Univ-C were undecided. Also in Table 5, 20%, 20% and 40% of the respondents from Univ-A, Univ-B and Univ-C respectively stated that some instructors ODL teacher programme are incompetent. This presupposes that any competent instructors teach ODL programme since the percentages are low when compared to those that rated competency of staff low.

Table 5 further showed under item 3 that training programme for ODL instructors is hardly conducted. Only 25% and 10% respondents from Univ-A and Univ-B respectively agreed that periodical training for ODL instructors do take place while 50% of Univ-C respondents attested to regular training programme being carried out for ODL instructors. In Table 5 under item 4, it was observed that most of the ODL instructors in Univ-C are on part-time basis (60%) while fewer number of part-time ODL instructors is recorded for Univ-A and Univ-B were 20% and 25% respectively stated that part time ODL instructors exist. The adequacy of staff in terms of quantity and quality are not the same in ODL programme of the universities. It seems that adequacy is more pronounced in Univ-C than the other two universities.
Table 6 shows in frequencies and percentages the ratings of the methods of teaching ODL programme in the three universities.

Research Question (d): How adequate are the methods of teaching ODL in Nigerian universities?

To answer research question (d), results in Table 6 were used.

Results in Table 6 showed a similar trend throughout the six items and in all the three universities. It was observed that negative ratings (N) recorded the highest percentages in all cases.

Specifically, respondents in all the three universities observed that teachers do not use variety of methods in course delivery and that learners do not have adequate competence in the use of multi-media course delivery. Furthermore, they agreed that methods of teaching encourage life interactive instruction while student large population does not affect lectures during ODL course delivery. Respondents also unanimously stated that students are not well motivated to attend.
lectures regularly and also do not agree that learners are separated in time and distances from delivery of instructions depicted by results under items 4 and 5 in Table 6.

Table 7 Evaluation procedure of ODL programme

<table>
<thead>
<tr>
<th>Item S/N</th>
<th>Evaluation</th>
<th>UNIV-A</th>
<th>UNIV-B</th>
<th>UNIV-C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>There is provision for regular evaluation of learners programme</td>
<td>11</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>(55%)</td>
<td>(25%)</td>
<td>(65%)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>ODL programme in Science and Arts has achieved its objective</td>
<td>6</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>(30%)</td>
<td>(45%)</td>
<td>(40%)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>The present role of ODL teacher preparation requires modification to meet specific needs of learners</td>
<td>7</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>(35%)</td>
<td>(45%)</td>
<td>(35%)</td>
<td></td>
</tr>
</tbody>
</table>

Table 7 shows in terms of frequencies and percentages the rating by respondents of ODL programme. Item 1 of Table 7 shows that 55% of Univ-A respondents believed there is provision for regular evaluation of learners programme while Univ-B and Univ-C that respectively had high negative ratings of 65% and 75% signified that no provision for regular evaluation of learners of ODL programme. Table 7 equally shows that item 2 elicited similar responses from the three universities in which negative ratings of 45%, 50% and 55% were recorded. This implies that ODL programme in science and arts has not achieved objectives. Furthermore, Table 7 shows under item 3 that 35% and 25% were respectively recorded by Univ-A, Univ-B and Univ-C under positive ratings. It implies that only few respondents think that there is a need for modification of ODL teacher preparation programme as presently obtainable.
Results of the Interview

To further validate the responses from the questionnaire, ten students from each of the three Universities were interviewed. The interview was recorded on Panasonic radio/tape recorder and transcribed verbatim. The general trends of opinion of the interviewees are summarized below:

'The standard and quality of courses offered in ODL is very high. I compare very well with my colleagues in conventional university. This is why I have now registered for my Masters program'

'The major problem has to do with the facilitator. They miss a lot of lectures during the weekends only to stress us during residential. They need a balance to help us internalize the material'.

'The delay in releasing results is getting out of hand. Imagine, it took eight months for my final results to be out'.

'The authorities should look into the cost of tuition and other internal payments. It is simply outrageous. Some of us adult learners without jobs'.

'Instructional materials are scarcely available. Here is nothing like audio/video tapes, CD-ROMs, or electronic transmission materials. We use only our books and lecture materials'.

Discussion

Five research questions were raised to provide a complete picture and detailed understanding of the various aspects of Open Distance Learning in three selected conventional universities in Nigeria. The findings of the study have given a comprehensive picture and insight into how far the teacher preparation programmes have been implemented. Though the adequacy of ODL programmes in science and language education preparation in Nigerian Universities is contentious and viewed differently by the individual universities, the study clearly depicts that the goals and objectives of ODL programmes appear to be consistent but not yet fully realized. More so, the study established discrepancies in all areas of implementation in science and language teacher preparation programme in ODL. Comparatively, (Univ-A) has made a modest achievement in the areas of research awareness, increased student population and accreditation of programmes (figure).
Figure 1 Summary of panel’s report (for Univ – A)

<table>
<thead>
<tr>
<th>Total Score</th>
<th>Accounting (78.5%; Full)</th>
<th>Bus. Admin. (82.6%; Full)</th>
<th>Educ./Biology (84.4%; Full)</th>
<th>Educ./Chemistry (81.4%; Full)</th>
<th>Educ./Maths (86.4%; Full)</th>
<th>Educ./Physics (80.2%; Full)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philosophy, Vision, Mission, Prospective</td>
<td>2 (100%)</td>
<td>2 (100%)</td>
<td>2 (100%)</td>
<td>2 (100%)</td>
<td>2 (100%)</td>
<td>2 (100%)</td>
</tr>
<tr>
<td>Admission Requirements</td>
<td>4.17 (94.22%)</td>
<td>5 (100%)</td>
<td>4 (80%)</td>
<td>5 (100%)</td>
<td>4 (83%)</td>
<td></td>
</tr>
<tr>
<td>Curriculum</td>
<td>8 (80.0%)</td>
<td>10 (100%)</td>
<td>10 (100%)</td>
<td>10 (100%)</td>
<td>8 (80%)</td>
<td></td>
</tr>
<tr>
<td>Course Materials</td>
<td>*11.5 (56.8%)</td>
<td>10 (100%)</td>
<td>*10 (50%)</td>
<td>8.2 (41%)</td>
<td>9.8 (98%)</td>
<td>*10 (50%)</td>
</tr>
<tr>
<td>Evaluation</td>
<td>9.12 (91.2%)</td>
<td>*12.3 (61.5%)</td>
<td>8.1 (81%)</td>
<td>7.8 (78%)</td>
<td>10 (100%)</td>
<td>8 (80%)</td>
</tr>
<tr>
<td>Staffing</td>
<td>*75 (50.0%)</td>
<td>8.4 (84.2%)</td>
<td>8.6 (86%)</td>
<td>8.9 (99%)</td>
<td>10 (100%)</td>
<td>9 (90%)</td>
</tr>
<tr>
<td>Learner Support</td>
<td>60% and above</td>
<td>22.5 (90.0%)</td>
<td>21.97 (87.9%)</td>
<td>25 (100%)</td>
<td>25 (100%)</td>
<td>25 (100%)</td>
</tr>
<tr>
<td>Administration</td>
<td>4 (80%)</td>
<td>4.5 (90.0%)</td>
<td>4 (80%)</td>
<td>4 (80%)</td>
<td>4.08 (81.6%)</td>
<td>4.08 (81.6%)</td>
</tr>
<tr>
<td>Internal Efficiency</td>
<td>4 (80%)</td>
<td>4.0 (80%)</td>
<td>4 (80%)</td>
<td>4.10</td>
<td>3.5 (70%)</td>
<td>*3 (60%)</td>
</tr>
<tr>
<td>External Efficiency</td>
<td>2.85 (95.0%)</td>
<td>*2.57 (51.4%)</td>
<td>2.98 (88%)</td>
<td>2.4 (80%)</td>
<td>2.91 (97%)</td>
<td>*2 (67%)</td>
</tr>
<tr>
<td>Student Welfare</td>
<td>2 (100%)</td>
<td>2 (100%)</td>
<td>2 (100%)</td>
<td>2 (100%)</td>
<td>2 (100%)</td>
<td>2 (100%)</td>
</tr>
<tr>
<td>Feedback Counselling</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Funding</td>
<td>3 (100%)</td>
<td>3 (100%)</td>
<td>3 (100%)</td>
<td>3 (100%)</td>
<td>3 (100%)</td>
<td>3 (100%)</td>
</tr>
</tbody>
</table>

Univ-B is sustained with some application of medtechnologies and manageable student size, while Univ-C is striving exist amidst stressful situations.

The study also noted that students are keen to study poorly motivated by the facilitators (see table, 6 items 4&5). That view of most universities confirm that facilitators mostly attend lectures during the residential period without establishing adequate contact with them during weekends. This behavior often establishes 'neophobic conditions' (Carter, 2001) which leads to student resistance, negative attitude and poor internalization of lectures during the programme. Moreover, the demographic reality of students from diverse backgrounds demands competent staff strength to deal with the multiple needs and demands of students. In addition, it could be observed that the universities have not made adequate attempts towards the new mode of quality higher education through regular training of staff in ODL pedagogy (see table 5).

The responses of the subjects also exposed the dearth of delivery methods/materials such as interactive video, email, internet, and intranet technologies, television and radio broadcast as well as electronic transmission of multimedia materials. Yet, it has been noted that information, knowledge and technology constitute key factors for the success of distance learning delivery. Due to lack of interactive videoconferencing and interaction through the medium of the internet or intranet, it becomes difficult for facilitators to continuously monitor the overall progress of their students. This finding echoes the Prime Minister of Singapore, Goh Chok Tong's remark in 1993 that:

'The future belongs to countries whose people make most productive use of information, knowledge and technology. These are now the key to economic and educational emancipation not natural resources'.
Another dimension to this issue is the fact that the facilitators are ill-equipped to cope with the challenging demand of the current interactive distance learning systems. The scenario viewed very serious when we consider that Nigeria is still many years away from internationally accepted standard in ICT as our electricity is epileptic and cannot therefore be relied upon. Without a steady power base, the internet, the television, the radio and all other materials needed for the programme will hardly function. Besides, it is evident that systems geographically removed from the classroom where the teaching students are located often promote a high degree of cost efficiency and efficiency. Yet, surprisingly, the respondents unanimously complained about the high cost of the tuition fees which made it difficult for them to actualize their dreams. Komane and May (2001) gave evidence to ODL cost efficiency when they noted that:

None of the countries in sub-Saharan Africa have fulfilled the promise of providing education to the entire population through conventional education system. It is ironical that distance education is viewed as an appropriately cheap method of delivery. Distance education is able to provide people who have missed an education opportunity at one level or another to recapture and they have lost without necessarily going back to the classroom.

There is need to ensure that projects of this nature beyond high sounding ambitions. They have to be matched with realistic fees and workable materials. It is not an understatement to assert that most of the infrastructure are totally inadequate for the needs of the present day and age. For these institutions to be relevant and their peers in the developed world they must provide adequate management involvement and support.

Recommendations
The following recommendations are made to enhance effectiveness on ODL in Nigerian higher institutions:

1. For Nigerian universities to capture the promise of ODL, every component of the programme must be largely technology driven and integrated through computer networks. The use of the Internet should be encouraged as a means of interaction and the stakeholders. As well, there must be technical support for staff using the internet for technical purposes.

2. There is need for an in-depth understanding of contextual factors and for taking into account the urgency for mass production of study packs, CD-ROMs, soft wares, video tapes, maps and other workable materials. Implicitly thus, qualified and competent experts in handling the use of information and communication technologies should be recruited as facilitators.

3. It is important that effective management and efficient administration be considered crucial in order to ease the burden of students long waiting for the release of their results.

4. Online learning resources will not suffice if students are not supported academically, psychologically, and administratively through proper advising, tutoring, guidance and counselling and
adequate feedback. Hence, the core of dedicated distance education expertise, particularly in learner support is crucial in promoting student motivation and perseverance. High failure rates and attrition is often due to lack of learner support typified in a number of African countries, though a few institutions including the University of Namibia and the University of Eastern Cape offer examples of good practices for Nigeria to emulate in both academic and administrative support to learners.

Conclusions

This study has drawn attention to all governments and stakeholders to begin to recognise the importance of distance education and to have in place appropriate policies and strategies for promoting and funding its related activities. In particular, the study emphasises the necessity to forego hasty, arbitrary importation of programmes without taking into account all available resources – human, financial, infrastructural and technological. As long as distance learning systems of delivery in Nigeria continues to fulfill the cognitive as well as the affective needs of learners on lifelong basis, ODL teacher preparation programmes in science and language arts must be pursued with greater flexibility, proactive engagement of students and access to rich pedagogical contents and software application for optimum results. Ultimately, if the emphasis is on producing open university education graduates that will have the technical know-how to face the challenges of best practices of teaching and learning in the 21st Century, then, dual mode higher institutions need to be re-positioned, re-energised and re-sustained to compensate for past and present educational deficiencies in Nigeria.
References


PSYCHOLOGICAL PREPAREDNESS OF DISTANCE LEARNERS: IMPLICATIONS ON ACHIEVEMENT AMONG SCHOOL-BASED UNDERGRADUATE STUDENTS IN KENYA

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Abstract

Psychological preparedness represents a critical component of the process of entry into an educational programme. Among adult learners, this is compounded by the fact that re-entry into school is a major shift from their ordinary life, a distortion of regular routines, and a challenge of adjustment into school life. Among school-based learners in Kenya, empirical data is lacking with regard to their psychological preparation and eventual entry into university programmes. Thus, this study was designed to examine the extent of psychological preparedness of school-based learners and the implication of this preparation on academic performance. The data was collected from 232 school-based undergraduate students in 2 public universities in Kenya during the residential sessions of the programme. The study focused on certain variables; awareness, reasons adult learners go back to school, educational goals, career goals, challenges of the programme, and impact on academic performance. The findings of the study reveal important facts on the situation of school-based learners at entry into the programme and the impact this has in the entire learning process. The findings of the study identify gaps in the learner support systems for distance learners in public universities, and recommends how this can be improved.

Key words: Psychological preparedness, academic performance, educational programme,
Introduction

In the recent past, the school-based programme for undergraduate students was introduced in Kenya, as a mode of distance education specially tailored for teachers in employment as a sort of in-service course. According to Ansello (1982), such a programme is demand-driven, as in tandem with Maslow's theory of needs; there is an increase in the need to know. The theory emphasizes the need for self-improvement and vocational advancement. Kenyan teachers have enrolled in great numbers into the programme. The demand for school-based programme has been strengthened by certain key motivational factors, which according to Niles (1995) are the need for competition and social approval. Teachers are further driven by the need for promotion and the possibility of a higher pay upon getting an extra certificate. They also feel the need to fit in with their peers who have enrolled for the programme, probably because they will earn social approval when they become like them (Niles, 1995).

Most of the students who join the school-based programme in Kenya are adult learners. The majority of them have been working for a long time, have stable careers, have families or are in stable relationships, and have fairly stable economic status. The entry into school once again upsets the above equilibrium, and hence there is a lot of adjustment. The aspiring student needs to restructure his/her life in order to fit into the schooling environment and at the same time continue with ordinary life activities and professional progression. According to Deverthelyi (1995), adjustment of the individual into the system may be affected by situational factors, personality traits, cultural background, and gender-role orientation. For instance Myers (1986) argues that men in their mid forties may undergo the transition, which constitutes the "midlife crisis", and this may affect their adjustment to the school-based programme. At the same time there are an increasing number of modern women entering employment and the classroom in spite of the demands being made on their time (Myers, 1986).

In most cases the school-based students are teachers; this forms the basis of the programme being structured along the primary and secondary schools' calendar, so that they can attend residential sessions during the school holidays. Therefore, these students are individuals who are tuned to working through the term and having their cherished holidays every year. Joining the programme therefore means they have to forfeit their much-cherished holidays. The programme is also crowded since the students are expected to do a lot of work within a short time. This implies that most of the residential session is occupied by class work, conducting research, writing of term papers, and other forms of assignments for ordinary working time within the school term. As expected, this takes up the time teachers are supposed to be preparing lessons and apart from assignments suffering a lack of time, the competition it gives to the teachers' normal workload is very stressful. One way in which such stress can be combated is by putting in place learner support mechanisms to enhance self-directed learning skills. If inculcated at the onset of the programme, such skills will prepare the student because they will come to appreciate the support offered by instructors, and this will lead to high academic achievement (Victori, 2007).

Most of these students are used to life at home in familiar neighbourhoods with which they have established a relationship. Their lives revolve around the home and the workplace, thus shifting from this lifestyle poses a challenge with poor preparation, this may lead to stress and anxiety (Goody, 2000). The personal, psychological, career, and educational preparedness and level of adjustment are probably the key determinants of success of their academic endeavours. Most of these students are adults, and cognitively they are demonstrating ability to learn and retain new knowledge. Myers (1986) argues that despite occasional difficulties in adjusting to demands of coursework and testing, adult learners can still be successful in their academic pursuits. Driven by clearer goals and greater motivation to move up the professional ladder, they could even perform better than their younger contemporaries. According to Goody (2000), students who are not well prepared for what they are to expect may experience frustration and anxiety, and these could leave the students disoriented.
The break from the routine of everyday life to which one is used and entry into the world of school with all its demands is no mean task, and requires a well-prepared individual who has good adjustment skills. The student has to leave home, attend the residential session and put up in the university, a rental house, or live with friends. They also have to contend with separation from spouses and family, which may be very stressful. Further, the students have to learn to adjust to attending lectures, coping with assignments and study, and the most stressful of all, sitting for their examinations. Sedgwick and Yonge (2001) point out that student preparedness, which includes both cognitive and psychological components, is necessary for facilitation of a positive experience, which in turn increases learning effectiveness.

Schooling especially for middle-income earners, more than not, comes with economic strains, which upset lifestyle and sometimes fail to sustain one’s needs and those of dependants. This is because most of the students in the self-sponsored programmes, which require that they either use their savings to finance their studies, or take loans to do so. The universities have become very strict with the issue of fees payments to the extent that students are not allowed to take their examinations unless the fees have been paid. The financial problem is compounded by the rising cost of living away from home, and the fact that most of the students are themselves parents with children who are making financial demands on them as well. Failure to have proper preparedness may lead to stress and anxiety, which impacts negatively on their academic achievement.

The school-based programme comprises intensive sessions taken during the normal school holidays. Most of the students are required to reside within the college or in its environs. Separation from the family during residential sessions of the programme is another cause of concern. This introduces anxiety over the welfare and security of the family, and a deficit in the social needs of belonging and sexual intimacy. Most of these students are in the middle adulthood, the issues of relationships and intimacy pose a great challenge. According to Erik Erikson, this is a time when the individuals are struggling with the challenge of achieving intimacy, forming relationships, and growing in the capacity for love (Myers, 1986). This coupled with being in a new social setup introduces levels of socialization and sometimes intimate sexual relationships within the college circles. This may lead to further strain on the emotions of the student, and/or strain on the relationship with the family, leading to more anxiety and stress. Guilt and/or deep psychological involvement may be causes of failure to achieve ones academic goals. Counselling programs need to be in place as part of preparation and support for the students if they are to succeed academically. Blake (2007) rightly asserts, counselling approaches and practices should be adapted to the changing needs of the learners.

The pursuit of academic goals is mostly linked with a future goal of career progression and mobility. Notably, the social lives of these adult students revolves around not just physical and cognitive changes linked to ageing, but largely life events associated with work, marriage, and parenting (Myers, 1986). At the same time there is a role as students means new relationships, new expectations, and new demands. It is important that they are prepared for these events. There is therefore need to plan adequately for an educational programme so that its pursuit does not become a precursor to frustration in future. Some students may start to develop reservations in the middle of the programme due to changing trends of the job markets and career demands, or due to new realisations about their long-term career objectives. As they progress in their studies, new knowledge may lead to acquisition of new lenses through which they view their goals and endeavours. This may introduce totally new dimensions to their life, which may impact on their academic achievement.

Integration of the studies into the usual working programme may introduce the dimension of conflict of interest. This is because a lot of assignments have to be done during the normal working hours, and this is also the time when the student is supposed to be preparing themselves for examinations. It follows that if a student does well, then the schedule of work has to be more or less compromised, and this may hurt the career. There is failure by some employers to provide a supportive learning environment at the workplace, employment and research initiatives. This leads to lack of promotion of lifelong learning among the workers, and this is an impediment to academic achievement of the employed students. At the same time, the student may have to
compromise the time and attention they need to give to their families, which may lead to stress, or at the worst, poor academic performance (Zim, Zandk Radloff, 2003).

The students enter into a ready-made programme for which they are not required to make an input regarding how it will run, or even how long the course will take. This means they have to work towards fitting into the programme no matter what it takes. Involvement of the students in making the programme design may enhance ownership of the programme and hence contribute to psychological preparedness. Hopstock (2008) is of the opinion that a student who is prepared for education or training, and who participates in decisions about attending the course is more motivated in learning. In fact motivation correlates positively with adult learners’ self-concept, readiness to learn, and orientation to learning. Ghin (2002) asserts that cooperative learning and the degree of academic support correlates with achievement.

Methods

Participants

This study was carried out in two public universities in Kenya; Egerton University and Masinde Muliro University. Both universities have distance learning programmes, which are conducted on a school-based basis. The students are scheduled to attend three four-week residential sessions in a year, where they have a one-on-one interaction with their lecturers, sit for part of their continuous assessment tests and examinations. During the intervening three-month period, the students are working in their respective schools, reading on their own, and working on their work-based assignments.

This study was carried out during the residential sessions in the respective institutions, and the subjects were 232 undergraduate students. There were 130 (56%) students from Egerton University and 102 (44%) from Masinde Muliro University. 113 (48.7%) were male while 119 (51.3%) were female students.

Instrument

The instrument used was a 25-item questionnaire which was divided into three. The first section sought the demographic statistics of the respondents for purpose of comparison. The second part sought information about the students’ preparedness for entry into the school-based programme and the effect of the challenges they have met on their academic achievement. The third section sought to find out how the school-based programme affected the students’ career and educational goals.

Results

Most school-based students (51.3%) acquire information about the programme from the mass media. Another 43.5% of the students acquire information from their friends. 3.4% of the students and 1.7% acquire this information from the schools where the work and from the university respectively. The general feeling from the students about their level of psychological preparedness at entry into the programme was that 2.6% were very poorly prepared, 15.5% were poorly prepared, and 60.8% were well prepared; 21.1% felt they were very well prepared for entry. There were no notable gender differences in the preparedness of students for entry into the programme, and across various age brackets the preparedness was similar.

As they entered the programme, 60.8% of students expected to find a heavy workload in the programme while 39.2% did not expect a heavy workload. The majority (55.2%) expected the programme to be tight while 44.8% did not expect a tight programme. While 79.3% expected to be separated from their families, 20.3% did not expect to be separated from their families. Financial constraints were expected by 76.3% of students, but 23.7% did not expect to have financial constraints. In terms of adequacy of information at entry into the programme, 23.7% of
students felt they had adequate information, while 3% felt that they had inadequate information about the school-based programme.

As they continue with the programme, 47% of the students feel that heavy workload has had a positive effect on their academic performance, 43.5% feel that heavy workload has had a negative effect on academic performance, while 9.5% have not felt any effect of workload. The complexity of subject matter at university level has had a positive effect on the academic performance among 52.6% of students, a negative effect among 40.9%, and no effect among 6.5% of students. The tightness of the programme has had a positive effect on the academic performance among 37.5% of the students, a negative effect among 56%, and no effect among 6.5% of students. Separation from the family during residential sessions has had a positive effect on the academic performance among 28% of students, a negative effect among 40.6% of the students, and no effect among 31.5% of students.

Financial constraints have had a positive effect on academic performance among 18.5%, a negative effect among 75.9%, and no effect among 5.6% of the students. The bulk of the students (78.9%) had taken loans (from Cooperative societies and commercial banks) to finance their education, 17.2% were using personal savings, 2.2% had held fundraisers, while only 1.7% were on grants and scholarships. Consequently 54.7% of students felt that their financial status had deteriorated due to the programme, but 14.2% felt that their financial status had improved, and for 31% of students the financial status had remained the same.

35.3% of students reported that they had knowledge of sexual activity among students, and this behaviour was attributed to separation from the family by 55.6% of the students. Students who felt that sex was a need even during the residential sessions were 19%. The majority of students (78.4%) felt that sexual activity had a positive effect on academic performance, 5.6% felt that sex had a positive effect on academic performance, and 9.9% felt that it had no effect. Based on students’ responses, sexual activity is not very rampant during residential sessions. 37.9% of students reported that sexual activity was very low, 26.3% reported that it was low, and 17.7% reported that it was average. However 9.1% felt that sex activity was high and another 9.1% felt that it was very high during residential sessions.

The majority of students (56.5%) reported that they joined the programme for academic advancement, but the rest of the students had various reasons as shown in Table 1.

### Table 1 Students’ reasons for entering the school-based programme

<table>
<thead>
<tr>
<th>Reason for Entry</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Advancement</td>
<td>56.5</td>
</tr>
<tr>
<td>Vertical Mobility on the Job</td>
<td>22.0</td>
</tr>
<tr>
<td>Frustration in the Current Job</td>
<td>16.4</td>
</tr>
<tr>
<td>Prestige</td>
<td>3.0</td>
</tr>
<tr>
<td>Peer Pressure</td>
<td>1.3</td>
</tr>
<tr>
<td>Pressure from the Family</td>
<td>0.9</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The experiences that students have had in the school-based programme have largely impacted positively on the students’ educational goals and career aspirations. The majority (95.3%) feel that the programme has affected their educational goals positively, but 2.2% and 2.6% of students have been affected negatively or haven’t felt any effect respectively. As a result, 95.3% aspire to join postgraduate studies after completion of their current programme, but 4.7% of the students do not aspire to advance their education beyond the current level. The majority (86.6%) felt that the school-based programme has had a positive effect on their career goals, 8.2% felt that their career goals have been negatively affected, and 6.2% had felt no effect on their career goals.
The students reported that they had faced serious challenges during the pursuit of their studies through the school-based mode. Besides financial constraints which affected 46.1% of the students, there were other challenges as shown in Table 2.

Table 2 Challenges facing students in the school-based programme

<table>
<thead>
<tr>
<th>Main Challenges</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Constraints</td>
<td>46.1</td>
</tr>
<tr>
<td>Heavy Workload and Time Shortage</td>
<td>35.3</td>
</tr>
<tr>
<td>Loneliness Due to Separation from Family</td>
<td>9.5</td>
</tr>
<tr>
<td>Accommodation Problems</td>
<td>3.0</td>
</tr>
<tr>
<td>Lack of Reading Material</td>
<td>2.2</td>
</tr>
<tr>
<td>Complexity of Subject Matter</td>
<td>1.7</td>
</tr>
<tr>
<td>Balancing between Family and Studies</td>
<td>0.9</td>
</tr>
<tr>
<td>Sitting for Examinations</td>
<td>0.9</td>
</tr>
<tr>
<td>Poor Treatment from Lecturers</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Discussion

Psychological preparedness of students requires that one obtains proper and sufficient information about the educational programme that he/she intends to enter. The most appropriate source of this information is the institution that provides the programme. School-based students in Kenya largely depend on the media, which provides only a skeleton of the necessary information. This means that the adequacy of information that students have when making educational plans and decisions is wanting. There is need to create more awareness among aspiring students and to provide better information dissemination avenues as part of the universities. Students should be encouraged to gather as much information as possible about the programme of study and from relevant sources before making their decisions. Information should include how the study programme will be structured, the credit hours to be taken, duration of study per day, availability and type of accommodation, and total fees for the programme.

Most students have no idea what a degree programme and specifically a school-based one is like. As a result they blindly enter into it and find that they have difficulties dealing with heavy workload, complex subject matter, time constraints and separation from their families. Universities’ learner support programmes for students should include a comprehensive pre-programme orientation exercise through which students learn what to expect in their course of study. This knowledge will go a long way in encouraging students to make informed choices as well as put in place mechanisms to enable them to cope with the challenges ahead. Further, the learner support programme should include student services such as psychological counselling, educational counselling, academic advising, and career guidance. These services will ensure that students have appropriate adjustment strategies, coping strategies, stress management skills, educational goals, career aspirations, and decision-making skills.

The compounding effects of the challenges facing school-based students and the lack of preparedness for these challenges may lead to stress, problems and stress, as well as failure to achieve optimum academic performance. This may explain the prevalence (though low) of sexual activity among students during residential sessions as most students (83.2%) are married and the absence from their spouses may pose serious intimacy difficulties. The learner support programme should strengthen counselling services to equip these students with coping skills.

About a fifth of the students joined the programme for reasons other than academic and career advancement. While such factors may be motivating initially into the programme, they may serve to demotivate the student once faced with unexpected challenges in the programme. Such students need critical support through educational and career guidance to redirect their focus on more positive purposes that can be served by the programme. This will help them see beyond their past failures and frustrations, and look beyond the completion of the programme hence set realistic educational and career goals.
Recommendation

i.) To improve on the appropriateness of educational decisions made by school-based students, the universities should establish information centres where students can learn as much about the programmes as they can.

ii.) The universities should have comprehensive orientation for the school-based students before the start the programme.

iii.) The universities should put in place guidance and counselling services for school-based students and encourage students to make use of them.

iv.) As much as possible, students should be involved in making suggestions about the teaching timetable.

References


TRAINING OF DEVELOPERS OF DISTANCE EDUCATION STUDY MATERIALS IN KENYA: CHALLENGES FACING INSTITUTIONS OF HIGHER LEARNING: THE CASE OF MASINDE MULIRO UNIVERSITY.

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Abstract

Open and Distance Education (ODE) is increasingly recognised in Kenya as a means of realising enhanced access and equity in education at all levels. This alternative pedagogical model of education delivery is found appropriate because of its effectiveness and efficiency in educational provision and the crucial role it can play in achieving and meeting the Millennium Development Goals targets.

Many public as well as private universities in Kenya are at varying degrees of developing ODE programmes. One of the critical issues these higher education institutions are grappling with as far as the quality of programmes is concerned, however, is the preparation of developers of study materials. The current practice involves use of existing staff who teach conventional courses to develop ODE programmes regardless of the peculiar pedagogical requirements pertaining to each education delivery category.

Guided by the critical analysis theory (Gibson, 1986) this paper explores the preparedness of university lecturers at Masinde Muliro University of Science and Technology to design and produce ODL study materials. The following three major research strategies namely one case study, quantitative analysis and qualitative analysis were employed to determine the impact of teacher qualification, gender, experience and age. Based on the findings, it is envisaged that by establishment of a supportive policy and institutional framework it will be possible to facilitate training of quality ODL material developers.

Key words: Open and distance education, access, equity, Masinde Muliro, University, training, study materials developers.

The Context of Open and Distance Education at Masinde Muliro University

Brief History

Masinde Muliro University of Science and Technology (MMUST) was established through an Act of Parliament (Republic of Kenya, 2006) on 30th December, 2006 as the seventh and youngest public university in Kenya. The university is the successor of Western University College of Science and Technology which started in 2002 as a constituent college of Moi University. Situated in Kakamega, a rural town with a population of about 300,000 people, MMUST occupies refurbished facilities of what used to be a community college of science and technology.

The 7th University was intended to offer degree programmes in scientific and technical fields critical to the development of a country in the 21st Century. MMUST was also committed to providing academic programmes with a practical orientation aimed at providing solutions to problems in the local and national communities (MMUST Prospectus, 2007).

In an effort to stamp its presence and attract clients the youngest public university coined a motto “University of Choice” to give confidence to academic staff of the university to initiate innovative changes in programmes of study. Today, the university has a wide spectrum of programmes ranging from certificate, diploma, degree and graduate programmes including masters and doctorate studies. The distribution of programmes is based on the policy of 20% for Arts-based programmes and 80% for Science, Engineering and Technology programmes.
A critical aspect of the programmes is their inter- and multi-disciplinary nature. This unique arrangement is manifested in distinctive faculty and department names such as Faculty of Education and Social Sciences, Faculty of Science and Engineering, Department of Language and Literature Education, Department of Physical Science and so on. Another innovation is the development of university-wide courses offered to all students. Among these common courses is Communication Skills and HIV/AIDS Prevention and Management. Perhaps the most innovative venture at MMUST has been the development of programmes such as Disaster Management, Ethics and Corruption Studies and Employment and Labour Studies.

The increase in academic programmes has inevitably led to the rise in student population. In the five years of the university’s existence, the number of government sponsored students has risen from 94 in the 2002/2003 Academic Year to 3,390 students in 2007/2008. The most dramatic growth in enrollment has been that of privately sponsored students who have shot up from less than 50 to about 2210. This has provided a major challenge to the university. Other challenges include need to increase staff and the urgent need for infrastructure, all in the face of shrinking resources from the exchequer. For example, annual budgetary allocation from the government has stagnated at 250 million Kenya shillings. However, through internal savings mainly from fees and prudent utilisation of funds, the university has been able to put up a tuition and laboratory block, catering unit and two hostels. It is currently completing a library to replace dilapidated buildings inherited from the community college whose capacity was only 600 students.

The university has had to explore other alternative ways to ensure uninterrupted performance of its core business; the provision of knowledge. One of the strategies that has been adopted is the introduction of school-based programmes, where the majority of who are teachers come to the University for accelerated learning when the schools close for vacation. Another mode of delivery adopted is that of offering classes in the evenings and on weekends. Then there is the case of enabling students enroll on lower level academic programmes such as certificates to proceed up to degree programme if they qualify. The most recent strategy has been to identify study centres away from the university where classes may be offered. Currently, two centres are operational; one is based in Nairobi, the Capital City almost 300 kilometres away.

The rapid growth and need to remain relevant in a situation of escalating private and public university competition has necessitated the need for organized planning. The University formulated the Master Plan and Strategic Plan to define the thrust of its development particularly in two aspects: manpower and academic development. One key dimension of this has been the increase of faculties offering academic programmes from two to four. Among these is the School of Open Learning and Continuing Education (SOLACE) established in 2005 to co-ordinate certificate and diploma courses as well as Open and Continuing Education (OCE).

Another area that has witnessed phenomenal growth is terms of academic staff. From a paltry 20 in 2002 the number has shot up to 160, comprising mainly of lecturers below the age of 40. Most of these, however, are holders of master’s degrees.

MMUST is thus engulfed in a number of complex issues. Among these are increasing enrollment, demand from clients, competition from other universities and diminishing government resources.

Motivation to Adopt Open and Distance Education

MMUST has been propelled into adopting open and distance education (ODE) by not only the internal factors but external factors as well. Much of the initiative to adopt ODE is attributed to the commitment of the university leadership comprising the Council and particularly the Vice-Chancellor. The Councils in office between 2003 and 2006 were proactive to provision of ODE. They caused the proposal for the establishment of SOLACE to be developed.

Similarly, the Vice-Chancellor’s office is key in providing overall leadership. For instance, the Vice Chancellor who has been at the helm since the inception of the institution is credited with
putting in place the SOLACE. Indeed, he has never lost any opportunity to demonstrate strong faith in the importance and benefits of not only the new technology of content delivery. It is through his initiative that the University has sponsored attendance to ODE workshops for writers and reviewers of study materials. The one to two day in-house workshops have, however, been too short to have any tangible impact on participating staff.

The survival instinct has also led MMUST to embrace ODE. Reduced government grants have greatly stimulated the University to diversify modes of delivery and open doors to qualified fee-paying applicants on flexible entry requirements. This has provided a crucial financial lifeline. In addition, this is meant to reward staff by enhancing their take home package.

Externally, a number of recommendations from the government and international organisations have been instrumental in shaping the direction the University has taken. One of the key policy issues in the Kenya Education Sector Support Programme 2005-2010 (Republic of Kenya, 2005) is to establish and operate a national open University open learning and distance education (OLDE) centre.

The OLDE strategy which is aimed at increasing access and equity in education was earlier proposed in the Master Plan on Education Training 1997 to 2010 (Republic of Kenya, 1998). It is instructive to note that conventions and recommendations at international fora such as Dakar Declaration on Education for All (EFA) and Millennium Development Goals (MDGs) have had a ripple effect on the university plans for ODE. There have also been an impetus to initiatives to provide ODE. Recently, equipment for a radio station were donated to MMUST and one of the conditions by the donor is that the station be used to broadcast ODE.

The impact of competition as well as prompts from private and public universities within Kenya and beyond on the direction MMUST has taken in terms of ODE cannot be ignored. The practice of benchmarking and monitoring each other’s programmes has forced MMUST to modify or create new programmes and modes of delivery in order to attract students with diverse needs as well as interests. The mounting of bridging courses, market-driven courses such as business management as well as the establishment of study centres are changes that are well rooted in other Public Universities. MMUST has copied those changes that are relevant.

MMUST has not been averse to prompting from the civil society. Constant inquiries for certain specific programmes and flexibility in country requirements have influenced innovations. The development of certificate and diploma courses as well as the introduction of academic outposts is partly an outcome of pressure from the community where the University is situated. At the moment MMUST is overwhelmed by clients demanding ODE programmes.

MMUST has joined the league of universities which have adopted ODE as a way of contributing to and increasing access, achieving equity, enhancing capacity building, improving quality of life and contributing to personal and national development. These are ultimately aimed at meeting the MDGs and alleviating poverty.

Objectives, Rationale and Methodology

Objectives

This study sought to shed light on the main challenges facing young higher learning institutions. In addressing this general objective, the following specific questions were formulated to guide the investigation:

(a) What are the characteristics of the staff at MMUST? Do these characteristics affect development of study materials?
(b) What are the main factors militating against the development and production of ODE study materials at MMUST?
(c) What strategies need to be put in place to accelerate the development and production of ODE study materials at MMUST?
Methodology

Guided by critical theory (Gibson, 1986) the study attempts to explain types of challenges, trace them to their source and seek remedies as well as make decisions to improve the development of ODE study materials. The collection of data and information used in this research was undertaken in two distinct forms. The first involved a search and compilation of information on critical issues on developing ODE study materials. The information was mainly acquired from secondary and archival sources. The second form of data collection involved conducting surveys, observations and focused group discussions at MMUST.

The research design employed is the case study. The population of the study was academic staff under the employment of MMUST at the time of the study. The sampling frame was the list of academic staff on the payroll by January 2008. A one stage sampling procedure was used. First, purposive sampling technique was used to select faculties. After this, a random sampling technique was used to select 50 lecturers to participate in the study.

Rationale

Distance education technologies are expanding at an extremely rapid rate (Sherry, 1996). In the last 8 years there has been a lot of Open and Distance Education initiatives in the Kenyan public universities (Odumbe, 2004a). The driving force has been the need to promote the use of modern technologies in the provision of content as a way not only improving the delivery of content but providing flexible means of accessing the same content through different modes and media (Barry, 2008). The critical issue in this has been the one of developing the capacity of staff involved in the development of the study materials. Odumbe (2004b) advises, and rightly so, that the quality and credibility of teaching materials depend to a great extent on quality of staff. MMUST like other young Kenyan universities has been grappling with the issue of developing and producing study materials under less than optimal circumstances. What has contributed to this? In this regard, the training of developers of ODE study materials becomes an important and urgent issue to consider.

The study used findings from data elicited from members of a pool of potential developers of study materials to make a set of recommendations based on feasible strategies for accelerating development and production of study materials. The study, therefore, provides an occasion for MMUST and its Management to review strengths and weaknesses in order to determine the best way forward.

Results

The Staff Questionnaire was the main instrument used to source data. A total of 50 questionnaires were distributed. Only 38 were returned by the respondents. This amounted to 76% of the questionnaires distributed.

The first section of the Questionnaire sought information on four variables including gender, age, experience and qualification. These variables were deemed to be important because it was assumed they would explain differences or similarities in the capacity to develop ODE study materials. Analysis of data, however, indicated there were no distinct differences. The information gathered revealed that 73.6% of staff were male, 52.6% were less than 30 years old, 34.2% were between 40 and 50 years old while only 13.2% were more than 50 years old. Scrutiny of data also revealed that 55% of staff were grounded in the science disciplines. The remaining 44.7% had academic background in the arts disciplines. When analysis was done on the basis of qualification it was found that 17 (44.7%) of the respondents were holders of Doctor of Philosophy degrees. Results further revealed that majority of staff (81.6%) had less than 8 years teaching experience at university level. Seventy per cent of the respondents reported that they had never undertaken any training in development of study materials. A larger number (86.8%), reported that they had never developed any materials.
Although according to data in the rest of the sections 57.8% of the respondents indicated that their departments were ready to mount ODE programmes, all of them cited factors militating against the development of study materials. These factors ranged from lack of study materials (63.8%), lack of trained staff (57.8%), heavy teaching load (60.5%), inability of ODE mode to offer practicals and tutorials (52.6%) and absence of ODE development guidelines. Other factors include lack of equipment (15.7%) and lack of consultation and co-operation among various departments (15.7%). A total of 94.7% of the respondents never agreed that the ODE mode of delivery was indispensable.

In response to the questions regarding suitable media of presenting ODE course materials, respondents’ choices ranged from printed materials (71.0%), internet (65.7%), website (36.8%), online materials (31.5%) and open sourced educational materials (7.8%).

Finally, respondents’ opinion on the strategies MMUST would adopt in order to accelerate development of ODE study materials ranged from training of lecturers (94.7%), formation of clear policy and mainstreaming information and communication technology (ICT) in the delivery of content (55.2%), motivating lecturers (47.3%) and the recruitment of qualified technical staff (34.2%).

Discussion

Potential and challenges in the development of study materials

Although the design, development and production of ODE study materials has not been fully operationalised at MMUST, the study findings based on questionnaire survey, observation and discussions revealed that activities on the ground show great potential. Even though MMUST has not determined the mode of delivery of ODE that it should adopt, there is general propensity towards the dual mode and e-Content. It appears that there is silent agreement to first ensure that material is developed before a specific mode of delivery is identified. Decision over which medium to utilise is thus not a priority. What is clear though, is that the university would like to develop its own materials. The reason for this is quite clear; purposes of branding and institutional accreditation. Eager to stamp authority, MMUST would like to offer programmes certified by the institution. Already there are three modules in Business Management produced on trial basis. This is an indication of the seriousness attached to this exercise by University Management, academic units and individual lecturers.

The pace of moving towards full operationalisation, however, is slowed by numerous challenges. One of the factors delimiting development of materials pointed out by respondents is that lecturers who are potential developers have not received training. According to Odumbe (2004a) the success of any ODE programme depends on quality study materials which can only be produced by trained staff. Barry (2008) emphasises in the following words: “…prior to the implementation of any programme, detailed provisions made for the training of all the personnel involved including technicians, teachers and administrators”.

The training according to Odumbe (2004a) should cover pedagogical skills, curriculum design skills, course writing and reviewing skills, editorial skills, knowledge in the use of media and proficiency in ICT skills. The training needs to ensure that the foregoing sentence have been selected based on the assumption that university lecturers are well grounded in their respective areas of content.

Literature shows that there are numerous ways of training developers of study materials. More often than not training runs concurrently with the production of courseware. The major training strategies include on the job training, use of professional accredited courses, online staff development made available through UNESCO and Commonwealth of Learning (COL), use of professional Associations, manuals and booklets and study visits (Odumbe, 2004a). Whatever the method one employs, the most critical factor is the cost of training. The university has so far financed two in-house training workshops for about 30 module writers and
reviewers at a time. Due to financial constraints, the first workshop took 2 days while the second took only one day. Even when considered cumulative, the three days are too short for the training provided to have any meaningful impact on the trainees. Respondents’ responses indicating that 71% of them are not well trained in the venture implies that the training was not adequate.

Personal interview by Odumbe (2008) reveals that it requires thirty days to effectively train a study materials writer and/or reviewer. In addition, there is need to pay for editors and media specialists. The cost of training one developer per module calculates to about 6,000 US Dollars. This scenario clearly brings out the paradox of ODE. Although this is a mode of delivery that promises to cut down on costs, it is an expensive venture to initiate. In circumstances where other issues like paying staff salaries, putting up tuition blocks and purchasing teaching materials need urgent attention, innovations in modes of delivery take a back seat.

Another dimension which makes training of staff even more expensive is the lack of training programmes and trainers. No local institution in Kenya has developed an accredited programme to produce professionals in distance education (Odumbe, 2004b). At the moment there is only one qualified trainer in Kenya. Because of the demand for his services, it is difficult to engage him. Whatever the costs may be, training staff is an activity worth undertaking. On top of the numerous benefits of ODE stated earlier in this section, training helps staff understand the concept of ODE, its utility and thus helps them form a positive attitude. In addition, training provides courseware developers with orientation into distance education practice which enables them apply the knowledge, skills and experiences they possess appropriately. For instance, a number of respondents did state that ODE is inappropriate in terms of offering tutorials and providing remedial work. Those familiar with ODE know that it is one of the most versatile modes of delivery.

Teaching load was one of the factors cited by respondents as being responsible for non-crystallization of the development of ODE content. During group discussions with a number of them it was possible to gauge the magnitude of the problem. Most of the respondents felt that the sudden surge in the number of students and programmes led to lecturers on the ground being overstretched. The study has shown that in four years the population of students has shot up from less than 200 to 3300. In the same period academic programmes have increased from just about 10 to 46. The growth of full time staff numbers have not increased in corresponding manner.

Respondents cited cases where they teach up to three courses per semester as normal load for conventional programmes, then another similar load in programmes offered in the evenings and weekends. The same respondents said they also teach school-based programmes. Respondents were categorical that this leaves them with little time to design and develop ODE materials. The ADEA (2000) have come up with cost design estimates for designing one hour of study time. The estimate is that on average 20-100 hours is required for print, 20-100 hours for audio, 50-200 hours for video and 200-300 hours for computer-based instruction. The situation is made more critical by the fact that the majority of staff are holders of masters degrees, they are enrolled on doctoral programmes.

The university has tried to alleviate the problem by engaging part time lecturers but because the allegiance of such staff is to their mother institutions, they rarely have time or commitment to the development of ODE study materials. With the kind of teaching load most staff cited, the issue of developing study materials at MMUST may remain a mirage for some time.

The issue of lack of guidelines emerged as number five in terms of gravity of challenges. This does not make it less important. Policy with regard to ODE at institutional level is crucial because it serves as a road map, which clearly spells out requirements in terms of infrastructure, software, technical training and use. The absence of an institutional ODE policy and strategy at MMUST may in part be explained by the Ministry of Education in Kenya has been making efforts to formulate an ODE policy but none has been released so far. In the institutions where ODE has been crystallised there is evidence of
clear policy which addresses a variety of issues including staff motivation. This issue came up severally during the focused group discussions. Respondents claimed they were in the dark as far as payment for study materials they were to develop was concerned and also whether they would be accepted as publications.

Findings of the study revealed that 15.7% cited lack of equipment as being responsible for absence of study materials. But during the face-to-face discussions, respondents emphasized that this was a major impediment. The issue of equipment came up in three dimensions. The first is in terms of lack of infrastructure. Respondents complained of poor connectivity. The second related to absence of equipment such as computers and printing machines. The third dimension was with regards to quality of equipment and services. Noteworthy that MMUST has more than 600 computers. Half of these are donations from Canada while others were sourced through the Computers for Schools Kenya project. A number of computers were purchased internally. The ratio calculates to about one computer for every five students. The capacity of the computers, particularly those that were donated, however, is and they cannot therefore be meaningfully utilised for teaching and learning. Heads of academic units are connected but staff and students are not. Even in cases where there is connectivity the bandwidth is small; at the moment has been allocated 128 megabites, half the capacity required. This leads to congestion which subsequently slows operations. Indeed, respondents overwhelmingly cited this constraint. But even if connections were adequate there is perennial complaint over high cost of internet services. The university currently pays Kenya Network, the provider, on average 1,200 US Dollars per month for this service. Commercial producers on the other hand charge one Kenya shilling per minute or 1 US Dollar per hour, which is unaffordable by any standards. The source of this problem is external to the university. Throughout the country, providers of ODE have been urging the government to boost infrastructure, increase bandwidth and reduce cost of internet services.

From the discussion in the foregoing paragraphs challenges may be categorised into personal, institutional and external. At the personal level challenges range from lack of training, heavy work load, lack of computer skills and unwillingness to embrace ODE. There is, however, need to treat the responses of staff cautiously. What was revealed from the discussions was the deceptive nature of some of the responses. For instance, most of the respondents indicated that their computer skills were good, this was not entirely true. What most posses was really the ability to read and send e-mail. Majority of those who claim they are computer literate cannot design, develop or deliver e-Content. It is probable for fear of being seen to be unskilled in this critical technology, most thought a little lie would salvage their image. As for readiness of their departments to mount ODE, a negligible number cited a negative attitude of staff. But scrutiny of data reveals that a number of them were sceptical, citing the inability to provide remedial lessons through ODE. This implies that staff do not fully comprehend the concept of ODE and its operationalisation.

At institutional level, the challenges range from providing technical and academic staff, availing equipment and facilities, financing training and developing ODE policy. The issue of policy is the most important as all the other factors are predicated on policy.

The external factors include lack of ICT infrastructure, shortage of ODE experts, and lack of cooperation among the higher institutions of learning.

Conclusion and Recommendations

As the MMUST case study demonstrates, young institutions of higher learning are faced by a myriad of challenges in terms of training developers of ODE study materials. These include personal, institutional, and external challenges operating in different configurations. Consequently MMUST has been unable to produce study materials. In this regard, for accelerated development of study materials, MMUST needs to formulate a comprehensive policy to provide guidelines that address all the key issues. This should place teaching and learning at the centre of ICT in terms of pedagogy, curriculum design and content development. The guidelines
should make it very clear that ICT application to learning is not a substitute for lecturers, but, rather, a means of their empowerment and enriching interaction with their learners.

But it is instructive to note that a national ODE policy that is expected to cascade to institutional level would be necessary. Its development should be given urgent attention. The effective implementation of policy hinges on finance. It is imperative, therefore, for MMUST to commit resources required to propel ODE into motion. In this respect, training of staff in order to provide them with skills to use up-to-date ICTs becomes imperative. The training could be done in two ways. By training a crop of staff who would then form a pool of internal trainers. Secondly, by engaging external trainers to provide initial training of staff. Plans should be put in place to ensure sufficient financial support is allocated to ensure ODE students are provided with ICT skills.

Another way forward is by budgeting for funds to purchase high capacity computers and other equipment and accessories necessary for the development and production of ODE course materials. The lone ranger syndrome among units and institutions ought to be discouraged. Much as it is expected of an institution to develop and brand its own products, there are benefits in cooperation and linkages. MMUST would find it useful to collaborate with other providers of ODE, particularly those who have been in the game for a long time.

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Abstract

Education has been identified as the key to achieving the Millennium Development Goals (MDGs) set by world leaders in 2000. The Commonwealth of Learning (COL), an agency of the Commonwealth Governments in one of its publications described knowledge as “key to individual freedom and to cultural social and economic development” and stressed that achieving the MDGs would “require a massive expansion of human learning”. COL advocates the use of ODL in meeting this challenge noting that “Traditional methods of education and training cannot address the scope and scale of the task”.

Other international agencies such as UNESCO and many world governments also recognise ODL as the catalyst for delivering quality education needed to empower individuals and nations. The knowledge required to bring about social, cultural and economic transformations, necessitates that the citizenry of a society or nation be literate in the language of communication, information and business. A critical concern therefore in meeting the knowledge challenge is how best to enable people acquire literacy skills that they can access and use knowledge. This paper advocates the use of authentic texts, namely, newspapers as complements to traditional course materials and textbooks in accelerating the development of literacy skills. This paper provides a framework for ODL institutions in setting up literacy development intervention programmes for learners enrolled in ODL institutions; out of school children and youth needing literacy skills to improve their livelihoods; and low cadre workforce in the industries.

Introduction

Literacy: Key to Sustainable Development

Success in learning depends on the ability of learners to access and use information and this ability requires that the learner is literate (able to read and write). Literacy is the sine qua non for any meaningful human capital development which is the basis for meaningful social and economic development. How can a society or nation develop if its citizenry is illiterate? The need for literate citizenry is more than ever before critical because our world today is knowledge-driven.

The World Education Forum in Dakar, Senegal, 2000 recognised literacy as critical for human and social development and therefore set as its goal “to halve adult literacy by 2015” (The International Reading Association 2003). Literacy was seen as the means to achieve the global goal of Education For All as well as the basist of a meaningful developmental agenda for the 21st Century. In 2003, the United Nations launched the Literacy Decade, with the theme, “Literacy as Freedom”. At the launch, Mr. Kofi Annan, the Secretary General of the United Nations, described literacy as the “key to unlocking the cage of human misery; the key to delivering the potential of every human being; the key to opening up a future of freedom and hope” (The International Reading Association 2003). Five years earlier the World Association of Newspapers, asserted that only with access to information “provided by education and literacy, can all men and women play their full role in society…” (1998: 4).

At the occasion of the launch of the Literacy Decade by the UN, UNESCO Director General, Koichiro Matsuura, emphasised that priority should also be given to the most disadvantaged groups such as women and girls, migrants and refugees, out of school children and youth. One of the lines of action proposed to reduce illiteracy globally was the development of literacy programmes to suit people’s different needs. This is in line with one of the instructional policies of ODL...
system, namely making learning flexible by developing programmes that address the special needs of learners.

As mentioned in the introductory part of this paper, meaningful development could occur only when the citizenry of a society or nation could access and use information. Statistics by the International Reading Association in 2003 showed that more than 70% of the world’s illiterate adults were to be found in many parts of the world, including the sub-Saharan Africa and North Africa. This report was five years ago and there is evidence to believe that the situation has changed. The importance of setting up literacy programmes to turn around the present trend cannot be overemphasised. The urgency for this is obvious and therefore requires urgent intervention. We must accelerate the rate of literacy development especially in parts of Africa with high cases of illiteracy.

Speedy acquisition of literacy skills is possible to the extent that meaningful resources are employed. Language text books, the traditional resources for teaching literacy are no longer sufficient for learning to read and write in the present information-driven world. These text books are usually written around situations and topics that are geared towards teaching learners aspects of a language for example, tenses as well as satisfying comprehension and summarising tasks. Such texts, no doubt, help learners to learn the language and ultimately use it to read and write. Too often, however, the learning activities in these text books are not about issues that learners care about and can readily connect to their daily lives’ experiences. A major goal of learning is that what is learnt should readily be transferred to the learner’s life outside the classroom. This is especially so for adult learners whose desire to be literate may be for immediate use of the skills acquired for instance, better performance of their jobs or their businesses or in improved skills in managing personal and family lives. Cornish (2004) notes that students are motivated to learn when the topics they study are interesting and relevant to their lives.

This paper is advocating complementing traditional language text books with real life texts referred to in the literature as authentic texts for teaching literacy skills. Authentic texts are reading materials whose content is not contrived but consists of real life issues that students can relate with. Newspapers for instance are a good source of authentic materials for they usually contain topical issues that can motivate adult learners to read and write. Literacy skills thus acquired, broaden a learner’s horizon. As learners read and discuss issues that touch their lives in various areas of endeavors such as economics, politics, entertainment and sports, they acquire essential language skills as well as develop critical thinking skills which are readily transferable to other situations in their lives.

Rationale for using authentic texts in developing literacy skills

Authentic texts are print materials used in ways that they would be used by learners outside of their adult education classes (Jacobson et al. 2003:1). For texts to be considered authentic, they must not be contrived. They should be selected from print materials such as the newspaper. Authentic materials have been found to richly complement traditional language classes by enlivening the classes and creating on the part of the learners a more positive attitude toward learning (Kelly et al. 2002:1) Jacobson et al. (2003 ix) carried out a five-year study of adult literacy education in the United States of America titled, “The Literacy Practices of Adult Learners Study”, and found that students who participated in classes that included authentic materials and activities increased the amount of time spent engaging in literacy activities outside of school.

Auerbach, (1992) quoted in Jacobson et al. (2003) asserts that instruction which uses real life literacy materials and activities is best for adult learners. Using real life texts provides students with an education that is meaningful and responsive to their personal needs. One of the factors that contribute to learner attrition in literacy programmes according to Brod (1995) quoted in Weddel and Duzer (1997:1) is using instructional materials and approaches that are not relevant to learners’ needs and lives. Weddel and Duzer (1997:1) corroborate this view stating that adult learners in literacy programmes frequently have very specific learning goals and needs
such as being able to read to their children, job and when their needs are not met are likely to dropout of the programme.

Another important gain from using authentic texts that they stimulate the integration of the four language skills of reading, writing, listening and speaking and many content areas or areas of interest such as the natural sciences, arts, economics, consumerism, current events, career exploration, civics, environmentalism, propaganda and advertising, entertainment, sports etc.

Examples of authentic texts

There is an abundance of sources for authentic texts that teachers could use to develop literacy skills. These include: Newspapers, magazines, catalogues, directories, phone books, travel brochures, flyers of product and service advertisements and election-related matters, tourism pamphlets, greeting cards, invitation cards, the internet. Each of these sources could provide both long and short texts that could engage and challenge students to read, discuss and write. For the purpose of this paper, however, the newspaper will be used.

Newspapers: viable resource for teaching literacy skills

The newspaper is chosen out of the many authentic resources listed because of its wide coverage of topics and issues that affect people’s lives. Newspaper articles are about situations and events relevant and meaningful to learners’ daily lives and local, national and international news to editorials, sports, entertainment. Secondly, newspapers are chosen because of the currency of the articles in them and because of their availability and affordability at local, national, and international levels. The Internet, an excellent tool for accessing information is a rich source of getting newspaper articles from many countries of the world. Thirdly, newspaper articles offer learners opportunities for applying literacy and numeracy skills in understanding and analysing issues as well as appreciating the importance of current affairs. Newspapers offer context-embedded communication through photographs, graphs, headlines, cartoons, tables, figures and other context clues that aid comprehension of text (Nixon-Ponder et al.: 1). Newspapers when properly used can efficiently promote learning, critical thinking, creativity and resourcefulness in learners of all ages (Lakin, 1998: 5). Studies have shown that students who use newspapers in learning score higher in reading comprehension tests and develop stronger critical thinking skills as well as develop compassion and tolerance for other cultures (Cornish, 2004: 18 and Lakin, 1998: 5). A United Nations’ publication "Newspapers in adult education; A sourcebook" (1998) reports success stories of how adult educators in countries such as Argentina, Cameroon, Mali, Mexico, South Africa used newspapers to develop literacy skills in their adult citizens who became better informed about their livelihoods as well as about social and political issues in their countries. Newspapers indeed are excellent resources for aiding learning. ODL programmes that use newspapers to supplement prescribed course materials have much to offer their students in the areas of communication and cognitive skills.

A framework for using newspapers in ODL programmes

Any programme in ODL can profitably use the newspaper to teach students the skills needed to understand and apply the knowledge in the particular field of study. Newspapers provide learners real life learning experiences to use communicative and cognitive skills such as comprehending, discussing, analysing, applying, interpreting, synthesizing and evaluating. These are life-coping skills without which one cannot get on in life. Whatever the discipline, whether in the sciences, arts, management sciences, newspapers offer useful content for teaching and learning. Where newspapers of the general type cannot provide appropriate texts, for instance, in the natural sciences, there are special magazines and periodicals in these areas to consult.

The framework being proposed will present two types of literacy development interventions that ODL institutions could provide. The framework will also describe how ODL institutions could use newspapers and magazines as the case may be to supplement prescribed course materials.
Type 1

Literacy development intervention within ODL institutions

The intervention here will be for addressing literacy needs of students enrolled in ODL institutions. The intervention could be for students at 100 level degree programmes and certificate and diploma programmes. The intervention could also be for students at higher levels who are still not proficient in reading and writing. A lot of students in these programmes may have specific needs in using literacy skills. Evidence from undocumented reports from tutorial facilitators in NOUN for example, tell of students who experience problems reading and understanding course materials in general studies and their areas of study. This situation is not strange, considering that many of these students had been out of formal schooling for a very long time. Using newspaper articles on issues familiar to the students and related to their fields of study and prior experiences may help them develop the literacy skills they could apply to their learning.

Incorporating newspapers in the regular ODL system

Any programme in ODL can profitably employ newspapers as part of learning resources. This requires that course tutors and facilitators should regularly read newspapers to identify articles and other publications of interest such as editorials, news items, charts, diagrams, tables, weather forecast etc. They can also ask students to check out in the local and national newspapers, articles of interest and relevance to the topics they are working on in their prescribed course materials. Activities to use to develop literacy skills should include devising questions that would lead students to:

- Develop skimming, scanning and indexing skills
- Answer factual questions on articles
- Evaluate the reliability of information contained in newspaper articles
- Read, analyse and interpret data embedded in charts and tables
- Search and locate information in articles that graphs and tables reinforce

Note that all of the above activities are very suitable for students of various programmes such as – Economics, Statistics, Marketing, Arts and Social Sciences, Political Science etc.

Life examples of newspaper articles

1. Articles in Nigerian newspapers in recent times on the non-passage of Freedom of Information Bill (FOI) by the National Assembly, and the legality of the appointment of the new Chairman of Economic and Financial Crimes Commission (EFCC) excellent learning resources for teaching critical thinking to students of Law, Journalism, Mass Communication and Political Science. Here are titles of some of these articles

   - EFCC: Gani says President breached Constitution.
   - FOI Bill: N’Assembly can’t run away from law
   - Stakeholders seek better information flow to aid productivity. (This article buttressed the need to pass FOI Bill)

2. Examples of newspaper articles on health that serve as good resources for teaching health science students include:

   - Healthy Living: How much sleep do you really need?
   - Infections cause 40 per cent of premature deaths.

Type 2

Type 2 literacy intervention here is for out-of-school children and youth wishing to be gainfully employed; self-employed adults who need literacy skills to increase their yield; women in purdah and prisoners who need to develop some livelihood skills.
ODL institutions in collaboration with their host communities could set up special intervention literacy programmes for livelihoods for the above groups. In order to make the literacy classes meaningful and relevant to these groups, the programme provider should do some analysis of the literacy needs of the anticipated clientele through oral interview to obtain information on candidates’

- previous schooling experiences
- current level of literacy
- literacy contexts in which candidates live and work or business
- work or business they hope to get into on completion of programme.

The ODL institutions should take on intervention at this level as a community service and should not expect much financial gain from it. These special literacy classes should be set up at as many locations as possible depending on the size of the community and the ODL institution’s resources.

Another level of Type 2 literacy intervention is a situation where ODL institutions partner with industries such as Oil & Gas, Banks, Hotels and tourism agencies to organize workplace literacy programmes to educate their lower cadre workforce on necessary literacy skills to function effectively in these industries. This workforce would include: drivers, technicians, messengers, waiters, and artisans. For effective participation in the literacy classes workers should be given work-release time to participate in these programmes.

Useful literacy activities at this level should include teaching them how to:

- read and understand tools/equipment manuals, manuals on safety procedures, manuals on the ‘dos’ and ‘don’ts’ in the workplace.
- access and use information to perform their work.

Expected benefits of workplace literacy programmes include:

- increased productivity
- improved safety, precision and communication
- reduced turnover of employees
- retention and advancement of workers whose jobs otherwise be in jeopardy.

(Kortner, 2001: 3).

Conclusion

This paper has explored the use of newspapers in accelerating literacy development, using ODL. It argued that with the knowledge explosion in the world today and the urgent need to use this knowledge for development, programmes should be put in place to equip citizens of the world with the literacy skills to access and use information for personal realization and fulfillment and community development. Learning is meaningful and usable to the extent that learning materials are meaningful and relevant to the learners. Because newspapers carry content that is not only current but touch on issues that may very likely affect learners’ lives, are useful learning resources for developing literacy and life-coping skills.

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Commonwealth of Learning Publication: Open and Distance Learning for Development.


MEETING THE CHALLENGES OF THE MILLENNIUM DEVELOPMENT GOALS: THE ROLE, POTENTIALS AND IMPACT OF OPEN AND DISTANCE LEARNING
AGRICULTURE AND THE MILLENNIUM DEVELOPMENT GOALS: THE ROLE OF OPEN AND DISTANCE LEARNING

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Abstract

One of the major focus of the Millennium Development Goals (MDGs) is agricultural development and the eradication of poverty and hunger. A significant percentage of the population in Africa lives in rural areas with agriculture as their major preoccupation. This group of the populace is barely or not informed about new techniques and improved technologies in agriculture. There is no need emphasising the importance of driving home these new techniques and improved technological methods in agriculture. Open and Distance Learning is a mode of learning that can render this education accessible to the general public regardless of time and space. ODL has proven to be effective in the acquisition of skills and knowledge for agricultural productivity such as the case of Sugar cane farming techniques in Kenya, etc. and increasing the income of the farmers. This has exposed the indispensability of ODL in achieving the MDGs. Therefore, this paper attempts to shed more light on the potential and role of Open and Distance Learning in achieving this major focus of the Millennium Development Goals.

Key words: Agricultural development, MDGs, New techniques, distance education, Nigeria.

L'AGRICULTURE ET LES OBJECTIFS DE DEVELOPPEMENT DU MILLENAIRE: LE RÔLE DE L'ENSEIGNEMENT A DISTANCE

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Résumé

Les Objectifs de Développement du Millénaire (ODM) portent essentiellement sur le développement de l'agriculture et l'éradication de la pauvreté et de la faim. Un pourcentage considérable de la population nigériane, et même africaine, vit dans les zones rurales et sont, en majorité, agriculteurs. Cependant, ce groupe est peu ou pas du tout informé des nouvelles techniques et technologies dans le secteur agricole. L'Enseignement à Distance est un mode d'apprentissage qui peut rendre cette éducation accessible à toute la population, à n'importe quel moment et n'importe où. Par conséquent, ce papier essaie d'évaluer les potentialités et le rôle de l'Enseignement à Distance en vue de la réalisation de cet aspect clé des Objectifs de Développement du Millénaire.

Mots clés: développement agricole, ODM, nouvelle technologie, Enseignement à Distance, Nigeria.
Introduction

In the year 2000, all member states of the United Nations adapted the millennium declaration which formed the basis for the formulation of the Millennium Development Goals (Mannan, 2007). The MDGs set goals for global poverty reduction by 2015 among others (Prowse et al., 2007). Globally, the latest UN MDGs report shows that the proportion of people living in extreme poverty has fallen from 28% in 1990, to 19% in 2002. This implies that we may be on the way for success in 2015. However, progress has been uneven and the ongoing levels of human deprivation remain staggering as noted by Kofi Annan. Improvements in agricultural productivity and non-agriculture have facilitated structural economic change in Asia which has driven global poverty reduction. However, there has been little or no progress on overall poverty rate in sub-Saharan Africa since 1990 (Prowse et al., 2007).

About 70% of the MDGs Target group live in rural areas, particularly, in Asia and Africa, and for most of the rural poor, agriculture is a critical component in the successful attainment of the MDGs. More immediate gains in poor households welfare can be achieved through agriculture, which can assist the poor overcome some of the critical constraints they face in meeting their basic needs (Rosegrant et al., 2006). Therefore, an important component in meeting the MDGs by 2015 in many parts of the world is a more productive and profitable agricultural sector. To facilitate these, therefore, education and dissemination of information on improved methods of agriculture to farmers via the open and distance learning is highly imperative.

Agriculture and MDGs- reduction of poverty and hunger

Agriculture is important to the World. About 70% of the populace in Africa is involved in agriculture and the main stay of the economy of several African countries (and other countries of the world) contribute a high percentage of the GDP (Adewale, 2007). An estimated 1.2 billion people are absolutely poor, living on less than US $1 per day; nearly twice that number live on less than US $2 per day. Currently about 800 million people go hungry each day (CIDA, 2003: 4). Approximately 75% of the absolute poor in developing countries live in rural areas, where they depend on agriculture for their livelihood. Therefore, reducing poverty in rural areas, and hunger in both rural and urban areas will depend heavily on the sustainable development of agriculture. To achieve this, income of the rural poor must increase rapidly, and food production in the developing world must more than double over the next twenty years to keep up with population growth (CIDA, 2003: 4).

Agriculture policy papers have highlighted the critical role of agricultural productivity in stimulating agricultural growth and poverty reduction (Prostaff 2007: 2). Agriculture is strongly linked with the eradication of poverty and hunger which is the first goal of the MDGs, halving by 2015 the proportion of those suffering from extreme poverty and hunger. However, other MDGs have direct or indirect linkages with agriculture (Rosegrant et al 2006:1-2). Rosegrant reported that in achieving a Universal primary education (2MDG), a more dynamic agricultural sector will change the assessment of economic returns to educating children compared to returns from keeping children out of school to work in household agricultural enterprise. Also, promoting gender equality and empowering women (3MDG); agriculture empowers women farmers directly and indirectly through reduction of the time burden on women for domestic responsibilities. The reduction of child mortality (4MDG), agriculture indirectly contributes by increasing diversity of food production and making more resources available for manag childhood illnesses. Agriculture directly helps improve maternal health (5MDG) through more diversified food production and higher-quality diets, and indirectly, by providing additional income that can be channeled to health services. Agricultural practices can be both direct causes of, and important solutions to, environmental degradation (7MDG). More productive agricultural technologies allow the withdrawal of agriculture from sensitive environment.
Developing a global partnership for development (MDG) will help maintain the steady increase in agricultural trade, and significant increases in development assistance offered to the agricultural sector. However, agriculture, especially African agriculture, faces several problems making the continent the most backward in agricultural production. Farmers are largely in the rural areas with small fragmented plots, having little or no contact with extension services and crucial information needed for production, processing, and marketing. Farmers have no knowledge of market prices, and little access to input and output markets. Consequently, yields are low, and income from agriculture leaves little for the farmer to turn over.

Open and distance learning, MDG and agriculture

Stressing the important role that open and distance education can play in educating rural populations as a means for promoting positive change, Changchui, 2005 submitted that “FAO is convinced of the important role education plays in agricultural development and rural poverty reduction. We believe that without addressing the education of people living in the rural areas, often the majority of the population in many countries, little can be achieved to reach MDGs by 2015, especially MDG1 relating to the reduction of poverty and hunger.”

Education and learning are widely recognised as essential processes of development and poverty reduction. In many developing countries, issues of educational access, equity and quality have been identified as pre-requisites to the achievement of developmental goals. Given the inadequacies of conventional systems of education, training, and agricultural extension, many developing countries have introduced innovative approaches to ODL (Alexander et al., 2006). There has been a resurgence of international interest in distance learning and distance education as potentially useful strategies for addressing human development issues. This resurgence has been established in part in the evolution of new information and communication technologies (Alexander et al., 2006).

Open and Distance Learning (ODL) has emerged as an approach to increase education opportunities to reach the unreached. It has the potentiality to bring education to the geographically dispersed, rural and urban people and to accelerate the achievement of MDGs (Mannan, 2007). Education is the route to the full development of people as human beings with social, spiritual, intellectual, and cultural aspiration as well as with economic interest (Daniel, 2004). Education plays a key role in achieving MDGs, and there is also a need for innovative approaches to create a knowledge society (Khan, 2005).

The role of ODL

The importance of ODL via information and communication technology is further underscored at a workshop organised by FAO in collaboration with other institutions in 2005 where: bridging the rural digital divide where new information and communication technologies can be appropriately applied to enhance education and information access were strategised (Changchui, 2005).

The first millennium goal is to eradicate poverty and hunger, especially to halve the proportion of people living in less than a dollar per day and those who suffer from hunger. Thus, empowering millions of farmers and small holders and giving the masses in rural areas of the world more control over their lives are imperative (Daniels, 2004).

There is a real divide to bridge here. Many organisations conduct research on agriculture and try to communicate the information or results. The difficult task is communicating these results to the individual farmer (Daniel, 2004). Communication operates in two directions: (1) to help farmers and smallholders define their own needs, and (2) to enable agricultural extension workers, through dialogue to match these needs to real possibilities (Daniel, 2004). Technology (ICT which is a key component of ODL) can help to scale up this process.

Information is widely acknowledged as one of the critical factors of production decision. Patrick et al. (1993) pointed that farmers demand for information increased in recent years due to greater market instability, more complex production technologies, and other. Lack of timely information can prevent...
good quality decision and thus lower the efficiency of production decision among farmers. Differences in decisions about what crops to grow can be attributed to differences in resources level of knowledge, environment, approaches concerning uncertainty and other factors (Mar Corazon et al, 1998). Farmers require information to link various inputs at reasonable prices, and also output markets (Adekunle et al, 2004). These may increase farmer income. "A strong extension linkage complemented by flawless information flow enhanced by the effective use of information and communication technologies (ICTs) will significantly boost agricultural production and improve livelihoods in developing countries" (Arokoyo, 2005).

The new means of communication namely internet and others has led to a new way of teaching, allowing distance learning or opened distance learning, more used by educational institutions at all levels (Vieira et al, 2006).

Application and the use of ODL

ODL in recent times has been used in the access to the MDGs especially in the area of agriculture in order to reduce poverty and hunger. In a research study carried out by Adekunle (2006) in Ago-Are Village, Oyo state of Nigeria, he reported that there was a significant increase in the yield of maize, 2.46 kg per unit area after 18 months of exposure to ICT and internet connectivity. He reported that this increase was largely due to the farmers' ability to grow a new variety and reach for information on how to grow the new variety through interaction with scientists made possible by the internet. He also reported a significant increase in the farmer income because of the use of ICT and internet facilities to monitor market prices for better market penetration, thereby choosing a good market for their commodities and demand. The increase in the use of fertilizers from 22% recommended rate to an average of 62%. The increase in the use of fertilizer is an indicator of increasing market outlook for a subsistence-oriented farmer. He also reported an increase in farm holdings of participating farmers from 2.22 ha to an average of 3.76 ha after 18 months of exposure to the internet. This was probably due to the fact that farmers increased their income and having surplus which was ploughed into expanding their holding.

In a related development, according to a news bulletin, the Kenyatta University seeks to reduce poverty among peasant farmers in Kakamega district in Western Kenya. An instance was in Igbotse-Shikoti village in Kakamega district, Kenya where farmers were learning to improve their livelihoods through sugarcane farming techniques taught by the university. Some 75% of farmers in this area live below the poverty line. The main reasons being lack of knowledge and information. It is reported that the university is working with local partners to develop an agricultural knowledge ICT centre that will use computers, television, telephones and radio to deliver agricultural information to farmers and their families, enhancing their ability to access better markets and prices for their produce.

The news bulletin also reported that “one village foundation”, an all-volunteer NGO in Ghana was involved in a project focused on ICT capacity building and communication development. It involves developing ODL modules to teach the rural poor ways to get balanced nutrition from locally available foods, etc. It also included developing and broadcasting radio programmes through local community radio stations.

It is pertinent to state that ODL provides a lifelong learning opportunity. According to the news bulletin, lifelong learning for farmers programme has been implemented in Sri-lanka by the Commonwealth of Learning (COL). This is in response to a critical need where the wealth of information resulting from agricultural research and development often fails to travel the last mile to the village of the developing world where it is most needed. While governments face challenges in funding adequate agricultural extension, globalisation is creating increasing opportunities for poor rural farmers. Lifelong learning for farmers addresses these issues by empowering able rural women whose predominant form of employment is agriculture to organise themselves to solve problems with producing and marketing their products and foods security, improve their living conditions among others. Lifelong learning for farmers has the potential to provide rural women with information on access to credit. It enables communities to move away from donor depending towards a developmental process that is sustainable and self-replicating. According to the bulletin, farmers in Sri-lanka are learning to cultivate more profitable crops. Thus
A farmer in the Hambantota region saw his income increase by a factor of six when he switched from growing mixed vegetables to bananas. The bulletin further reported that lifelong learning for farmers is also being adapted and introduced in Jamaica, Kenya, Mauritius, and Papua New Guinea.

Conclusion

Given that the majority of poor people live in rural areas or rely on agriculture, and that agriculture paves the way for economic growth in the poor developing nations, agricultural and rural development will underlie progress on the broad array of economic and social indicators stressed by the MDGs.

Of the MDGs, the first goal is the one that clearest involves the agricultural sector: The poor around the globe are disproportionately farmers, and the very hungry also most commonly find their livelihood through agriculture. By increasing food availability, incomes and contributing to economic growth, higher agricultural productivity and supportive policies allow people to break out of the poverty-hunger-malnutrition trap. Broad-based agricultural growth is the key for decreasing poverty and increasing growth in sub-Saharan Africa.

Because of the importance of ODL to higher agricultural productivity, COL is working with the Forum for Agricultural Research in Africa (FARA) to expand technology-mediated Open and Distance Learning (ODL) for agricultural education in sub-Saharan African. FARA is increasingly involved in agricultural education, extension and development.

A report commissioned by COL recently, outlined eight country case studies about the use of ODL for improving livelihoods through agriculture. The countries included were Cameroon, Ghana, Kenya, Nigeria, Sierra Leone, Tanzania, Uganda and Zambia. The report focuses on the urgent need to use ICTs to provide education, training, information and communication about agriculture.

It is therefore imperative that the largest group of illiterate population in the rural areas should be provided learning opportunities to meaningfully participate in the development process, and ODL has proved to be the effective method of doing it.

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RECONSTRUCTING MASCULINITY AND POWER IN AFRICA THROUGH OPEN DISTANCE LEARNING FOR SUSTAINABLE DEVELOPMENT: A CRITICAL ANALYSIS OF WOLE SOYINKA’S CLIMATE OF FEAR

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Abstract
The strabismus conception of masculinity and power with its manipulation as reflected in the consequences of actions endorsed and demonstrated by leaders, citizens as individuals and groups at different times in the past and present has been a major source of the seemingly quiescence and underdevelopment in Africa. Masculinity has often been associated with being athletic, breadwinner, objective, sexually aggressive, unemotional, dominating, etc; while power is frequently construed as a tool of dominance, authority, superiority, influence, and governance. This inept perception was borne out of Africa’s situating and ignorance. The consequences of the misconceptions include: abuse of power, intolerance, militancy, humiliation, insecurity, inadequate dialogic tools and fora etc. These result in the “climate of fear” as being experienced in the Niger-Delta of Nigeria, Kenya, and other parts of Africa. Thus, this paper examines the concepts of masculinity and power with exemplification from Africa with Wole Soyinka’s Climate of Fear. The research methodology employs a combination of critical discourse analysis and Halliday’s Systemic Functional theory of grammar with sociolinguistics approaches for the analysis. The study posits that the root of the problems that abound in Africa is traceable to the lack of precise socio-cultural, political and philosophical ideologies by Africans. The research opines that these fundamental problems of Africa can be resolved through orientation with Education For All, which is one of the challenges of the millennium development goals. The paper examines the contrivance of open distance learning and its role in the education of African citizenry. It concludes on the ground that open distance learning as a recent and welcomed information technological development in Africa, if properly channelled and adequately funded would enhance sustainable development in Africa by its elimination of some of the aforementioned obstacles.

Key words: masculinity, power, education, Africa, ideologies, development.

Introduction
Reconstructing masculinity and power in Africa important, as the limited perspectives of defining these concepts have generated stagnated development in various parts of Africa. The myopic understanding of masculinity and power responsible for the actions taken by political and religious leaders in Africa, which have seriously jeopardized the unity, co-existence and peaceful habitation of people in various parts of the continent. Hence, there is the need for a critical examination of masculinity and power; need for the analysis of some actions taken by African leaders; and need for the critical evaluation of the consequences of the actions on African citizens as reflected in Wole Soyinka’s Climate of Fear in order to exemplify the roles of Open Distance Learning (ODL) in Africa for sustainable development.
The concepts of masculinity and power

Masculinity in its crudest form is often associated with being athletic, breadwinner, sexually aggressive, unemotional, dominating, etc. Craig (1993) observes that it relates to “men’s need to achieve status and others’ respect, and to toughness, which means that men should be mentally, emotionally and physically tough.” This reveals that masculinity is about being tough. As this discourse is not centered on gender, it examines masculinity from a purely sociological dimension and thus, the toughness of African leaders, which influence their decisions and actions is the concern of this paper.

Hanke (1992) describes hegemonic masculinity as:

The social ascendancy of a particular version of masculinity that operates on the terrain of common sense and conventional morality that defines ‘what it means to be a man’, thus securing the dominance of some men within the (sex/gender) system.

From Hanke’s definition above, the need for dominance and assertion of self triggers the expression of masculinity as a form of force by particularly men. The salient desire to exhibit masculinity in its unrefined form leads to actions of force and domination that are often demonstrated by African leaders as their expressions of power. This conveys that there is need for a conceptualisation of gender that recognises multiple definitions of masculinity as well as research that goes beyond the traditional analysis. Craig, Kimmel and Lang (2000) explain that understanding the definitions and discourses surrounding masculinity can help in the analysis of how political, economic and cultural inequalities are produced and distributed not only between, but also within the genders. They observe that an inquiry into the ‘politics of masculinity’ offers an opportunity to rethink men’s strategic interest in challenging values and practices that create gender hierarchy. This indicates that gender equality is not only an end in itself, but also a necessary means to achieve sustainable human development and reduction of poverty. Hence, this calls for the need for the reconstruction of masculinity as a social discourse.

Typically, Connell (1998) expresses that making men more conscious of gender as it affects their lives as well as those of women is a first step to challenging gender inequalities. Earlier, Connell (1995) warns that masculinity is not a property of men, and reminds people to be weary of using the terms ‘men’, male and ‘masculinity’ interchangeably. Likewise, Sedgwick (1995) says:

As a woman, I am a consumer of masculinities but not more so than men are, and like men, I as a woman am a producer of masculinities and performer of them.

This buttresses the fact that women too possess and demonstrate the features of masculinity. Greig, Kimmel and Lang (2000) suggest that pluralising masculinity into masculinities shows that there is more than a way to explain that there are many ways to be a ‘man’. The above review demonstrates that there is still a great deal of investigation yet to be carried out on masculinities. It also portrays the need to redefine masculinity in terms of cultural orientation in order to rethink the basis on gender-in-equality. The above also demonstrates that gender studies and masculinities should be given attention in order to utilise means of using them to solve societal political problems such as poverty, drought, hunger, violence, sexual denigration, drug abuse, child-abuse, terrorism among others.

A person’s existence greatly depends on his/her interaction with other people in a society. A society as an enduring and cooperating social group of members has developed organised patterns of relationships through interaction with one another, is highly organised and structured. The structural organisation of a society reflects the relationship between people in that society. In a bid to enhance order and sanity in a society, group or organization of persons may exhibit the use of
power. Power then becomes a weapon of dominance, superiority, influence, and governance of the people in a society. Power can be wielded by an individual or a group of people to attain desired objectives which could be beneficial, to the people, who are the recipients of the products of power in a society. Hence, the use of power can generate positive or negative consequences depending on the intended objective of the user of power and the disposition of the recipients.

A précis of the views about the essence of power illustrates that: Power has to be acquired. Power may only be exercised. Power is a matter of authority. Power belongs only to the collective. Power cannot belong to anyone; it is a quality of social systems. Power involves conflict. Power does not involve conflict in every case. Power generally involves conflict, but not necessarily. Power provokes resistance. Power, first and foremost, has to do with obedience. Power is both resistance and obedience. Power is connected with oppression and rule. Power is productive and makes development possible. Power is an evil, a good, diabolical, and routine (Lukes, in Clegg, 1989, p. 239).

To the majority of people, masculinity is equated with self-worth, power, victory, and competence (Steinberg, 1993). A good man has the Midas touch; everything he does meets with success. Or at least that’s what he thinks. This pattern repeats itself in culture after culture. The images that have been preserved from them are unsurprising by our current standards for masculinity. Men are shown engaged in warfare, capturing prisoners, hunting, engaged in ritual dance, and receiving visitors in a leadership capacity (Joyce, 2000). It has been said that “the accumulation of power is one of the defining characteristics of the masculine persona” (Steinberg, 1993). Scholars often define power as a capacity to change other people’s behavior. Dominance is an outcome of power. In the absence of power, one cannot sustain control over any matter. Nevertheless, the presence of power does not necessarily mean that dominance is assured either.

The consequences of the use of power as felt by the receiver are expressed through the use of language. Language as a system of communication is rule-governed is central and indispensable to humans. Oyeshile (2000) describes language as an instrument for communication of thought, and thought consists of a succession of ideas in consciousness. In other words, language mirrors one’s subconscious and reflects one’s thought as message. In politics for instance, Nigeria has experienced different forms of governance such as the military and the civilian regimes, which wield different degrees of power and produced different effects on Nigerians as reflected on the expressions of people. Ayeomoni (2004) states that language and politics are interconnected, language is considered the vehicular expression of politics. It is the means by which politics or political discourse and ideas are widely disseminated. Thus, language is an important tool for reflections on society, politics, and people etc.

Contextualisation of the Text

This paper opines that the misconception of masculinity and power by African leaders is responsible for the several vices such as abuse of power, intolerance, intimidation, militancy, humiliation, insecurity, etc. that abound and give rise to the “climate of fear” in African countries. Hence, the text, Soyinka’s Climate of Fear is selected for this study as it exemplifies these situations as they are found in various parts of the continent. The text published in 2004 as a reflection of the author can be described as a political essay that analyses the political activities of leaders and people in various parts of the world.

In the book, the author explores the changing face of fear; the conflict between power and freedom; the complex motives behind unthinkable acts of violence; the meaning of human dignity, while comparing the fanaticism of powerful terrorists with the attitude of world leaders – discovering terrifying similarities. For the purpose of this study extracts shall be drawn from the text and examined with the linguistic approach of Critical Discourse Analysis. Wole Soyinka’s text is chosen for this investigation as the Nobel Laureate is a literary giant who has made a great impact in the world of literature. Ogungbesan (1979) buttresses this that Soyinka, as a novelist deserves to be taken seriously because of his high intellectual position among African writers. He describes Soyinka as a writer that possesses an inner light that is
unavailable to the mass of his people, and one, uses his inspiration and insight to guide his society towards a beautiful future. Thus, educating others about his noble ideologies for the society makes Soyinka’s texts appealing to scholars.

Critical Discourse Analysis

Fairclough (1995) opines that discourse is the language seen as a form of social practice, and discourse analysis is analysis of how texts work within socio-cultural practice. The analysis requires attention to textual form, structure, and organisation at all levels. A working assumption is that any level of organisation may be relevant to critical and ideological analysis. (Also see Brown and Yule, 1983; Fowler, 1996; and van Leeuwen 1996).

Van Dijk (1996) explicates further that one of the crucial tasks of Critical Discourse Analysis is to account for the relationships between discourse and social power. The scholar posits that such an analysis should describe and explain how power is enacted, reproduced or legitimised by a text. It posits that a critical analysis of project of access to public discourse and communication presupposes insight into more general political, cultural and economic aspects of dominance. (Also see McCarthy, 1992; Eggins, 1994). Critical discourse is important to this study as Fairclough (1992) reveals that discourse contributes to the construction of “social identities”. It also helps to construct social relationships between people. It also contributes to the construction of systems of knowledge and beliefs.

Critical Discourse Analysis of Masculinity and Power in the Climate of Fear

a. Thematic Structure Analysis

Halliday (1985) explains that the theme is the element which serves as the point of departure of the message. It is the starting point for the message and it is what the clause is going to be about. The textual function of the clause is that of constructing a message. The following sentences, as extract from the text shall be used as the sample analysis thus:

<table>
<thead>
<tr>
<th>Sentence</th>
<th>Clause type</th>
<th>Logical component</th>
<th>Logical semantic process</th>
<th>Theme</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Again and again, our paths - those of creative people - would meet, leading to that immediate question: how did creativity survive under such arbitrary exercise of power? P. 4</td>
<td>Hypotactic</td>
<td>a = b X b</td>
<td>Expansion enhancement Projection: idea</td>
<td>marked</td>
<td>Circumstantial adjunct</td>
</tr>
<tr>
<td>2. The relationship between that fire, a naked force of Nature - even though probably the work of arsonists and the humanity that was menaced was very different from the exercise of the power of an individual over another, or that of a totalitarian state over its populace. P. 7</td>
<td>Simple</td>
<td>S P C</td>
<td>Embedded expansions elaboration projection: idea elaboration extension.</td>
<td>Unmarked (thematic equative)</td>
<td>subject</td>
</tr>
<tr>
<td>3. Today, the fear is one of furtive, invisible power, the power of the quasi-state, that entity that lays no claim to any physical boundaries flies no national flag, is unlisted in any international associations, and is every bit as mad as the MAD gospel of annihilation that was so calmly</td>
<td>Hypotactic</td>
<td>a = b = b</td>
<td>Expansion elaboration extension.</td>
<td>Marked (Thematic equative)</td>
<td>Circumstantial adjunct</td>
</tr>
<tr>
<td>4.</td>
<td>Political cowardice or a lack of moral which dominated the thinking of many African leaders was, frankly, Let us keep mute and maybe he will exempt us from his current revolutionary rampage, or at least exercise his restraining influence, and cloak us in selective immunity.</td>
<td>A S P A C</td>
<td>Embedded expansions</td>
<td>Unmarked (thematic equative)</td>
<td>Subject</td>
</tr>
</tbody>
</table>

| 5. | They had only to recall that Libya, headed by a young maverick called Gaddafi was then at the heights of its power. P. 16. | S P A -P C | Embedded expansions: | unmarked | subject |

| 6. | Distasteful though the conclusion may be to such mind-sets September 11, 2001 has proved to be only a culmination of the posted signs that had been scrawled on the sands of the Sahara, over decades in letters of blood. P. 18. | A S P C A | Embedded expansions: | Marked | Comment adjunct |

| 7. | Thus: We shall ascend to power on the democratic ladder – declared the evidently popular Islamist party- after, which we shall pull up the ladder, and there shall be no more democracy. P. 31. | a = b | Projection: idea | Marked | Conjunctive adjunct |

| 8. | Once righteousness replaces rights in the exercise of power the way is paved for a permanent contest based on the primary of the holier-than-thou. P. 36. | A S P C A | Embedded expansion: | Marked | Circumstantial adjunct |

| 9. | We are speaking of the thrill of power by means other than actual governance, power as a pursuit in its own right, an additive concentrate, extract or essence. P. 41. | S P C A | Embedded expansion: | Unmarked (thematic equative) | subject |

| 10. | What differs in our contemporary situation is that the relishing of power is no longer an attribute of the outstanding, exceptional individual, but is increasingly accessible even to the nondescript individual whose membership of a clique, or activities on behalf of the chosen, more than fulfill this hunger for a share in the diet of power. P. 42. | a + b x b | Embedded expansion: | Unmarked (thematic equative) | subject |

| 11. | Power, alas – even in its comic vein is neither abstract nor metaphysical in its impact on society. P. 45. | S A P C A | Embedded expansion: | Unmarked (thematic equative) | Subject |

| 12. | The axis of tension between power and freedom continues to propel the very motions of personality development, social upheaval and nation conflicts P. 45. | S P C | Embedded expansion: | Unmarked | Subject |

<p>| 13. | Apart from a fear of the loss of | Embedded | Comment |</p>
<table>
<thead>
<tr>
<th>No.</th>
<th>Sentence</th>
<th>Type</th>
<th>Bracketing</th>
<th>PoS</th>
<th>Markedness</th>
<th>Adjunction</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.</td>
<td>Power is self-sufficient, a replete possession, and must be maintained by whatever agency is required. P. 48.</td>
<td>Hypotactic</td>
<td>a + b</td>
<td>Embedded expansion: elaboration</td>
<td>Unmarked (thematic equative)</td>
<td>subject</td>
</tr>
<tr>
<td>15.</td>
<td>This all-pervasive extract was, in my own view the exercise of power. P. 50.</td>
<td>Simple</td>
<td>S P A C</td>
<td>Embedded expansion: elaboration</td>
<td>Unmarked (thematic equative)</td>
<td>subject</td>
</tr>
<tr>
<td>16.</td>
<td>Unnamed, unacknowledged, power was nonetheless the palpable fetish of worship. P. 50.</td>
<td>Simple</td>
<td>A S P A C</td>
<td>Embedded expansion: enhancement</td>
<td>Marked</td>
<td>Circumstantial adjunct</td>
</tr>
<tr>
<td>17.</td>
<td>For a start, power takes away the freedom of the other and replaces it with fear. P. 52.</td>
<td>Hypotactic</td>
<td>a + b</td>
<td>Expansion: extension.</td>
<td>unmarked</td>
<td>Subject</td>
</tr>
<tr>
<td>18.</td>
<td>The basis of rejection that registers itself in an audience seated at a theatrical or cinematic representation of the megalomaniac has always been the antithesis of human volition - power! P. 52.</td>
<td>Simple</td>
<td>S P C</td>
<td>Embedded expansion: elaboration, extension.</td>
<td>unmarked</td>
<td>subject</td>
</tr>
<tr>
<td>19.</td>
<td>So, power is really neither efficacious nor a mandatory facilitator of vision or political purpose. P. 53.</td>
<td>Simple</td>
<td>A S P A C</td>
<td>Embedded expansion: elaboration extensions addition variation.</td>
<td>Unmarked (thematic equative)</td>
<td>Conjunctive adjunct</td>
</tr>
<tr>
<td>20.</td>
<td>On the contrary, true vision may eschew power, may totally repudiate power, seeking to fulfill itself by that hardy, self-sacrificial route that does not learn on the crutch of power. P. 53.</td>
<td>Hypotactic</td>
<td>a = b x b</td>
<td>Expansion: elaboration embedded expansion: enhancement</td>
<td>marked</td>
<td>Circumstantial adjunct</td>
</tr>
<tr>
<td>21.</td>
<td>And power, let us stress just once more need not to be an individual aspiration; can be no more than mere participation in a collective exercise a variant that is the intriguing and proliferating arm of hegemonic obsession of a unit within a totality. P. 54.</td>
<td>Hypotactic</td>
<td>a = b = b</td>
<td>Embedded expansion: enhancement elaboration</td>
<td>unmarked</td>
<td>subject</td>
</tr>
<tr>
<td>22.</td>
<td>In short, power is, paradoxically, the primordial marshland of fear, from which emerges the precipitate of man’s neurotic response to mortality. P. 55.</td>
<td>Simple</td>
<td>A S P A C</td>
<td>Embedded expansion: elaboration enhancement</td>
<td>Marked (Thematic equative)</td>
<td>Circumstantial adjunct</td>
</tr>
<tr>
<td>23.</td>
<td>Youths went into battle with nothing but wooden guns in their hands - captives of the same rhetoric that was drummed daily into their heads – No power on the African continent can subdue us. P. 64.</td>
<td>Hypotactic</td>
<td>a X b</td>
<td>Embedded expansion: enhancement projection: locution.</td>
<td>unmarked</td>
<td>subject</td>
</tr>
</tbody>
</table>
24. I refer to potentially inhibitory discoveries of history and society, such as power corrupts, and absolute power corrupts absolutely. P. 70.

<table>
<thead>
<tr>
<th>Simple</th>
<th>Embedded expansion: elaboration extension.</th>
<th>unmarked</th>
<th>subject</th>
</tr>
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</table>

25. Fanaticism remains the greatest carrier of the spores of fear, and the rhetorical of religion, which the hysteria so readily generates is fast becoming the readiest killing device of contemporary times. P. 82.

<table>
<thead>
<tr>
<th>Hypotactic</th>
<th>Embedded expansion: elaboration extension enhancement.</th>
<th>unmarked</th>
<th>Subject</th>
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</table>

26. Dignity is simply another face of freedom and thus the obverse of power and domination, that axis of human relationship (that is equally sustained by fear – its poles doomed to remain in permanent conflict, yet complement each other. P. 99.

<table>
<thead>
<tr>
<th>Hypotactic</th>
<th>Embedded expansion: elaboration extension enhancement.</th>
<th>Unmarked (thematic equative)</th>
<th>Subject</th>
</tr>
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</table>

27. The power that is exerted by Nature does not humiliate. P. 100.

<table>
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<tr>
<th>Simple</th>
<th>Embedded expansion: elaboration</th>
<th>unmarked</th>
<th>Subject</th>
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28. Illustrations of the kind of power that reduces our self-worth range from the most mundane, even domestic relationships-such as a tenant’s fear of ejection by a landlord in a system that offers neither preventive measures nor legal redress – to a wife or child subjected to constant physical and mental abuse by a husband or parent, an Irish teenager in the grip of terror of a vigilante committee, a Zimbabwean recruit in the burgeoning terror training camps of a Robert Mugabe (where some are raped as a mandatory rite of induction). P. 101.

<table>
<thead>
<tr>
<th>Hypotactic</th>
<th>Embedded expansions elaboration: exemplification extension enhancement</th>
<th>unmarked</th>
<th>subject</th>
</tr>
</thead>
</table>

29. The nature of power that humbles and humiliates is that which compels the head of a Palestinian family to sit helplessly under Israeli guns, drenched in tears, as he watches his ancestral olive grove, the sole family source of livelihood, fall under the electric saw, tree by tree, to make way for the very wall that will from then on, reduce his space of volition. P. 101.

<table>
<thead>
<tr>
<th>Hypotactic</th>
<th>Embedded expansion: elaboration enhancement.</th>
<th>Unmarked (thematic equative)</th>
<th>subject</th>
</tr>
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</table>

30. No community, true, dare succumb to an arrogation of power over the lives of its innocents, and the doctrines there are no innocents must be strategically and morally repudiated. P. 106.

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<thead>
<tr>
<th>Paratactic</th>
<th>Expansion: enhancement extension projection: idea</th>
<th>unmarked</th>
<th>Subject</th>
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</table>

The investigation above reveals that Soyinka in Climate of Fear uses simple sentences, which have one-clause structure; and clause complexes. Simple sentence as a unit below the clause is usually made up of words and group complexes with embedding mechanism. The clause complexes that evince the system of interdependency as used in the text are the hypotaxis and...
parataxis relations, which define univariate structure. The hypotaxis relation that is used to disclose the relation between a dependent element and the element on which it is dependent, is frequently employed in the text.

The logical semantic processes employed by the writer in the text are the processes of expansion and projection. For the hypotactic clauses, the expansions are usually realized as extension, elaboration, or enhancement; while in simple sentences, the expansions are realized by the use of embedded groups or rank shifted clauses. Likewise, projections of ideas are used in both the simple and clause complexes. Soyinka employs the logical semantic process of expansion to elaborate and give additional information on the subject or theme of the message in order to convince the reader on his point of logical argument. It also enables the reader to think along and agree with the author on his view of power. This is because the concept of power as used in the text needs to be elucidated on its hydra-faced application in human societies.

Still on textual meaning, the thematic examination of sentences reveals that Soyinka uses marked and unmarked themes that are often presented as phrase complexes. A marked theme refers to a theme that is different from the subject declarative clause, while the unmarked theme is that which the psychological subject (theme), the grammatical subject (subject), and the logical subject (actor) are conflated into a single element. Halliday (1995) affirms that the selection of themes by a speaker or writer gives characteristic flavour to a piece of discourse. The analysis shows that the writer uses more of unmarked themes in the text.

The thematic equative in most cases employs nominalization to function as the theme and the subject. For instance:

The relationship between that fire, a naked force of Nature – even though probably the work of arsonists – and the humanity that was menaced was very different from the exercise of the power of an individual over another, or that of a totalitarian state over its populace. P. 7.

Today, the fear is one of furtive, invisible power, the power of that quasi-state, that entity that lays no claim to any physical boundaries, flies no flag, is unlisted in any international associations, and is every bit as mad as the MAD spell of annihilation that was so calmly annunciated by the superpowers. P. 9.

Political cowardice or a lack of moral will, what dominated the thinking of many African leaders was frankly, ‘let us keep mute and maybe he will exempt us from his current revolutionary rampage, or at least exercise his restraining influence and cloak us in selective immunity’. P. 15.

What differs in our contemporary situation is that the relishing of power is no longer an attribute of the outstanding, exceptional individual, but increasingly accessible even to the nondescript individual whose membership of a clique, or action on behalf of the chosen, more than fulfill this hunger for a share in the diet of power.

This all-pervasive extract was, in my view, the exercise of power. P. 50.

Thus, the mode of the discourse as revealed through thematic structure with the textual meaning analysis greatly determines the ideologies portrayed through the language in this context.

b. Mood Structure and Interpersonal Meaning Analysis

This aspect of analysis focuses on the clause exchange, the clause takes the form of proposition. The interpretation of the structure of statements or questions gives the understanding of the clause in its exchange function. Polarity, which is expressed in finite element, demonstrates that the positive polarity is mostly used by the speaker in the text.
means that the propositions employed in the text are making assertions with high degree of usuality. The modality of the propositions shows that the speaker’s opinion is more often than not, put with a positive polar form. For instance:

Interrogation

P. 133: Has Marxism triumphed since the killing of Leon Trotsky? What nature of an environment enabled the stabbing of a creative Naguib Mahfouz? Was peaceful coexistence promoted as a result of the demolition of the mosque in Uttar Pradesh?

Has the assassination of Sheikh Yassin made the world safer? What kind of morality of liberation struggle deceives a fourteen-year-old child into becoming a walking bomb?

Does a supposed wall of defense concretize despair across the middle East- and the world?

Why is the woman writer Taslima Nasin a fugitive from her home in Bangladesh?

P. 122 (What, in the name of all that is unholy, does a council of religious clerics in Northern Nigeria know of modern medicine that it commands Muslims to resist inoculation against cerebrospinal meningitis - a scourge in that part of the nation that leaves hundreds of thousands of infants disabled for life - and claims authority from the Koran!)

The questions above are for the reader’s self-interrogation in order to give objective answers to them. They demonstrate that in the world, most people have been victims of intolerance and fanaticism, which are the outcome of power. Proposals in forms of commands are seldom used in the text, where they are employed, they are used in the positive form, in prescription purposes to indicate obligation by a finite modal operator or by an expansion of the operator. The mood structure with subject and finite, which is employed for most of the proposals in the text, implies that often the speaker employs independent clauses in form of clause-complexes that are often realized as declarative or interrogative. The investigation further reveals that the subjects of the mood structure in the text are often realized as nominal group complexes or as nominal group complexes that are embedded clauses, which function ahead, such as:

Power, alas-even in its comic vein - is neither abstract nor metaphysical in its impact on society. P. 45.

Apart from a fear of the loss of identity to those goblins from outer space-with heaven knows what nasty habits - one recognizable source of that repulsion is, very simply, the ancestral adversary of human freedom that we designate power? P. 47.

This all-pervasive extract was, in my view, the exercise of power. P. 50.

The basis of rejection that registers itself in an audience seated at a theatrical or cinematic representation of the megalomaniac has always been the antithesis of human volition-power! P. 52.

Thus, the mood structure reveals the interpersonal meaning of the text by distinguishing the form of the exchange found in the text. It shows that interaction is predominantly in form of assertions given as proposals with statements. The speaker, Wole Soyinka, makes assertions about the forms of power that are exhibited in various societies by rulers.

c. Transitivity Structure and Experiential Meaning Analysis
This aspect of the study focuses on the aspect of meaning as representation, that is, "it centers on the clause in its ideational function and its role as a means of representing patterns of experience" (see Halliday 1985; Eggins 1994). Transitivity, which grammatical and structural expresses the reflective, experiential aspect of meaning and its representation of processes that are recognized in a language, is also perceived at the clause level. The meaning of the utterance is revealed through the real world as coded by linguistic structures. The transitivity structure with the experiential meaning of the thirty sentences above demonstrates that the relational processes of attribution or identification are predominantly employed by the speaker in the discourse. The writer gives the attribute of or identifies the participants in the discourse. One occasion, the material process of action is employed by the speaker to reveal the act that is carried out with the actor and the goal of the action. The implication of this is that the writer presents the discourse as phenomena that are observed or identified by the speaker.

The activity going on in the discourse is a review of the various ways leaders in Africa and other parts of the world have exhibited power in the past. Participants in the discourse are the writer and the reader. The speaker uses nominalisation to present the subjects in the discourse. Here, the relationship between the speaker and the listener is that of inclusion. The speaker identifies "something" which the listener as a co-participant may not have observed. The speaker thus uses relational processes in portraying the message. Language in this discourse is used as an instrument of dialogic communication to give information to the reader. The interaction is predominantly in the form of assertions given as propositions with statements. The speaker makes assertions about the forms of power that are exhibited in various societies in Africa by rulers.

Fairclough (2001) explains that the exercise of power in modern society is increasingly achieved through the ideological workings of language. Hence, the task of this study centers on extricating the ideologies presented in the discourse through language. For a successful attempt of critical discourse analysis, Fairclough (2001) suggests that one needs to consider the description of the text; interpret the relationship between the text and the interaction; and explain the relationship between interaction and social context.

Thus, the discourse of masculinity and power in the text centers on the power relation of the ruled (the citizens of a country) and the rulers. There exists the struggle between the ruled and the ruler. The text exhibits a dual level of power. There is the relation of power between the actors and agents on one hand; and the relation of power between the speaker and the listener (reader) on the other hand. The later exhibits power by consent rather than power by coercion as demonstrated by the first relation. The societal struggle for power by leaders (rulers) is demonstrated in the discourse at the level of vocabulary. Here, attention is given to some sociolinguistic features that are used in the text as an attempt at identifying the contextual meanings of expressions. Hence, a lexicosemantic investigation of the text is presented thus:

Reiteration:

This refers to the repetition of lexical items, synonym, near-synonym or a superordinate term. Examples of words reiterated in the text include: fear, power, democracy, humiliation, rhetorical hysteria, fanaticism, etc. The words are reiterated also as near synonyms such as:

Fear: Fear of a nuclear holocaust, fear of reprisals, fear of Libya, fear of loss of identity, fear of humiliation, fear of ejection.

Power: Invisible power, overt power, formal power, etc.

Democratic: Democratic choice, democratic process, democracy, democratic ventures, democratic walk, etc.

Bomb: Time bomb, suicide bomb, atom bomb, etc.
Dignity: Human dignity, pursuit of dignity, epitome of dignity, essence of dignity, diet of dignity, collective dignity etc.

Human: Human rights, human survival, human existence, human virtues, etc.

Mantra: Mantra of Weapon of Mass Destruction, mantra of piety, mantra of beautiful change of faith etc.

Super ordinate Terms: Co-Hyponyms

Human virtues: Integrity, love, tenderness, graciousness, generosity

Architects of necropolis: Pol Pot, Adolf Hitler, Josef Stalin

Countries: Nicaragua, Chile, Argentina, Panama, Iran, South Africa, Hungary, Albania, East Germany, Bulgaria, Nigeria, Afghanistan.

Religions: Christianity, Islam, Isra.

Infidels: Unbeliever, Kafri

Dictators: Mariam Mengistru (Ethiopia), Pinochet (Chile), Mlobijeviz (Yugoslavia) General Sanni Abacha (Nigeria) Rabbidgbe (Zimbabwe), Hitler, Pol Pot, Idi-Amin, Sergeant Doe

Super ordinate items such as above operate anaphorically as forms of synonyms, while the hyponyms give entailment of the members of the group as a form of expansion that enhances reader’s understanding of the concepts through the relation of inclusion.

Collocation: This refers to lexical items that regularly co-occur. Words that prominently collocate in the text include:

Fear: Level of fear, diet of fear, climate of fear, potency of fear, symptoms of fear, conditioning of fear, emotion of fear, kind of fear, bars of fear, power of fear, season of fear, expression of fear, inculcation of fear, virus of fear, era of fear, etc.

Power: Contention of power, arrogant of power, statement of power, exercise of power, triumph of power, apprehension of power, essence of power, expansion of power, thrill of power, laboratory of power, nurturers of power, lust for power, nature of power, sense of power, pursuit of power, crutch of power, consolidation of power, explication of power, expression of power, etc.

The collocation of words as shown above, portrays the various ways the words have been used in the text. It shows the extended meanings that the lexical items could possess. It is used to reinforce the reader’s imagination and create vivid picture of the situation. Thereby enhancing understanding of the lexical items.

Antonyms

Some few instances of antonyms as found in the text:

Fear * dignity
Democracy * force
Monologue * dialogue
Life * death
Freedom * domination
Humiliation * self-esteem
Lexical borrowings

Some lexical items are used as a result of borrowings by the author in the text, these include:

P. 81 Praise Jesus, Hallelujah, Allah Akbar, Hare Krishna, The Last Temptation of Christ, The Passion of Christ, Siege hell

P. 88 We shall not sacrifice our dignity; There are no innocent; I am right, you are wrong; all life is theft.

P. 20 We must, in other words, reject the conditions George Bush delivered so explicitly in that ultimatum “You are either with us and against the terrorists; you are on the side of the terrorists; and in “We do not require the world’s approval since we are divinely guided”, just as we repudiate Osama Bin Lader. The world is now clearly divided into two – the world of the follower of Islam against that of infidels and unbelievers.

P. 20 I have always been a light traveler, but that became de rigueur under the terror reign of Sanni Abacha of Nigeria.

P. 115 Not for nothing do the Yoruba warn that sooner than have a monster child meet a shameful death in the market place, it is best the mother strangle it in the secret recess of the home.

The borrowing of words (in italics) as used in this context refers to words used by the author that are not his original expressions. These words are used by people in different societies but here the writer uses them as locution or indirect speech to buttress his points. The discourse reveals that most leaders at that time aimed to retain their power through the use of coercion. On the other hand, the ruled in this context, express their power in a passive way as this group is predominantly made up of illiterates that are covertly excluded from the struggle because they can’t read. The minute part of the group in the opposition of coercive power is made up of the educated people that can express themselves and construct the ideology of the group.

The social order of the discourse reveals that the speaker presents the use of power in Africa by Military rulers. For instance, it portrays the power employed by General Abacha, and some other totalitarian leaders. The power that produces as demonstrated by African leaders and terrorists is that which results from coercion, opposed to power of education and enlightenment. Hence, masculinity is expressed by leaders as being tough, resolute, uncompromising and aggressive through the power relation of the ruler and the ruled.

This presupposes that most African leaders adhere to power by power by coercion because they lack philosophical orientation and do not possess adequate education on ideologies that influence societies. The social practice in Africa is that anyone can ascend to power particularly with the use of arms and ammunition, and as a result, subject the citizenry to his whims and caprice. This necessitates the need for education of African leaders and populace. Africans need to be educated and orientated on political and philosophical ideologies. Thus, the significant roles of open distance learning (ODL) cannot be disputed at this point in time, if African nations are to meet the objectives of Education For All (EFA) as one of the millennium goals.

Lopes (2003) stated that development can be perceived as a transformation of society, which necessitates change that provides individuals with more control over their own destiny. This means that education through ODL can enhance the transformation of individuals in a society, which would result in sustainable development of human minds if it provides political, ideological and
sound philosophical foundation to individuals. The importance of the education that develops the attitudes and values of a learner into a coherent viewpoint which is adjudged as enduring value both to the learner and the society is also reiterated by Ayodele-Bamisaiye 2003,(also see Babarinde 2003; and Egunyomi 2003). Sustainable development can be attained through ODL, if it is geared towards overcoming African educational challenges such as the problem of non-affordability of educational technology by distance learners; the problem of high-population growth rate; the problem of inequality in sectoral provision; and the problem of gender imbalance among others.

In conclusion, ODL should be adequately funded and channelled to enhance sustainable development in Africa with the provision of sound, qualitative education that provides philosophical, ideological, and political orientations that provide the foundation for the right mindset for Africans. This would also enhance in the reconstruction of masculinity and power. The goal of education through ODL should be the provision of the education that would facilitate reconstruction of masculinity as the ability to be focused, determined, tolerant, humble and dialogical to issues rather than the ancient stereotypic orientation of masculinity. Finally, ODL should likewise facilitate the reconstruction of power as power of education, orientation, and enlightenment instead of the archaic perception of power as the use of force and coercion as exhibited by African leaders in the text.

References


INNOVATIVE METHOD OF HIV/AIDS EDUCATION AND MANAGEMENT THROUGH ODL: CONTRIBUTIONS FROM NATIONAL OPEN UNIVERSITY OF NIGERIA

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Abstract

In a bid to fill the much needed gap in the effort to effectively address the HIV scourge in Nigeria, the National Open University of Nigeria (NOUN) introduced a Post Graduate Diploma course in HIV/AIDS Education and Management that provides in-depth knowledge on HIV/AIDS and sexuality. This is considered innovative because it involves a flexible learning mode: the Open and Distance Learning (ODL) method. It also provides a much needed access to quality and continuing education under the generally accepted philosophy of 'work and learn'. Thus, health professionals as well as those working on HIV/AIDS related matter are given the much needed skills in the various aspects of HIV/AIDS education and Management. Against the backdrop of NOUN's experience this study x-rays the philosophy of ODL and its application to the study and management of HIV/AIDS. Specifically, it illustrates the challenges of designing and sustaining the programme which include planning, quality assurance and course material development. Lastly, the object of exploring the likely prospects of HIV/AIDS education through ODL is the belief that it enables quicker, flexible and cheaper access to learning and development that could achieve sustainable intervention in the fight against HIV/AIDS.

Introduction

The development problematic has occupied the attention of scholars, activists, politicians, development workers and international organisations for many years with an increased tempo in the last decade. Even though there are different perspectives to development, there is a general consensus that development will lead to positive change manifested in increased capacity of people to have control over physical, material and emotional well being. This is why some have argued that the purpose of development is to improve peoples’ lives by expanding their choices, freedom and dignity (Igbuzor, 2005). The African Council for Distance Education (ACDE) conference with the theme 'Open and Distance Learning for Sustainable Development' is a modest and innovative contribution towards achieving this goal.

Generally, education is widely accepted as central to sustainable economic and social development. African countries, however, face tremendous challenges vis-à-vis other parts of the world. Rapidly increasing demands for all levels and forms of education, coupled with local and international governments’ limited capacity to expand provision of education through traditional bricks-and-mortar institutions, leave open and distance learning (ODL) as an alternative and viable option to address and satisfy growing demand. Thus, the intrinsic human value of education, which includes the capacity of education to add meaning and value to human lives without discrimination, make it a central component to attaining universal human rights. In short,
education is the key that unlocks and protects the full spectrum of human rights (Aderinoye and Ojokheta, 2004)

Since the 1960s, ODL has enabled African countries to provide relatively inexpensive forms of access to formal education. Further, in recent years, ODL scholars have been aiming to improve quality distance instruction, which in turn raises the overall standard of the end product.

In line with the vision of this conference, the entry point of our contribution is on the innovative method of HIV/AIDS education and management through distance learning. Responding to the pivotal role of education in the fight against HIV/AIDS, and most importantly the choices, freedom and dignity of all, the National Open University of Nigeria introduced an HIV/AIDS Education and Management Course. The intention is to create a means through which health workers and other stakeholders could improve their knowledge of HIV/AIDS and its management.

An Overview of the HIV/AIDS Situation in Nigeria

There is no doubt that the greatest health problem threatening the human race in contemporary times is the HIV/AIDS pandemic. The greatest burden of this scourge is in sub-Saharan Africa. Located in sub-Saharan Africa, Nigeria is the most populous nation in Africa with an estimated population of over 140 million people (Nigerian Census, 2006). Government reports claim that over 300,000 Nigerians die yearly of complications arising from AIDS. Over 1.5 million children are said to be orphaned annually and an estimated 8 million are expected to be infected by 2012. Official figures put the steady rise in HIV prevalence rate from 1.8% in 1988 to 5.8% in 2001, 5.0% in 2003 and 4.4% in 2005 (Nigeria HIV Info., 2006).

The 2005 survey released in 2006 estimated that there are 4 million adults living with HIV/AIDS in Nigeria, and 57% of these are women. The figures, there is significant variation in prevalence between states and between population groups. The epidemic is said to be fuelled in the country largely by poverty, lack of awareness, dense commercial sex networks, early age of sexual activity, poor gender empowerment with religion and culture obstructing open debate about sexuality. The biggest challenge, however, impeding progress of Nigeria's intervention effort, is corruption (Nigeria HIV Info., 2006).

It is alarming, but HIV/AIDS has become a localised epidemic in many states of Nigeria. For instance, if we look at the HIV prevalence rate the 2005 figure (serious doubts exist about the credibility of official figures), Benue has a 10% prevalence rate, with Akwa Ibom following in line with 8% and Nasarawa, Enugu, Rivers and Taraba all in the 6% range. A 3.3% prevalence rate was ascribed to Lagos, but in parts of Lagos, on Lagos Island specifically, the rate is 9%. We had asked officials what the peculiar situation is on Lagos Island that is not present in other parts of Lagos. The most credible explanation given is that Lagos Island has the highest concentration of Voluntary Counselling and Testing Centers (VCT), so, more people receive test here than other parts of the city!

According to Nigeria’s Ministry of Health, the country intended to spend about N247 million to conduct a new sero-prevalence survey between November and December 2007. Indeed, the National AIDS and Sexually Transmitted Infections Control Programme (NASCAP) of the Federal Ministry of Health (FMOH), plans to adopt a new but costlier model in the survey in order to better reflect the number of People Living With HIV/AIDS (PLWHA) in the country. According to Araoye Segilola, the Assistant Director project programme of NASCAP in justifying the Ministry’s decision, “if you conduct study among the high risk groups and at the hot spots, you will realise that the 5 or even 10 percent prevalence is not reflective of the HIV/AIDS situation in the country. Conduct a study any university and you will find that nothing less than 37 to 40 per cent of the population are HIV positive. The problem we are seeing on paper as 4.4 per cent prevalence is just the iceberg. When you carry out studies with the high risk groups, you will know we have a problem at hand (Nigeria HIV Info., 2006).
To be certain, the treatment situation is such that more than half million people of those who are HIV positive in the country need to be on treatment. In reality, we have less than 30,000 people on treatment, presently. Of this figure, almost half access their treatment from sources other than government; yet, every year, HIV/AIDS guls so much that the federal budgets and commands heavy grants from donor agencies.

Between 2005 and 2006 alone, a total of N14.7 billion was budgeted to fight HIV/AIDS from the federal allocation. A quick glance at NACA’s budget reveals that stupefying overhead costs come before matters that have direct and immediate impact on the corresponding benefits in terms of quality of services to PLWHAs. In other words, not in the documents suggests that the 6 million PLWHAs in Nigeria will fare better as it is (HIV Info., 2006).

Political commitment actually began in 2002 when the Nigerian government with a $3.5 million order commenced what some then referred to as an ambitious antiretroviral (ARV) treatment programme to get 10,000 adults and 5,000 children on ARVs within one year. In 2004, several PLWHA who commenced the ARV treatment eventually lost their lives when they skipped treatment for up to three months when the programme was hit by a shortage of drugs. In 2005, government again announced that PLWHAs will henceforth access ARV free of charge, and also came up with a presidential mandate to place at least 250,000 from the more than half a million people on treatment before the end of 2006. With presidential mandate came increased funding and a political commitment by former President Obasanjo which is yet to be rivaled. Meanwhile, at several treatment sites across the country, the few PLWHAs on the programme still pay through their noses to access treatment (Nigeria HIV Info., 2006).

Questions put forward to gauge the impact of the intervention on the life of an average person who is HIV positive and on the community include: How many of our healthcare facilities have the required equipment necessary for HIV/AIDS management? Do our people have enough information necessary to take informed decisions? Do people now see the need for voluntary counselling and testing? Are our women now more empowered to negotiate safer sex and have a decisive say on issues that affect their sexuality? How easy is it to secure paid employment with positive status, and how adequately trained are the trainers?

If these questions will be honestly answered, it would represent the state of response as a community of people against the level of resources at our disposal. Now, let us examine the concept of ODL.

The Concept of ODL

There is no one definition of open and distance learning. Rather there are many approaches to defining the term. Most definitions, however, pay attention to the following characteristics: separation of teacher and learner in time or space; both time and place; institutional accreditation; that is, learning is accredited or certified by some institution or agency. This type of learning is distinct from learning through your own effort without the official recognition of a learning institution. Also inclusive is use of mixed media courseware, including prints, radio, and television broadcast, video and audio cassettes, computer-based learning, and telecommunications. Courseware tends to be pre-tested and validated before use. Also two-way communication: allows learners and tutors to interact as distinguished from passive receipt of broadcast signals. Communication can be synchronous or asynchronous (COL, 1999).

ODL offers a number of advantages to both learners and providers of opportunities of learning. Problems such as distance and time, which are inherent in conventional learning, are overcome in open and distance learning. Such advantages include: overcoming physical barrier, solving time or scheduling problems, expanding the limited number of places available, accommodating low or
dispersed enrollment, making best use of the limited number of teachers available and dealing with culture, religion and political considerations (COL, 1999).

HIV/AIDS Education and Management: Contributions from NOUN

While offering curative care to AIDS patients seems to be a distant reality in the absence of a vaccine, evolving various strategies to prevent or control the unabated spread of this pandemic is desirable and possible. For this, immediate and effective response in new programme areas through teaching, research and extension is required. In this context that the role of the National Open University of Nigeria (NOUN) assumes much importance. Situated in the School of Science and Technology, NOUN introduced a Postgraduate Diploma (PGD) HIV/AIDS Education and Management course to provide the needed and timely support towards HIV education in Nigeria.

Taking cues from its forerunners like the Indira Gandhi National Open University, IGNOU, with a programme on 'HIV/AIDS and Family Education' and National Teachers' Institute, Nigeria, (NTI) amongst many, the programme: HIV/AIDS education and management is skillfully and professionally designed with the following courses:

- Basics of HIV/AIDS
- Basics of Family Education
- Alcohol, Drug and HIV/AIDS
- Disease, Illness and Society
- Basic Anatomy and Physiology of Human Body
- Communication and Counselling in HIV/AIDS
- Clinical and Diagnostic and Therapeutic Services on HIV/AIDS
- Management and Care of HIV/AIDS
- Human Behaviour in Illness
- Economics of HIV/AIDS
- Legal and Ethical Issues in HIV/AIDS
- Global Initiatives on HIV/AIDS
- Primary Health Care and HIV/AIDS
- Biostatistics

Basics of HIV/AIDS introduces the students to the concepts of HIV and AIDS, the evolution, origin, theories and spread of HIV, developing global epidemic of HIV/AIDS. It also provides information on the biology of HIV/AIDS. This course further highlights HIV transmission modes; symptoms and diagnosis. The last two modules look at comprehensive HIV prevention and management strategies. Basics of Family Education traces the role of the family towards health education. Alcohol, Drug and HIV/AIDS expose learners to the relationship between the aforementioned variables. The course, Disease, Illness and Society as the name implies introduces learners to different conceptualisations of disease, illness and effects on society. Further, the course: Basic Anatomy and Physiology of the Human Body enables students understand basic concepts in anatomy and physiology which include the human skin, skeletal system, the nervous system, endocrine system, reproductive system, and so on.

The course: Communication and Counselling in HIV/AIDS is divided into six modules and 23 study units. It introduces the students to concepts of communication, approaches to HIV counselling, counselling process, pre and post counselling, counselling skills and styles, stigma and discrimination, etc. Clinical and Diagnostic and Therapeutic Services on HIV/AIDS is broken into 4 modules and 12 study units. It introduces the students to basics of HIV/AIDS, types and structure of HIV, HIV modes of transmission as well as replications in HIV. It further highlights clinical manifestations of HIV as well as severe assessment techniques. Furthermore, it equips students with classical diagnostic methods of HIV as well as various management techniques.
The course: Management and Care of HIV/AIDS is a rich course that exposes students to basic concepts of HIV/AIDS, psychological management of HIV/AIDS, nutritional management techniques as well as chemotherapeutic management measures. It also deals with HIV palliative care, patient adherence and treatment support. The course: Human behaviour in Illness, introduces the learners to concepts of illness behaviour, namely: symptom experience, assumption of the sick role, medical care contact, dependent patient role and recovery/rehabilitation stages. Economics of HIV/AIDS is broken into 24 study units. It introduces the students to concepts of health and the health continuum, STIs and their relationship to HIV/AIDS, prevalence of HIV/AIDS in Nigeria, peer education, economic implications of HIV/AIDS, HIV/AIDS programmes in the work place, evaluations and interventions of HIV/AIDS, etc. Primary Health Care and HIV/AIDS introduces students to health concepts and prerequisites, concepts of primary health care, health promotion, general analysis of health care services and evaluations, health education, etc. Legal and Ethical Issues in HIV/AIDS highlights inherent ethical and legal issues in management of HIV+ individuals. The course Global Initiatives on HIV/AIDS introduces students to global trends, research and funding associated with the curbing of HIV. Lastly, in Biostatistics, students are exposed to applications of statistics to a wide range of topics in biology and health. Suffice to note that course writing and development entails systematic and articulated stages, which are briefly outlined in the next segment.

Stages of Course Material Development

Course Material development is a critical activity in NOUN as well as other ODL institutions. Guidelines are presented below:

1. Pre-planning Need Assessment Stage
2. Design (Planning Stage)
3. Development Stage
4. Production Stage
5. Review Stage

Pre-planning stage consists of in-house preparation of the academic unit or schools to mount a programme and the determination of relevant courses for the programme. This entails market survey and need assessment for academic programme, preparation of outline programme proposals (OPP) and Detail Programme Proposal (DPP) and selection of course writers, editors, eLearning, content developers, etc.

Course material design stage comprises finalisation of course syllabus, determination of course delivery mode, identification and purchase of adaptable materials, writers and editors’ workshop.

Course material development (authoring) stage consists of the following: authoring of course material manuscript, collection of course material manuclipt (in electronic and printed version), editing of course material by (in-house or external) content experts, correction of manuscript by writers, obtaining copyright permission where necessary and proof reading of manuscript by academic unit.

Course material production stage entails proof reading, house style editing, copy editing, effecting corrections and formatting of manuscript, checking by instructional designer and printing of course material.

Revision stage becomes necessary to update course contents due to review of curriculum, new trends and practices. This stage thus involves the original course writer, except if they are not available, and providers (for adaptable courses).
Specifically, the above illustrates the challenges of designing and sustaining the programme which includes, planning, quality assurance and course material development.

So what makes the HIV Education and Management Programme Innovative?

Within the sphere of professional education for HIV education and management, a combination of factors makes this programme highly innovative:

- It is a programme designed for professionals in the field of health management and its associated disciplines.
- It assists in training the trainers, professional HIV counsellors are equipped with necessary skill needed in their profession.
- It enables students to study at a distance in a context can be organised in relation to personal and career responsibilities.
- It seeks to provide the much needed professional education in HIV education and management, much needed in the country, to address the glaring ignorance about the disease.
- It seeks to recruit experienced and established practitioners, from different professional backgrounds for whom other modes of study in health promotion may be inaccessible or inappropriate;
- It encourages autonomy as students have a student-centred, individual programme
- It promotes networking and sharing among the learners.
- The programme focuses on links between health and current practice issues and concerns.
- It synthesises the personal, professional and political dimensions of theory and practice through critical reflections on learning.
- Ultimately, students are exposed to ICT through ODL

Conclusion

We have attempted to present NOUN’s contributions to HIV/AIDS education and management through the development of a programme designed to address what is considered as a shortcoming or lacuna in the fight against HIV/AIDS in the country especially among professionals. The point, however, is that ODL could be used as an instrument or means of reaching special groups, in this case, HIV/AIDS professionals within the society who are responsible for addressing certain social malaise. The intervention, though generated as a programme, has the ability to not only improve the knowledge base of the health workers, but also invariably has a positive impact on the efforts at addressing the scourge of HIV/AIDS in the country.

There is therefore much that can be learned from innovation from NOUN, and goes to show that ODL, more specifically the programme (HIV Education and Management), could serve to better the lot of the people. To this extent, the relevance of ODL to augment the traditional sources of education cannot be overemphasised.

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EXPLORING OPEN AND DISTANCE LEARNING IN MEETING THE LEARNING NEEDS OF ALMAJIRAI OF NORTHERN NIGERIA

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Abstract

The Almajirai are pupils enrolled in traditional Quranic schools that are prevalent in many parts of northern Nigeria. Although Quranic schools are highly revered religious institutions that have played vital roles in Muslim societies in pre-colonial northern Nigeria, the challenging demands of modernity tend to put the future of these schools at risk. Pupils enrolled are consequently denied effective participation in formal basic education, and are not adequately catered for by either the state or their communities. Concern over the future of millions of children enrolled in Quranic schools has led to the official adoption of integration policy by the Federal Government intended to position them within the framework of the Universal Basic Education (UBE) programme for the purpose of achieving Education For All (EFA) and Millennium Development Goals (MDGs). This paper contends that although the integration policy is widely accepted by stakeholders of the Quranic schools, there are a number of contentious issues which devolve on the implementation of this policy, i.e., the peculiarities of these schools, their pupils, and the socio-economic rhythms of their local communities which have the tendency to exclude rather than integrate them into the regular schools. Consequently, the paper proposes Open Distance Learning (ODL) as an alternative platform that has the potentials of delivering the promises and gains of the UBE to the Quranic school pupils in ways that are responsive to their peculiarities. The paper recommends, among other things, the adoption of a dual mode of ODL system in which traditional classroom method is complemented by radio broadcast in specially designed packages tailored to the needs of Quranic school pupils and their teachers. This, it is believed, will provide for flexibility in the organisation of instruction, and respond to the needs of personnel and resources in these schools.

Introduction

In its bid to widen the participation of all children, particularly the disadvantaged, in its basic education programmes, the Federal Government pursues a policy of instituting flexible programmes that are meant to be responsive and relevant to the peculiarities of these learners and their communities which had hitherto excluded them from conventional programmes of educational delivery. One of such programmes is the integration of Quranic schools into the Universal Basic Education (UBE) framework through a process of cross-infusion of their curricula elements into each other. The aim of this policy thrust is to resuscitate the decaying structures of the traditional Quranic schools and empower them to dispense to the millions of children they enrol, the knowledge, skills and attitudes they need to be functionally relevant in knowledge-driven societies of the 21st Century. It is widely held that the implementation of the UBE programme and the attainment of Education for All (EFA) goals in northern Nigeria could be compromised by the continued neglect of the traditional Quranic schools (Federal Republic of Nigeria, 2002).

However, the implementation of this integration policy is confronted with a number of challenges that limit its effectiveness and led to the failure of past attempts to address the needs of Quranic schools and their pupils (Junaid, Umar & Dukku, 2008). These challenges include lack of strong political will on the part of governments; absence of a sustainable funding pattern; inadequacy of trained teaching force to implement curriculum; resource scarcity; conflicting demands of child labour practices with the routine of the school, the perceived irrelevance of curriculum content to the realities of the pupils and their communities, etc. Therefore beyond the expansion of the Quranic school curriculum, programmes aimed at these pupils and their communities need to be widely accessible, affordable and flexible to local situations and needs.
This paper explores how the curriculum programmes of Qur'anic schools stand to benefit from some of the inherent features and arrangements involved in Open and Distance Learning (ODL).

Almajiri – a Life of Abuse and Exclusion

A pupil of a Qur'anic school is generally referred to as almajiri (plural = almajirai). The word is itself a Hausa loan word which is derived from mujahir, a word in Arabic language which refers to an emigrant. The larger connotation of the word is to describe a long established practice of migration of scholars and mature students throughout the world for the purpose of acquiring knowledge (National Council for the Welfare of Destitutes, NCWD, 2001: 42). In its original conception, the practice of scholarly migration (almajirci) was restricted to learners who having completed the elementary stage of Qur'anic studies (i.e. Qur'anic school Maktab), may emigrate to continue their studies under the tutelage of scholarly residents in other locations. It also involved the movement of children from urban areas to the serenity of rural locations so that they could concentrate on their studies without any distractions. While on this migration, the upkeep of the almajirai and their teachers became the responsibility of the host communities where they decide to reside; it was therefore considered a religious obligation for individuals in host communities to support the feeding and accommodation of these religious emigrants. It was also a common practice for Qur'anic school pupils to move from house to house begging for food and items of clothing. Apart from being a means of sustenance for the Qur'anic school pupils and their teachers, the practice of begging by the almajirai is also considered by many Islamic scholars as training in endurance and humility (Okoye & Ya'u, 1999:33).

In recent times, however, the term almajiri has undergone a transformation in both its application and meaning due to increasing poverty levels particularly in rural areas, the resultant rural-urban migration, and deterioration of formal educational facilities (Khalid, 1997). For instance, the direction of movement has now changed from urban to rural – urban migration i.e. a situation in which pre-school age children are thrown out of their homes to urban centres to study the Qur'an under a Malam. A Malam may therefore have a number of children (between 30 to 150) under his care but without any sustainable means for their upkeep as the communal support system which Qur'anic schools enjoyed in the past either collapsed or are not tenable in the metropolitan life of urban areas. To make matters worse, very few parents make enough provisions for the upkeep of the children they send to the cities for Qur'anic learning. In the absence of support, regulation or recognition by any of the three levels of government in Nigeria (i.e. Federal, State, or Local), the management of Qur'anic schools is exclusively left in the hands of their sole-proprietors (the Malams).

This situation has given rise to the deterioration of Qur'anic schools in terms of their limited curricula content; absence of decent facilities for learning; critical welfare issues for the learners and their teachers; abusive and child labour practices including the scourge of child-street begging, prevalent in many of these schools. Unlike traditional rural communities in northern Nigeria, Qur'anic schools confront a variety of challenges. Despite the limitation, Qur'anic schools enrol more pupils than formal primary schools in many parts of northern Nigeria and, a large percentage of children enrolled in these schools do not attend any formal primary school (UNICEF, 1999, 136). This is what makes Qur'anic schools the biggest challenge in attaining the vision of the UBE programme and actualizing EFA goals in northern Nigeria.

Integrated Qur'anic Schools within the Context of the UBE Programme

The EFA goals are designed to ensure that all children and adults have access to education as fundamental right, and that barriers of age, gender, socio-economic status, ethnic background, geographic location should not stand in the way of equitable access to good quality educational for all. However, this ALL is not a class name that describes individuals possessing common characteristics; it is a heterogeneous grouping of individuals each with different needs. This
emphasis on the heterogeneity of this ALL becomes necessary because of tendency by programmes of mass education to concentrate on easy-to-reach populations while neglecting those who are most desirous of the attention they need and need the most. It is in realisation of this fact that goal 2 of the 6 EFA goals is committed to ensuring all children, particularly girls and other children in difficult circumstances have access and complete free and compulsory basic education of good quality (UNESCO, 2000, 15). Children in difficult circumstances are those who do not have the chance to experience effective educational opportunities on account of poverty, rural location, gender, ethnicity, disability or some special need which confer them characteristics that make them unfit for schools and schools unfit for them (Bernard, 2000). For this group, the mere expansion of educational opportunities only heightens their exclusion since existing school structures are generally too rigid and unresponsive to their peculiarities.

The Dakar Framework of Action anticipates that education systems to attract children in difficult circumstances to schools and keep them there, they must be flexible to the circumstances and needs of all learners providing relevant curricula that are accessible and appealing. While both the Jomtien Declaration and the Dakar Framework of Action acknowledged the centrality of Primary Education in the drive toward attaining EFA goals, they encourage the search for alternative learning and delivery systems to complement existing structures. It is therefore within this framework that present efforts for the reform of Qur'anic schools and their subsequent integration into the Nigeria’s UBE programme is properly situated. Qur'anic schools which had hitherto operated outside the official circles; unsupported, unmonitored and unrecognised by the state or any of its apparatus for the delivery of education are now being encouraged to adopt the integration policy. This was given a boost with the approval of an FGN/UNICEF Non-Formal Education Curriculum for Qur'anic Schools by the National Council on Education in 2001. This was followed up in 2002 by drafting of an Action Plan and Implementation Guidelines for the states to adopt the execution of the integration project (Junaid et al., 2005: 17).

However, the committee that drew up the Action Plan and Implementation Guidelines referred to above also entertained fears that the integration project could be marred by certain factors which it identifies to include (FRN, 2002): weak institutional structures of the Qur'anic schools; negative attitude of some stakeholders (particularly the Qur'anic school teachers cum proprietors i.e. Malams); inadequate and untrained teaching personnel in Qur'anic schools to handle the integration; the deprivation of basic welfare provisions for the Qur'anic school pupils (almajirai); inadequate resource base to support the additional teaching of secular subjects; and lack of sustained support, monitoring and regulatory mechanisms for the Qur'anic schools. Recent studies such as Junaid et al., (2005: 18) and Boyle (2006) confirm the existence of some of these shortcomings among schools that have embraced some form of integration or the other. In particular, the studies reaffirmed problems associated with teacher supply and quality; inadequate resources; pupil and teacher welfare concerns. Junaid et al. submit that the integration efforts tend to concentrate largely in urban centres where many of the children already have access to formal schools. These problems are symptomatic of the failure of the system to make some of the required shifts to acknowledge and make provisions for the peculiarities of the learners, the school system and their host communities because of the rush to formalise the Qur'anic schools without the corresponding attempts to non-formalise the rigid structures of the formal primary schools.

There are defining features of Qur'anic schools and their pupils that have emerged from research studies conducted in Nigeria over the years (Kbab, 2005; UNICEF, 1999; Okoye & Ya'u, 1999; Bakari, 2003; Junaid et al. 2005; Boyle, 2006) which need to guide efforts at reforming and making them functional in the UBE scheme. These include:

a. Qur'anic schools enjoy large patronage among dwellers and the urban poor, and for many of the children from these backgrounds Qur'anic schools are the only schooling experience they have;

b. Almajiranci is largely a boy-child phenomenon whereby boys of primary school-age are sent to the cities for Qur'anic studies during the dry season and are required back home to assist in agricultural activities during the rainy season. Girls only engage in begging
indirectly by serving as guides to the disabled and elderly beggars; however, a number of girls enrolled in Qur'anic schools engage in street hawking (talla) to supplement family income;

c. Almajiranci therefore fits very well into a cultural practice of rural – urban migration of able bodied men during the dry season (known as ciran) as a strategy of reducing pressure on limited stock of food back home and supplementing family income.

d. The primacy of Qur'anic recitation and religious instruction in the curriculum of Qur'anic schools and the willingness of stakeholders to accept integration so long as it does not threaten this arrangement.

e. Qur'anic schools are largely one teacher schools but also have a tradition of drafting older students to assist in teaching jobs. Teachers therefore few and untrained; the main qualification required to be a teacher is having graduated from a Qur'anic school. Only few of the teachers in Qur'anic schools have attended formal schools, but among those who did, some have acquired additional qualifications of Higher Islamic Studies and Grade II Certificates.

f. Qur'anic schools operate in austere circumstances and resource – lean environments.

The import of these revelations is to provide a better understanding of the existing circumstances and needs of the Qur'anic schools and their pupils are necessary for instituting a relevant and responsive framework for their reform.

Open and Distance Learning System and its Relevance in Reforming Qur'anic Schools

Distance learning systems have existed in different forms over the years, and they are particularly noted for their relevance in adult and continuing education programmes. Their relevance to the needs of adult learners in particular, stems from their convenience and ease of learning since learners could acquire education in the convenience of their locations mediated by artificial source i.e. print or electronic. That is the point of emphasis in a definition given to distance education by UNESCO (2002, p.22) i.e. “any educational process in which all or most of the teaching is conducted by someone removed in space and/or time from the learner, with the effect that all or most of the communication between teacher and learner is through an artificial medium, either electronic or print”. Therefore a distinguishing feature of Distance Learning programmes is that technology, rather than face-face contact, is the medium of communication.

It is, however, in their ‘open’ nature that Open Distance Learning (ODL) programmes hold the most promise for their utilisation beyond the needs of adult learners. The open nature of these programmes devolve particularly in the freedom to grant the individual learner in the choice of one or more of the main processes of learning, i.e. the adoption of “…relatively flexible organisational structures, delivery and communication patterns, and the use of technologies in supporting learning” (UNESCO, p.23). The practice of openness involves allowing the learner freedom and flexibility in the choice of how, where they learn, at what speed, under whose guidance or assistance, and whether, where and when to have their learning assessed. This is a significant departure from the practices of regular schools which are tailored to the needs of the average learner who possesses characteristics adaptable to the ethos of the formal school. For learners who are already disadvantaged, come to school with some background characteristics which make them unfit for the curricula and organisational patterns of the regular school. In keeping with recommendations of the Dakar Framework of Action, there must be in place flexibility, relevance and choice in design programmes meant for these categories of learners. It is in this respect that ODL particularly fits in as appropriate delivery system for disadvantaged groups.

UNESCO (2002: 23) traces the historical evolution of Distance Learning system to four main phases, each with its own organisational form determined by the mode of communication it adopts. These four phases are: i) correspondence systems; ii) educational television (ETV) and Radio Systems; iii) Multimedia Systems; and v) Internet – Based Systems. Advances in
Information and Communication Technology (ICT) have enriched these options and integrated them into one platform mediated through the use of the Internet and World Wide Web (www). Through these media, materials in print, multimedia (audio, visual, video, and animations) are widely accessible to anyone with internet access. However, for populations that are served by Qur'anic schools, with no access to computers, internet or even stable power supply, the use of modern sophisticated technologies is largely limited or even impossible. Despite this limitation, the use of Radio Broadcast can be a viable option to ensure that Qur'anic school pupils have well structured instructions delivered to them at a place and timing of their convenience. Proprietors/teachers of Qur'anic schools also benefit from these radio broadcasts specifically tailored to inculcate basic literacy and effect attitudinal changes in them towards the integration programme. This option is particularly appealing in view of the limited supply and poor quality of teachers as well as inadequacy of basic textbooks and materials for teaching both secular and Qur'anic components in Qur'anic schools. Radios are generally cheaper to own and maintain than either Television or Internet, and they require less infrastructure and logistics for their operation. The Nigeria Demographic and Health Survey 2003 (National Population Commission, NPC, & ORC Macro, 2004) indicates that Radio ownership among urban households in Nigeria stands at 85.3% while in rural areas it is 65.8% as against 58.6% (urban) and 15.4% (rural) for ownership of Television sets. Households in Northern Nigeria have an average radio ownership of 69.4% against television ownership of 19.1%.

Within this framework, therefore, ODL for Qur'anic school pupils could adopt a Dual Mode i.e. offer a combination traditional classroom based methods and distance methods (Commonwealth of Learning, COL, 2000, 8). Instructions in both secular and Qur'anic components could be offered in both modes so that the two instruction could be mutually reinforcing and allow more flexibility in the organisation of instruction. Qur'anic schools, despite their limitations, are known for their flexibility and responsiveness to local circumstances particularly the socio-economic rhythms of their host communities. It is in fact a feature that explains their persistence despite long years of official neglect. The use of ODL will therefore fit very well into this pattern of flexibility, openness and responsiveness. The Radio broadcasts as a component of the Qur'anic school ODL enhances their capacities to put in place flexible organisational structures to cater for the special needs of all learners enrolled.

The major challenges in the use of ODL for Qur'anic schools will be in securing the cooperation, support and active involvement of proprietors of Qur'anic schools and community members. Given the extensive control they have over the curriculum and management of their schools, the Malams will be crucial to the success or otherwise of this proposal. Another major challenge is designing flexible curriculum content and materials which teachers and education resource managers can adapt to suit local requirements of different schools and communities.

Recommendations

In order to ensure proper integration of ODL into the curriculum framework of the Integrated Qur'anic schools, the following measure are recommended:

i. Mass mobilisation aimed at creating awareness particularly among key stakeholders of Qur'anic school system i.e. Malams, parents and community members. A positive disposition to the integration programme is critical to success;

ii. A review of the existing curricula to make it flexible and incorporate Qur'anic component which the government left untouched exclusively in the hands of individual proprietors. In the absence of uniform minimum curriculum for use in all schools, it is difficult to design radio programmes that have common applications in all the schools.

iii. Provision of basic infrastructure and logisticsthe integrated Qur'anic schools to enable them implement the additional responsibilities assigned by the integration. In particular, the provision of buildings (classrooms and offices) is necessary for effective working of the ODL system.
iv. Rehabilitation and empowerment of Education Resource Centres (ERC) and Divisions of Educational Support and Services (DESS) at state and local government levels is very necessary if any ODL system is to be fully operational. These bodies could work in tandem with the National Educational Resource Centre (NERC) in designing and packaging programmes appropriate for use in Qur'anic schools.

v. Expansion of Radio broadcast services to all parts of the states covered by the programme. When there is increased accessibility to local stations, it is possible to design programmes tailored for particular schools and localities.

vi. A sustained programme of continuous teacher training is necessary to sustain any arrangement made to integrate ODL into the Qur'anic schools. Both existing Qur'anic school teachers and those that will be recruited need to be trained on the applications of ODL in Qur'anic schools.

vii. Because the problem of almajiranci is highly associated with poverty, welfare issues in Qur'anic schools should be a paramount concern. No amount of curriculum reform can make pupils to have meaningful learning, when learning time has to compete with battle for survival on the streets.

Conclusion

The tasks of attaining the goals of EFA are numerous, and Nigeria is classified among countries not likely to reach the targets by the year 2015. It is a major challenge which calls for the mobilisation of structures and resources for the realisation of UBE. Qur'anic schools have remained largely ignored in the scheme of educational structures in the country, and that has produced ugly circumstances in these schools with consequences on millions of children whose future is put at risk. The integration of Qur'anic schools into the UBE has the potential of offering a lifeline to this endangered children, and their pupils get a flexible structure that is responsive to their peculiarities, limitations and potentials. This paper has argued that ODL provides a delivery platform on which the integrated curriculum could be executed in ways that are flexible, responsive and relevant to the peculiarities of these schools, their learners and communities.

References


FROM EMPOWERMENT TO TRANSFORMATION: A CAPACITY BUILDING MODEL FOR ACADEMICS IN DISTANCE HIGHER EDUCATION IN INSTITUTIONS IN AFRICA

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Abstract

Applying the benefits of the multi-dimensionality of empowerment, using transformative paradigms to boost capacity building, within academics in Distance Higher Education (DHE), is a vital part of the re-focusing of research perspectives in African Tertiary Institutions (ATIs). How and when the transformative package is utilised for a sustainable research dividend, among the stakeholders in DHE, and within acceptable norms, calls for regular investigation. The study, therefore, using the transformative paradigm, examined how mentees and mentors' relationship curtails possible academic frustration, indolence, career stagnation, spiral of academic victimisation and other challenges, through a symbiosis of interconnectivity employed to facilitate adequate skills acquisition. The acquisition of relevant skills was therefore, instrumental to appropriate research breakthrough, personal development (i.e. increased self-awareness, openness, positive self-image, interdependence, etc) and overall community impact, national and/or the African sub-regional advancement, growth and development.

Keywords: Empowerment; Transformation; Capacity Building Model; Academics; Distance Higher Education; Africa

Background

A very fundamental product of education, generally, and in particular, higher education, is the development, facilitation and acquisition of lifelong skills for useful living. Lifelong skills that are regularly developed and validated retain their marginal utility and strength when they can be annexed and directly application-driven mechanism in bringing hope to global challenges, viz, socially, economically, politically and academically. Skills in lifelong Education (LE) are therefore reliable and positive-oriented weapon that is needed, especially, for the re-engineering of erstwhile oddity in learning. Such re-engineering, revalidation and re-appraisals are required in behavioural adaptability, instrumental for expected changes both in academics and professional perspectives. Actively pursuing these goals, as it were, presupposes that the major stakeholders in higher education (HE) and in distance higher education (LDHE) are directly geared for programme re-validation, and the re-conceptualisation for the resurgence of new curricular design, professional behaviour, skills development and acquisition which are necessary for quality education as well as sustainable development. Being nurtured, prepared and equipped with necessary knowledge and skills, the re-orientation of the stakeholders, as it were, will ensure the overall enhancement of quality education and promotion of sustainable development.
for sustainable results, especially in this 21st Century, is functionally epitomised in institutional employee collective empowerment.

The studies on empowerment generally, have had impacts in every segment of human life, including health, socio-economic, politics, and education. For instance, while Adetoun (2005) study implicated the importance of empowerment in “Gender and HIV/AIDS Nigeria, to curtail power-imbalances in discriminatory practices against the women folk of Osiki (2007a) was directed in the revalidation of preconceived African traditions for improving household economies (i.e. income-generating activities). Further implication includes Osiki (2007b) where new behavioural techniques were utilized in demystifying research difficulties and challenges of distance learners (DLs). In Osiki (2007b) for instance, when the Research Status Inventory (ReSI) was used in identifying the research difficulties of Distance Learners (DLS), the findings, among others, indicated that over 95.64% of the DLS have not had previous research orientation, and would be happier if research methodology courses and, or dissertation were made part of the University programme. Similarly, further showed that while only 16.1% of the participants liked research activities, another 78.4% detested especially the applied form of academic research that implicates the use of statistical analyses. Using the benefits of the Multi-behaviour psychological techniques, both in correcting emotional distortions of the DLS, the concomitant upsurge in the participants’ interest in research, Osiki (2007b), has therefore facilitated the concept of empowerment in HE.

Introduction

Recent events at the National University of Lesotho (NUL), Southern Africa, where research training workshop was held (NUL Bulletin, 2008), had the title for the programme read as “Demystifying the Ph.D” posted for all her academic staff members and postgraduate students. The NUL, as one typical University in Southern Africa, among other few, has postgraduate students’ enrollment of less than 15 (although the emphasis here is on the Doctorate programmes) with Faculty of Humanities having over 70% of the number. Among the sub-themes that attracted speakers from some African countries are:

(a) ‘choosing your topic and supervisor’
(b) ‘writing your thesis proposal’
(c) ‘the architecture of a thesis’
(d) ‘what examiners look for in a good thesis’
(e) proposal writing exercise’.

What the NUL’s experience portends in the aforementioned, however, was to epitomise the dearth of scholarly work (i.e. researches) especially in higher education in the African sub-region, while, also implicating the open distance learning (ODL), in the 21st Century. The fallout of such events, also, without equivocation, points that:

(i) embarking on research activity is not a child’s play
(ii) emotions are involved in any reasonable and well-conceived research
(iii) research and continue research endeavours can be the regular validation of research outcomes continuous
(iv) results-oriented research and/or investigation involves one kind of training or another
(v) experience in research can only be gleaned from being involved in research activities.

Empowerment in Higher Education (HE)

Fundamental in this multi-etiological concept, is the notion of the very difficult circumstance of adequate definition. Empowerment is a process that challenges the assumptions about the way things are and can be (Page and Czuba, 1999). The central contention is that power is the product of power which is held in relation to the people and/or other things. In their postulations, Page and Czuba contended that empowerment depends on: (a) the notion that power can change; and where it does not happen, then there is no empowerment, (b) Secondly, that empowerment depends on the idea that power can expand (i.e. power got at the expense of others- the zero-sum theory). In the first contention, and which underlies Max Weber’s twentieth century maxim “power is related to our ability to make others do what we want, regardless of their wishes or interest means by inference, that power does not exist isolation nor is it inherent in individuals; and since it is created in relationship, power and power relationships can change.
conception of power according to Page and Czuba (1999) and which depicts their second notion was based on the premise that power will remain in the hands of the powerful unless they give it up.

Although Page and Czuba’s (1999) conception of empowerment merely focused on the socio-political dimension, other studies (Commonwealth of Nations, 2007; Chamberlin, 2008) provide additional dimensions. Strictly discussing on ‘Commonwealth Youth Programme’ (CYP), the Commonwealth of Nations in their signed plan of Action for Youth Empowerment (2007-2015), conceptualise the term when it said: ‘Young people are empowered when they acknowledge that they have or can create choices in life, are aware of the implications of those choices, make an informed decision freely, take action based on that decision and accept responsibility for the consequences of those decisions’. A critical feature in the definition epitomises the central theme of ‘accountability’ and that, until the individual accepts responsibility and can be accountable, the notion of their empowerment may be a nullity. In consequence therefore, until such a time and age, the individual can only be regarded as a mere ‘child’. Thus, youth empowerment is an attitudinal, structural and cultural process whereby young people gain the authority and agency to make decisions and implement change in their own lives and the lives of other people, including youth and adults (Vavrus and Fletcher, 2006). Providing the necessary experiences to empower the youth is often addressed as the gateway to intergenerational equity, civic engagement and democracy building with multifarious activities that are focused on youth-led media, youth rights, youth council, youth activism and youth involvement in community decision-making (Fletcher, 2005; Sazama and Young, 2006) as well as other methods, geared towards their mainstreaming.

In Mohawk Valley Community College (MVCC) (2008) as readily as the case may be, with most Institutions of Higher Education (IHE), but with particular reference to some institutions in Africa, students are assisted through professionals and peer tutors in deficient and weak areas of their academic responsibilities including reading, writing, mathematics, chemistry and biology. Professionals and peers, using the MVCC as a referent point, provide supplemental instruction to ameliorate learners’ challenges and as well as the emotional conditions predicating poor academic performance. As a rider to what the MVCC might have been known for, Osiki (2006), examining how the girl-child could be empowered economically, conceived empowerment to include the varied strategies employed in the different forms of skills acquisition, awareness creation/generation, knowledge-generation and creatively-tested ideas designed to instigate independent, meaningful and useful living both for the individual and the family which he said, was their shared goal for adequate home management and family happiness. Conceiving empowerment as Osiki (2006) has provided, though with emphasis on family economics, the term ‘empowerment’ is, without doubt, amorphous, ranging through every segment of academic disciplines and human endeavours. Every human being needs to be empowered to maximise their potentials, socio-politically, economically, mentally and healthfully living emotionally and psychologically; while, mitigating human sufferings and frustration. Fundamental among its benefits is that, it promotes personal independence, creates individual and collective awareness with symbiosis of shared opportunity for knowledge generation for personal and institutional growth and development.

According to the World Bank (2008), empowerment is the process of increasing the capacity of individuals or groups to make choices and to transform those choices into desired outcomes and desires. But then, the outcomes and desires being envisioned, should have been capable of transforming our individual and collective poverty and, or squalor (i.e. economic or knowledge) inclination to actual innovations by every individual. When individuals are empowered, particularly positively, they are able to initiate and propel the opportunity to exercise personal discretion and choice that contributes to individual’s growth and personal wellbeing in the workplace. Empowerment as summarised in Page and Czuba (1999) leads the individual with the following options:

(a) decision-making power on their own
(b) access to information and resources for making proper decision
(c) a range of options from which to make informed choices
(d) ability to exercise assertiveness in collective decision-making
(e) positive thinking on the ability to make change
(f) ability to learn skills for improving one’s personal or group power
(g) ability to change others’ perceptions by democratic means
(h) involving the growth process and changes that are ending and self-initiated and
(i) increasing one’s positive self-image and overcoming stigma.

306
An important dimension, and as inferred from Page and Czuba’s (1999) study, is that learning is an enduring, abstract and invisible process that permeates every life, whether young or old, rich or poor, avid or illiterate where the individuals are influenced within the cyclic order, also influences otherwise. Some times, employees (i.e. whether in the civil service or academics, especially HE) and, or learners engage in learning encounter, sometimes deliberately or inadvertently (i.e. direct consequence of creativity), in order to learn new things or to unlearn old and unprofitable ideas (i.e. consequence of empowerment) with the implication on how we live and should be living. Real and apparent learning is an embodiment of education that transcends the four-walls of the classroom, and can be categorized as a lifelong phenomenon that is results-oriented and overall academic breakthrough and professional maturity. This is the essence of learning, being the consequence of empowerment functions as a process, adds to or updates the reservoir of individual's knowledge and or group existing knowledge base, which of course, is expected to lead to some form of behavioural modification on part of the educatee as well as collective comments that simultaneously, instigates performance efficiency and the orientation of world-view which, consequently, improve positively.

Challenges in Twenty-First Century Higher Education (HE)

Prominent and common workplace practice, and which equally epitomises that of the higher education, World-wide, is the exercise of ‘pseudo-empowerment’. Pseudo-empowerment summarises the inclination of management activities geared toward a direct attempt to change the attitudes of workers, colleagues and learners to enable them to work harder through conformity rather than providing enabling environment for independent, creative and democratic and well reasoned ideas which is the function of real and ultimate ‘power’. In Wilkinson (2004), the term ‘attitudinal shaping’ was used to characterise some of the antecedent weaknesses inherent in institutional pseudo-empowerment. In some of the African HE for instance, learners and, or younger colleagues are supposed to be conditioned (otherwise, mentored) in a most productive and elegant manner, particularly typifying academic culture of excellence in research, teaching and community services. Paradoxically however, the rapidly changing landscape of higher education in Africa has led to unimaginable apathy, so to say, on the part of academics and the management staff of several African Universities, to embark on the process of meaningful professional initiation of the new entrants into the culture of teaching, research, scholarship and publishing. Adjudged from this perspective, the psycho-social stability and or emotional preparedness is desired in the quality of performance of the junior and inexperienced newly recruited lecturers, who inevitably engage in the process of trial and error, in order to find their feet in academia, with regard to what to do, how to do it, when to do it, and the extent to which what is expected, get done, unnecessarily confused from the onset.

Mentoring, typified as part of any institutional responsibilities, is the informal educational and/or organisational process which promotes personal and intellectual (otherwise, management) growth, invested professional development through empowerment andance building for the achievement of academic, professional, workplace and other organisational excellence. In applying the general concept of personal mentoring, which among others, includes coaching, discussion, counselling and or supervision of the less experienced scholars in academia and, or personnel (and students inclusive), it is the basis for the development of a virile, nurtured and well groomed academic of all time, for all day. Traditionally, mentoring is described as the activities conducted by a person (the mentor) for another person (the mentee) in order to help that other person to do a job more effectively and/or to progress in his/her career. Mentoring, with defined specific goal, does not promote gullibility in the mentee; rather, it equips the mentee with independent skills needed for sustainable growth and personal development. The mentor, in HE and or an organisation, would probably, therefore, be someone who had “been there, done that” before (http://www.managementhelp.org/guiding/mentrng/mentrng.htm) and knows ‘what’ ‘when’ and ‘how’, the expected competences that are arranged to facilitate acquisition, but without exploitation.

In higher education, however, though the mentoring relationship was expected to exemplify that of symbiosis, especially when empowered, however, scenario, today, is the flouting of known ethical or workplace standards (academic and or professional) most in this direction, is the outcome of regularly and over-debated challenge of plagiarism. Plagiarism in the 21st Century HE, though an aged phenomenon, is a constant threat in the operationalisation of either employee (with emphasis to the academics) and learners’ empowerment (otherwise mentorship), that has continued to erode the fundamental
in education. Plagiarising the works of other people, colleagues and students’ theses/dissertations, and, or the re-editing and scanning of related materials of others, for personal advantage, without due acknowledgement, especially the virtual learning programme as well as the conventional system, has a lot of ethical implications (Braimoh and Osiki, 2008). It can lead to summary dismissal from work places or it could even attract demotion, a failure in course grade for a paper, and sometimes, expulsion from the programme. It erodes known academic confidence, equally, potentially affects institutional image negatively. Using the information from Academies in Distance Education Student Handbook, 2008), different perspectives on plagiarism were summarised and included, among others, the following:

(a) copying and pasting text from online media such as encyclopaedias;
(b) copying and pasting text from any web site;
(c) transcribing text from any printed material such as books, magazines, encyclopaedias or newspapers;
(d) simply modifying text from any of the above sources or replacing a few selected words using a Thesaurus;
(e) using photographs, video or audio without permission or acknowledgment;
(f) using another student’s work and claiming it as your own, even with permission (known as collusion);
(g) the acquisition of work from commercial sources;
(h) translation from one language to another using your own words which fall under the guidelines for quotations, summaries and paraphrasing.

Although plagiarism is almost an intractable embarrassment the world over, its continued menace equally concern in HE and educational institutions generally, with a lot of worries in open and distance learning (ODL) globally. While academic cheating cannot be limited to time, space and or environment (otherwise type of programme), the sustenance of the ODL progress via the machinery of especially technology, almost often, smears the purpose of education, academia credibility and professional excellence; while acknowledged academic shrewdness of programme facilitators (PFs) vis-à-vis those in tutelage, have gotten rather, asymptotic since the gap between theory and practice, is not merely sluggish, but wider; with obvious and concomitant increase in school dropout and antecedent unemployment.

Learning, Empowerment and Morality

One very uncommon research irritation, is the question bothering on the ‘morality of learning’ and, simply put, does empowerment have its limitations? Or when academics are empowered, does its after-effect also lead to morality question in the workplace and HE. Learning, however, occurs in most of people’s lives because it is fundamentally situated in activity, text and culture (Packer & Goicoechea, 2000). Learning includes goals, purposes, intentions, and decision-making (Rogers & Freiberg, 1994); an integral part of generative social practice in the lived world. It involves enculturation that is picking up the behaviour, values and norms of a social group, and adopting its belief systems to become a member of a culture (Lave, 1996). Jarvis (1995: 20) defines learning as “any process of receiving and assessing any aspect, or aspects of culture. It transforms experience into knowledge, skills, attitudes, values, emotions, etc.” In learning, a person is an acting being engaged in activity in the world (Lave & Wenger, 1991).

Formal education has exercised considerable influence on people’s understanding of learning. However, several studies have shown that most learning occurs informally (Lave & Wenger, 1991, Rogers & Freiberg, 1994). Learning, wherever it occurs, is an aspect of changing participation in changing practices (Lave, 1996). Social interaction is a critical component of situated learning – learners become involved in activity which is situated in particular context and culture (Lave & Wenger, 1991). They refer to this social interaction as people involved in communities of practice which embodies certain beliefs and behaviour to be acquired. In developing the situated learning theory (Lave and Wenger (1991) observed how professional tailors, for instance, facilitate learning to their apprentices. They therefore, concluded that the practice, rather than the master-apprentice relationship, is one that provides the most important learning opportunities which, of course, typified skills in fashion and design.

In Lave and Wenger’s (1991) theory, learning is seen as the acquisition of knowledge; they viewed learning as configured through the process of an individual becoming a full participant in a socio-cultural milieu (Lave & Wenger, 1991: 29). Mezirow translation
theory argues that learning should be understood as the process of changing our frames of reference and sets to generate a new or revised interpretation of beliefs and experience as a guide to future action (Mezirow, 2000). “The justification of what we know and believe, our values and our feelings, depend on context of biographical, historical and cultural times, in which they are embedded” (Mezirow, 2000, 3).

This process involves a constant interaction between individual and his or her experiences and environment (Kolb, 1984). For learning to occur, according to Kolb’s experiential theory, there must be a direct relationship and connection between the person who learns and the person who teaches (i.e., mentor-mentee relationship). Such connection happens at the link between prior experiences and new knowledge leading to higher level of learning (Ndoe, 2003). Adults adapt to their professional and social environment by reflecting and acting upon a rich pool of experiences. The transformation that happens when learning occurs, emanates from a support system of family, friends and support groups; but more importantly, within ODL in particular, the set goals and objectives directing empowerment.

Empowering the academics and or learners, in especially the ODL, has the single advantage for boosting academic confidence, standards and professionalism. Empowerment, through mentor-mentee relationship, can be symbiotic, as both learn from the other with crucial skills for personal and collective growth with the potential to take on independent tasks and stand by their decision. But, the aspect of academics’ re-editing of others’ publications, plagiarism, academic indolence, pilferage, and mutilation of library collections and or books/journal articles, however raises the morality question. Although learning can be contagious and effectively productive for its impact in inducing positive and meaningful changes, the issue of morality and professional standards have been addressed (Fieser, 2007, Braimoh and Osiki, 2008) in especially the sub-themes of formative ethics. The normative ethics buttresses the dimension of moral standards that regulate ‘right and wrong conduct’.

According to Braimoh and Osiki (2008), in academia, for instance, learners are prompted through effective participatory learner-teacher activities (other than that of the teacher-teacher), to initiate and stop the capacity for independent and collaborative efforts academic success rather than engaging in cheating to pass examination, and, or submit articles for publication as the case may be, which is punishable. The normative ethics usually operate therefore within the “Golden Rule” which establishes the single or set of principle (principles) against which, all human actions are evaluated and judged. The assumptions of the normative ethics gets empowered by its sub-theories of (i) virtue theories (ii) duty theories and deontological or the non-consequentialist theories (right theory, categorical imperative and prima facie versus actual duty); and (iii) the consequentialist theories summarised in ethical egoism, ethical altruism and utilitarianism. In ethical egoism, actions are considered to be morally right if the consequences of the actions are more favourable than unfavourable only to the agent performing the action. In ethical altruism, actions are considered to be morally right if the consequences of the actions are more favourable than unfavourable to everyone except the agent. Actions are however wrong if the consequences of the actions are more favourable than unfavourable to everyone (utilitarianism). Following the aforementioned analogy, there is the additional emphasis that epitomized Fieser (2007) categorization of ‘ethical theory’ in his applied ethics which consists of the analysis of specific and controversial moral issues such as abortion, euthanasia, pilfering, examination malpractices, sexual abuse, results falsification. Understanding the interconnectivity of the relatedness of the sub-themes and their respective underpinnings in education has potential for mitigating abuses in workplace professional behaviour as well as academic fraud. It harnesses the opportunity for improved and sustainable individual and collective tasks commitments (Braimoh and Osiki, 2008) with enhanced propensity for self-confidence, professional growth and academic credibility.

Research Breakthrough and Transformation in Higher Education

In the tripod related responsibility of the academic, designing and conducting research as well as the related activities, which includes the validation of research measures are of prime importance in HE as a particularly in ODL. Attitudinal and behavioural changes in terms of human life styles, technological coping for growth, development and advancement are part of the transformational import of higher education. Human survival, socio-economically, technologically and generally are directly linked to research endeavours, even though, conducting applied research can be tasking and very demanding (i.e. whether among academics and, or the learners).
In Osiki (2007b), it was opined that learners in Distance Learning Programmes (DLP) and, or select programmes in higher education, as part of their Degree Certification, are often expected to compile and write a field report in the form of either a project and dissertation/thesis before graduation. This, ODL beneficiaries often dread. But in other spheres, the publish or perish is a familiar precept within the academia. In consequence therefore, while research requirement constitutes a threat to the learners in ODL and, or HE generally, it is an issue of general concern, that is constantly worrisome among academics. In so far as general application of knowledge is concerned, and should be the vogue, the transformation of research benefits (otherwise, breakthrough) is a product of continuity whether in politics, traded industries, socio-religiosity, mental health and general medicine as well as administration.

Research has so many parts, and that, must be appreciated. Additionally, academics whether among the PF and or those in tutelage (i.e. students), once in the academic, every participants and or stakeholders should be perceived as learners for life. We keep learning things every day just as curricular re-appraisal or review is a regular feature; and that is, if progress in HE and or ODL in particular, would have a sustainable relevance, with the capacity to transform individual and or national dreams, to a concrete reality. Highlands does not exist in academic circle as continuous dividend (i.e. whether in HE or ODL) is the function of collective commitments of all and sundry. In this paradigm, skills acquisition for eventful research is followed through the cyclical order where, research perspectives and the modus-operandi and, or modus vivendi are essentially derived from the community functional inter-personal symbiosis. In the transformation, mentee-mentorship is a direct consequence of empowerment, which in itself, is multi-dimensional. In its multi-dimensionality, premium is placed on the socio-psychological indices, person emotional variables, eco-religiosity while simultaneously, using the structures of the mentee-mentor a community benefits. The essence of this paradigm has been summed up in the ultimate and transformation academic capacity model in figures I and II below (appendix).

Capacity building model for Academics in Distance Higher Education Institutions

Particularly hinged on the multi-dimensionality of the transformative theme, the empowerment of the stakeholders in institutions of higher education (HE) in general, and ODL in particular, recognises the tripod interconnectivity of the mentee, mentor and community paradigm. Within a more dynamic symbiotic cyclical order, individual (i.e. mentee and mentor) characterises the basis for community and or national growth, advancement and development (i.e. socio-economically, politically, mental wellness and or health, etc); and without equivocation, the relevance of HE in Africa. While the paradigm necessitated the more experienced academic to a purposefully driven activities along with the less experienced and, or the learners (mentees), individual change (personal growth) instigated via continuous and eventful research breakthrough, then becomes the bridge to community and, or national (or continental) connectivity and politico-social and economic changes. According Wilson (1996) putting it succinctly, reasoned that, to create change, we must be ready to change individually to enable us to become partners in solving the complex issues facing us. It was this conceptualisation perhaps, and the synthesis of the recognition of mentee-mentor/mentor-mentee mutual trust and respect, within a diverse perspective and a concomitant developing vision, with individuals striving to collaborate towards facilitating creative and realisations to the myriad of African challenges (otherwise, global challenges) that typifies empowerment (Speer & Hughey, 1995; Wilson, 1996) and, of course, the epistemology of capacity building in ODL and DHE. As encapsulated in the paradigm (figures I and II, Appendix) therefore, skills enhancement and acquisition flow symbiotically between the mentee and mentor (i.e. irrespective of gender, age, academic status, experience, personal variables, which are all held constant), to impartively on personal development and growth and, or overall implication for community survival and national or African sub-regional advancement.

Conclusion

In this paper, we have dealt with a myriad of issues which should serve as signposts for us in our distance education marathon journey to the ‘promised land’ of efficient capacity building, through the mentoring process. It must be borne in mind however, that mentoring does not only benefit the mentee but in the process of mentoring, even an equal and performance level of the mentor in all ramifications, is also being constantly improved. We must also not see mentoring paradigm as a new phenomenon in our society, as has a long historical root even with the operation of the apprenticeship training process at the traditional functional education premise.
Suffice it to say that before the advent of modern education system in Africa, there used to be a form of educational encounter, no matter how rudimentary it was, through which character formation, skills training and even traditional literacy used to be imparted to the learners. Such training was holistic and all-embracing but sometimes it might be referred to as dogmatic, repressive, authoritarian and chauvinistic. The problem is that not many people believe or consider mentoring anything of importance in education, let alone in distance education, through which permanent and lifelong learning process could be undertaken for the purpose of attitudinal and behavioural modifications as well as in coping with our daily professional challenges. Braimoh (2008) indicated that the modus operandi of mentoring may only become more discernible now in the 21st century, nonetheless, mentoring is a useful informal and lifelong educational process which is not only cost effective, but can stimulate personal development, increase productivity and improve performance of its trainees.

We must not be oblivious of the reality that as we progress with our mentoring process, not only is the mentee at the greater receiving end to improve professionally by-product of his personal development with the mentor, the major challenge however, which the operational mentoring paradigm in either the conventional and/or virtual higher institutions of learning should be curious about, is the unconscious or the deliberate abuses of mentoring which may render impotent the usefulness of the process. Abuses of such kind are limited to the mentor alone, but the mentee may also be totally absolved from committing such abuses, without knowingly or inadvertently. Mentoring is not a very useful strategy of capacity building in academic. We must however, critically assess first, the socio-cultural milieu and geo-political settings in which we are operating before it can be adopted, especially on a blanket basis, because, culturally, it may be an offence, a violation of human right or an aberration of custom and tradition of some group of people, who may be working in such a heterogeneous and complex distance higher education environment.

In order to stimulate further academic discourse based on our varied individual experiences, perceptions and belief systems with regard to the how, why, when and to what extent we can adopt mentoring for empowerment and thus lead to the transformation of human resource base in the process of capacity building in our various higher institutions of learning, we have given below some few challenging recommendations. These are not meant to castigate but to strengthen the management structure of our higher institutions in order for them to produce positive and enviable results in their process of maintaining quality of both the academic staff and the institutional programmes they offer to the teeming populations who are daily yearning for the acquisition of higher education qualifications.

Recommendations

Ladder and Stardom Philosophy

Majority of senior academics in our different African Tertiary Institutions (ATIs), who by virtue of their positions are expected to mentor others, selfishly withdraw from performing that role or are resistant to share knowledge or experience with the junior and/or inexperienced academic staff, simply because they see them as mere threats to their positions. They have the belief that the junior and inexperienced staff members should also struggle on their own in “climbing the academic ladder” like they did without any available mentor to show them the way. That is a wilful thinking because it should be a thing of pride for us that we have been able to replicate ourselves through effective mentoring process before we leave the “academic stage” rather than being parochial to hoard information to ourselves while we watch our junior colleagues traveling the rough academic road like a lost sheep without a shepherd.

Apathy due to incompetence

Many atimes, unexpressed incompetence on the part of senior colleagues to whom many junior and inexperienced academics look unto, can be a manifestation of unwillingness to groom others. Many senior academics got to their present exalted positions not through merit and not because of high quality and consistent academic output but simply as a result of many years of sojourning in a particular university campus, ostensibly without anything worthwhile to show for it. Sometimes, it is through political gymnastics or administrative favouritism, to say the least. This group of people can be referred to as pseudo academics, who parade themselves as politicians in academic robes. To maintain quality in academia therefore, the promotion goal-post in particular, should not for any reason be moved haphazardly.
and caprices of any “military general VCs” or be doctored by influential university principal officers, “king makers” on campus, simply for the advantage of their professional and political associates.

Performance-Based Assessment (PBA)

Annual increment, promotion or any financial reward that may be accruing to any staff member from rank of senior lecturer upward as an academic career entry point, should be weighted highly on the basis of following:

- At least, one publication annually should be produced in any internationally reputable journal;
- Regularity and successful supervision of either masters and/or the Ph.D. students should be mandatory in order to remain a productive and respected Professor;
- Mentoring of at least one junior colleague to acquire academic and administrative competence level, within a given period of time, continuously and with discernible results, should be encouraged;
- Regular attendance at university sponsored international conferences where he/she will be expected to present solid academic paper, to boost the image of institutional affiliation, should be the practice all our higher institutions of learning.

Leadership of University Administrative Positions

In order to lead by example, and to supervise junior colleagues, headship of departments/schools/faculties/colleges should not be competed for and the most competent candidate be appointed, there must also be consideration for seniority in terms of academic ranks. It is indisputable that “experience is the best teacher”, it will be a mockery of administrative process to appoint someone who is just fresh from the University either with a Masters or a Ph.D. degree without any previous administrative exposure in running a department/school/faculty/college, to lead, when there are more senior and more qualified colleagues at the associate and full Professorial levels available, whose services could still be utilized. There is no doubt that this may raise some serious debatable philosophical questions from some people in different schools of thought, who may argue on the basis of where will the new graduate acquire the expected working experience if he/she is not given the chance now to lead, is not against giving chances to anyone, all we are saying is that if and when more qualified and experienced colleagues are still available and ready to accept positions, they should allow the new comers to therefore be mentored for a while by watching how the system is being operated in order for him/her to attain a result of his/her own ineptitude.

Standardize Promotion Criteria

It may be impossible to have uniform promotion criteria across all the disciplines within a university, nonetheless, for quality assurance maintenance purpose there must be a realistic benchmarking without similar regional and international institutions, not to be encouraging the promotion of mediocrity at the expense of academic excellence.

Retirement Age

A paradox of reality is with the current brain drain syndrome, which of course, is a brain gain to other institutions within or outside of African continent which have the economic capability to pay for the services of those who decide to emigrate. We must note that this is a matter of discussion, and therefore, not too rigid about rating the willing, active and productive Professors who attained the age of 65 years compulsorily retire, while yet, there are no qualified skilled human resources available on the ground to replace them. With any sentiment, this may be subjecting the quality programme in whichever departments or faculties they are retiring from to be in jeopardy. It is however, commend few Universities in South African sub-region, who practice the retention of their good Professors even up to the age of 70. Some Professors may although decide to retire officially in order to collect their retirement benefits by choice, they could nonetheless, be encouraged by the university management to stay further and be given contract appointments. This will however, depend on whether they are still physically strong and mentally alert to cope with the challenges of academia. This group of people could be given less of teaching work-load at the
undergraduate level but be engaged more on institutional research activities postgraduate students' supervision including essentially, the mentoring and the assignment of the new generation academics.

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Mentee/Learner  Academic/Program facilitators

Skills acquisition
- Self dependence
- Adequate information search
- Adequate information utilization
- Data generation/application
- Decision making

Personal Development
- Increased self awareness
- High positive self image
- Openness
- Stress free (lack of acrimony)
- Constructive criticism
- Collaboration
- Interdependence
- Shared-knowledge
- etc

Academic/Program facilitators

Community

Research Breakthrough

Community Advancement
- Economics
- Health
- Social
- Politics
- etc

FIG. 2: Ultimate Cyclical Transformative Capacity Building Model for Academics in Distance Higher Education (DHE)
INTEGRATING RELATIONSHIP MARKETING AS A LEARNER SUPPORT MEASURE IN THE QUALITY ASSURANCE POLICY FOR DISTANCE LEARNING AT MAKERERE UNIVERSITY, UGANDA

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Abstract

This paper reports the results of an explanatory, descriptive and analytical study undertaken to establish the relationship marketing system in the Department of Distance Education (DE), Makerere University, Uganda and develop proposals for its incorporation into the University policy. The university is currently in the policy formulation process for distance education and during the program evaluation stage, it was established that general student support and care was poor (IEC, 2005). The programs have registered attrition and one of the factors leading to this is the lack of lasting relationships and personal care provided by the university staff to the students (Nakibuuka, 2006). The increased need for distance education and minimizing drop-out rates have led the department to devising ways of effectively managing distance learners and one of the approaches is through adopting a relationship marketing approach and incorporate it into the University policy where it is currently not mentioned at all. Using a questionnaire on a purposively selected sample of tutors and administrators, and focus group discussions on purposively selected students, relationship marketing was found to be a key aspect in controlling attrition and should therefore be incorporated in University policy for Quality Assurance in Distance Education so that each staff member is obliged to implement it. The study recommended that relationship marketing be included in all aspects of student life right from the time of admissions, registration, help-desk to be put in place, and in the teaching and the learning environment.
Qualité dans le domaine de l’Enseignement à Distance, afin que chaque employé soit obligé de l’appliquer. L’étude recommande l’inclusion du marketing relationnel dans tous les aspects de la vie estudiantine, dès le moment de l’admission, de l’inscription, au niveau des help-desk à mettre en place, et au niveau de l’enseignement et de l’apprentissage.

Introduction

Distance Education is an excellent method of reaching the adult learner. Because of the competing priorities of work, home, and school, Adult learners desire a high degree of flexibility. The structure of distance learning gives adults the greatest possible control over the time, place and pace of education. However, distance learning has some problems like loss of student motivation due to lack of constant face to face interaction with tutors and peers, family and work demands, cost of the course and a general lack of support or department support. Hillman, Willis and Gunawardena (1994) noted that in distance education, there is strong emphasis on the provision of learner support, which is designed to facilitate interaction and communication between students and academic staff. Support services required to ensure a complete well-rounded education. Educational institution providing distance education programmes must also provide quality support services to all students (Khoo & Idrus, 2004). Further to this, not many institutions have incorporated relationship marketing aspects in their student support structures and policies.

Makerere University (MAK), a dual mode institution has been running DE degree programs since 1991 (Aguti, 2000) but without a guiding policy (IEC, 2005). The programs are managed by the Department of Distance Education (DDE) in the Institute of Adult and continuing Education (IACE) in collaboration with the academic faculties. DDE carries out student support activities to students scattered in many parts of Uganda and who only report to the center for a two-week face-to-face session. The university is currently in the policy formulation process for distance education and during the program evaluation stages it was established that general student support and care was poor (IEC, 2005) hence affecting the quality of service delivery. The programs have registered attrition and one of the factors leading to this is the lack of lasting relationships and personal care provided by the university staff (Nakibuuka, 2006). The increased need for distance education and minimizing dropout rates has led the department to devising ways of effectively managing distance learners and one of the approaches is through adopting a relationship marketing approach. University policies do not provide for mandatory action towards caring for the students. Formulating a policy will enable the Department of DE to mobilise resources and support which are pertinent for survival (McCarthy & Perreault, 1993).

Relationship marketing refers to all activities needed to establishing, developing and maintaining successful long term relationship with the student and other stakeholders (Shaik, 2005). Gronroos (2000) stated that relationship marketing in institutions is the attitude of mind throughout the institution, when students feel that the staff is interested in addressing their concerns spontaneously in a friendly and professional manner. The emphasis is placed on building long-term relationships with students rather than on individual transactions. It involves understanding the student's needs as they go through their studies. Emphasizes providing a range of products or services to existing students as they need them. Tracking and analysing of each student's preferences, activities, tastes, likes and dislikes, and complaints. Khoo & Idrus (2004) also noted that due to the wide range of technologies used by distance educators, the support must be available and consistent to all students at all times. The support services require constant interactions between instructional designers, teachers, student support staff, administrators, and technical staff, help support staff, and students.

Since DE students are separated physically from the providers (Venkaiah, 1995). Khoo & Idrus (2004) emphasize that Quality assurance practiced by any distance education providers should include elements of Total Quality Management (TQM) namely staff development,
strategic planning, work process, team work, prioritise customers and performance evaluation. Other important elements in distance education are system for sending of learning materials, system for receiving of assignments from students, management of students’ records. Shaik (2005) points out that education services constitute core and supporting services. Teaching and learning that occur in the class are examples of core service because they are critical to a successful learning experience. Supporting services assure quality therefore include real-time information about courses, student advising, orientations, student accounts, help-desks, complaint handling, and feedback in a friendly, trustworthy and timely manner. Students regularly come into contact with these services during their stay at the institution. These services create additional value to the student and determine the quality of students learning experience and the student will utilise as parameters to determine the service quality.

The competitive advantage of an institution lies its systems, procedures, policies and programmes. It is difficult for any distance education institution to serve the needs of its students efficiently and effectively without any quality assurance measures. Learner support is needed in order to facilitate students’ learning. These support can be in the forms of facilities, administrative, learning materials, reading material and references, human interaction, advice and moral support. It is important that providers of quality assurance measures to ensure that students receive the support needed to achieve educational and personal goals (Khoo & Idrus, 2004).

Quality Assurance (QA) is broadly the preventing of quality problems through planned and systematic activities (including documentation). It will include the establishment of a good quality management system and the assessment of adequacy, the audit of the operation of the system, and the review of the system itself (Oakland, 1993). According to Robinson (1994) QA as the set of activities that an organisation undertakes to ensure that a product or service will satisfy given requirements for quality, in other words, that standards are specified and reached consistently for a product or service. Its goal is the anticipation and avoidance of faults or mistakes. Basically, it involves setting attainable standards for a process, organising work so that they are achieved, documenting the procedures required, communicating them to all concerned, and monitoring and reviewing the attainment of standards. Administrative systems were pointed out as factors that determine the educational quality (Robinson, 1994).

In an academic institution services are quite different from services in the business world. The five major characteristics of services include intangibility, responsiveness, assurance, empathy and tangibility. Reliability is the ability to perform the promised service dependable and accurately. With reliability, a relationship develops very fast between the institution and the customer. Responsiveness is the willingness to help the customer (students) and provide prompt service. Assurance is manifested in employees’ knowledge and courtesy and their ability to inspire trust and confidence. Empathy involves caring and giving individualized attention to clients (students). Tangibility is the appearance of physical facilities, equipment, personnel, and written materials. Distance Education being a service and student the prime focus, Kotler and Armstrong (2005) also identified intangibility, perishability, separability, and heterogeneity as the four major characteristics of services. All these characteristics have to be exhibited by a firm if it is to be rated as a good service provider. Universities being non-profit organizations, marketing has become pertinent for them as it is for businesses (McCarthy & Perreault, 1993). Khoo & Idrus (2004) point out prioritisation of customers and management of students’ records as important factors in ensuring quality in DE.

Phipps et al., (1998) noted that Quality assurance strategies for distance learning tend to be oriented toward institutional assessment activities to affirming that the core capacities to assure quality such as faculty credentials and student support services are in place. With a yearning for more student-caring services and a need to reduce student drop-out rates caused by administrative hic-ups, it was imperative that a system of relationship marketing be established. The purpose of the study therefore was to study the current relationship marketing system at the Department of Distance Education, Makerere University and develop recommendations to be incorporated in the University policy for Distance Education. This will be useful for creating
lasting relationships between students and staff in order to improve service quality and reduce attrition rates. The quality policy of an institution should contain quality mission statement, resource allocation norms, quality review and control programmes through Quality Monitoring Teams (Venkaiah, 1995). The levels of skills and expertise of staff, the amount of resources available, weak or strong leadership, efficiency of

Methodology

The research design was explanatory, descriptive and analytical undertaken to establish the relationship marketing system in the Department of Distance Education (DE), Makerere University, Uganda and develop proposals for its incorporation into the University policy. The survey population included distance education tutors and administrators involved in the administration of DE students and DE student. Using purposive sampling, 8 tutors, 22 administrative staff and 20 students were selected. Sources of data were both primary and secondary. Interviews were also carried out with tutors and administrators using a questionnaire and an interview guide for students through focus group discussions. Secondary data was collected through document review of minute, evaluation reports and draft strategic framework documents. The study concentrated more on staff members because they are considered to be the key relationship marketing policy implementers.

Findings and discussion

Characteristics of respondents
The staff members were of varying age and gender as shown in the table below;

Table 1: Age and gender of the staff members

<table>
<thead>
<tr>
<th>Age</th>
<th>Male</th>
<th>Percent</th>
<th>Female</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 - 29</td>
<td>3</td>
<td>21.4</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>30 - 39</td>
<td>7</td>
<td>50</td>
<td>11</td>
<td>68.8</td>
</tr>
<tr>
<td>40 - 49</td>
<td>4</td>
<td>28.6</td>
<td>3</td>
<td>18.8</td>
</tr>
<tr>
<td>50 and above</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>100</td>
<td>16</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Primary data

Most of the respondents fell in the age range of 30 – 39 years followed by 40 – 49 years implying that staff are of varying age. The percentage contribution of each gender to the staffing is 46.7% Male and 53.3% Female. Implied that most of the staff who interact with students regularly by virtue of their positions and physical location are female.

The students’ gender and age was as follows;

Table 2 Age and gender of students

<table>
<thead>
<tr>
<th>Age Bracket</th>
<th>Frequency</th>
<th>Male</th>
<th>Percentage</th>
<th>Female</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 – 29</td>
<td>10</td>
<td>10</td>
<td>71.4</td>
<td>5</td>
<td>83.3</td>
</tr>
<tr>
<td>30 – 39</td>
<td>4</td>
<td>4</td>
<td>28.6</td>
<td>1</td>
<td>16.7</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>14</td>
<td>100</td>
<td>6</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Primary data

Most of students fell in the age range of 20 – 29 years followed by 30 – 39 years. Most of the students interviewed were male.

Positions held by staff members
Staff who participated in the study were purposively selected depending on the office occupied as shown in the table below:

Table 3: Positions held by staff members
<table>
<thead>
<tr>
<th>Position Held</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clerical Officer</td>
<td>6</td>
<td>20.0</td>
</tr>
<tr>
<td>Assistant Lecturer</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>Accounts Assistant</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>Teaching Assistant</td>
<td>3</td>
<td>10.0</td>
</tr>
<tr>
<td>Librarian</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>Records clerk</td>
<td>2</td>
<td>6.7</td>
</tr>
<tr>
<td>ICT Technician</td>
<td>2</td>
<td>6.7</td>
</tr>
<tr>
<td>Administrative Assistant</td>
<td>3</td>
<td>10.0</td>
</tr>
<tr>
<td>Secretary</td>
<td>2</td>
<td>6.7</td>
</tr>
<tr>
<td>Sen. Administrative Assistant</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>Assistant</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>Lecturer</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>Did not State</td>
<td>3</td>
<td>10.0</td>
</tr>
<tr>
<td>Receptionist</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Primary data

The above table shows the positions of the members who participated in the study. They belonged to several sections including Tutoring (33.3%), Accounts (3.3%), Information and Communications Technology (10.0%), Materials development including book bank (23.3%), Clerical (3.3%), Administration and management (20%), and Student support (3.3%). However, one (1) member of staff did not know the section to which he belonged which indicated a need for more staff orientation. Of these staff, 96.6% said that they interacted with students daily while 3.3% said they did this occasionally. This showed that the staff members who participated in the study interacted with students regularly. Khoo and Idrus (2004) point out that staff of an institution plays an important role in quality assurance. Lecturers, besides involving in administration and management, play important roles in the academic development of the students. This explains the higher means recorded by lecturers in the dimension of Staff Development. This is so because not all lecturers are involved directly in the administration and management of distance education, especially in the dimension of sending materials to students, receiving of assignments from students, and maintenance of student records. Both groups have different job descriptions.

The State Of Relationship Marketing In The Department

Several staff members and students were interviewed to establish the state of relationship marketing which is an indicator of quality. In his blog, Mishra (2007) says quality in open and distance learning has been a matter of concern from the beginning. He considers process quality as a means of assuring quality.

Respondents were asked whether they had been trained in relationship marketing and only 30% had ever got such training, the others had not. This implies that knowledge of relationship marketing is low which may lead to poor relationships with students.

Knowledge of the nature of students being served is important for proper relationship marketing. Only 6.7% of the respondents said they were aware of students’ preferences, 23.3% of the respondents were not sure while 70% said they were not aware of students’ preferences. This implies a poor state of relationship marketing because it is difficult to serve clients whose preferences are unknown. However, 96% of the respondents agreed that they always attempted to establish a student’s needs during interaction and 96% had knowledge of student’s activities, 70% or the respondents said were not aware while, 23.3% they were not sure if they knew or not while 6.7% said they knew. To further the lack of knowledge, 70% of the respondents said that they never new the students’ tastes and preferences while 23.3% were not sure if they knew or not while 13.3% said that they knew. This implies that there is a lack of knowledge pertaining to the students’ lives. Which reduces service, and affects the service profit chain (Kotler & Armstrong, 2005).
Student advisory service is one of the indicators that there is care for the students. 53.3% of the respondent said that they did not keep record of students' complaints, 43.3% agreed that they did while 3.4 were not sure if they kept such records. This implies that follow-up is difficult. However, 73.4% agreed that they provide information about courses to anybody who needs it in time while 13.3% said they did not provide it. Further, 83.3% said they advised students on all their queries as they came in while 16.7% said they did not. 73.3% of the respondents agreed that they respond to students' complaints in time while 13.4% said they were not sure while 13.4 disagreed. These figures generally imply that staff are willing and able to advise students which is a good indication of relationship marketing.

As regards student services, which are important in service marketing (Kotler & Armstrong, 2005), staff confirmed that there is no online registration system in place. Students have to report physically to the main campus to be registered rather than inconvenience to them. When students report, there is orientation where students are briefed on the nature of the program they are joining, meet administrators and are introduced to various courses by the tutors. They also get study materials from the book-bank which they read. However, beginning academic year 2007/2008, students on the Bachelor of Education External program are slated to be given materials to be taken for keeps. This will go a long way to improve the state of relationship marketing. Menon (2007) asserts that Quality assurance (QA) is the set of activities that an organisation undertakes to ensure that standards are specified and reached consistently for a product or service. It involves proactive measures taken to avoid faults while quality control (QC) involves reactive measures taken to remove faults. Assessment of quality systems includes the monitoring, evaluation, and audit of procedures. This points out learner support and learner centeredness as one of the important factors.

In order to practice relationship marketing well, the department must have a database containing all information about each student. Students being primary customers, it is pertinent that their needs are known so that they are satisfied as McCarthy and Perreault (1993) pointed out. 56.7% of the respondents said that this did not exist while 23.3% said it existed. The data available about a student is the basic bio-data that is captured as a student register for the first time. This data is captured in a software program called the Academic Registrar's Information System (ARIS). The other information about students is scattered in several offices depending on what those particular offices handle. There is therefore not one centralised database. This implies that information about a student is not easily accessible. Coupled with this is the lack of a formal helpdesk which responds to all students' queries. It is however a reception where students can ask as they visit or call in. However, this desk is not fed with appropriate information such that students have to be redirected to offices for questions that are seemingly easy like the venue where lectures are taking place. This is an indication of poor relationship marketing and ultimately affects corporate image of the department and the university as a whole.

All staff members agreed that they are friendly to the students who come to them for services. However, some students pointed out that some staff members are not friendly. This is mainly when those particular staff they referred to are leaving for lunch or signing off. At times they do not give students the attention they desire. Students said that they were however satisfied with their relationship with staff members. When staff members were asked their view on the state of the relationship between the department and students, 36.7% said it was satisfactory, 43.3% said they were not sure of the status quo while 43.3% said it was not satisfactory. This shows a lack of confidence in service provision which is an indication of poor relationship marketing. Besides, no survey has yet been undertaken involving all students to establish what their attitude towards the services of the department is.

Existence of a Relationship Marketing Policy for Distance Education in Makerere University
Currently, there is no known express relationship marketing policy for distance education in the university. Further to this the University does not have a policy for distance education as a whole.
Most of the customer care given to students has been due to frequent on-job training and briefing from senior staff members who has practiced distance education for long. However, staff are not under obligation to carry out relationship marketing activities. 40% of the staff agreed that there is no known policy regarding advising DE students they are required to follow, 26.7% were not sure whether it existed while 33.3% said they were aware about it. The few who agreed that they were aware about it said that by virtue of serving students, they were required to practice it even if it is not written policy. The success of quality assurance in an organisation depends on the total commitment of the management. The quality assurance in an educational institution is possible when every member of the organisation contributed right to the quality process.

As regards student orientation, 13.3% of the staff that the university does not have policy on DE student orientation, 40% did not know if it existed while 34.7% said that it existed. Those who said it existed said that they are required to give students information if they reported just like other departments do. They however said that there was no known policy governing it and the way it should be done especially for DE students. Further to this, the university is silent about establishing help desks for DE students at the places they visit like their mother department, collaborating departments and libraries both at headquarters and regional center.

Because of their uniqueness, DE students need a policy that stipulates the procedures of handling their complaint systematically so that they are guided as and when they require and that any staff member whose services they desire be available to them. 40% of the staff members said that there is no such policy, 30% were not sure while 30% said there was a policy. This is because the Academic Registrar, at the beginning of the academic year provides a program in which freshmen and women would meet their administrators. However this program is not faculty specific. There is no known mechanism of following up whether, staff that procedure, departments offer any other guidance to new students and whether there is consistency. The reporting time of DE students is at times different from that of othere students hence a need for special mandatory guidelines for their orientation and this should be done all units of the university.

As regards friendly services and being trustworthy while serving DE students, 56.7% of the staff said that they were under obligation to be friendly to students, 16.7% said that they were not sure, while 36.7% said that there is no policy requiring them to be friendly to DE students. This supports what students said that in some offices, staff members are not friendly while serving them which reduces their motivation. As regards the existence of a policy that requires staff to be trustworthy to students, 23.3% said that there is no such policy, 73.3% said they did not know if it existed while only 3.4% agreed that there is a policy. This again creates complacency on part of staff members hence reducing the quality of relationship marketing.

Staff were asked as to whether knowledge of relationship marketing will improve quality of services delivered to DE students, 90% agreed while 10% were not sure. Those that were not sure were sceptical because there was no policy to induce them to apply it. And as a consequence, 93.3% agreed that formulation of a relationship marketing policy in MAK will improve quality of service to DE students. In order for Makerere University to build competitive advantage based on collaborative involvement with the DE students and other departments, it has to develop a clear strategy based on the policy that will be set in line with the findings by Sheth and Parvatiyar (2000). McIlroy and Walker (1993) note that effective staff development and involvement of staff in planning are important elements of quality assurance. Staff of an institution will be able to analyse their operations and modify them to optimise the use of resources.

Students have to report physically and register with the university since there is no online registration in place. When they report, they are briefed on the nature of the program they are joining, meet administrators and are introduced to the various courses by the tutors. They also get materials from the book-bank which they read and return. Students also noted that staff members are friendly. However, some students pointed out that some staff members are not friendly. This usually happens when those particular staff they referred to are leaving for lunch or signing off which is an indicator of poor relationship marketing.
Conclusions

From the above findings the following conclusions can be made:

Most of the staff who interact with students regularly by virtue of their positions and office physical location are female. This shows that the staff members who participated in the study interacted with students.

Knowledge of relationship marketing is low.

There is no system of tracking and analysing information pertaining to the students’ lives including their preferences, interests, likes and dislikes. Staff are however willing and able to advise students.

Students have to report physically and register with the university since there is no online registration in place. When they report, there is an orientation where students are briefed on the nature of the program they are joining, meet administrators and are introduced to the various courses by the tutors. They also get materials from the book-bank which they read and return. There is no centralised database where information about a student can be obtained. Rather, it has to be gathered from different offices. This implies that information about a student is not easily accessible.

Lack of a formal helpdesk which responds to students’ queries. There is a reception at the entrance of the building where students ask questions but this desk is at times not equipped with all the necessary information that students need.

Staff members are friendly to the students who come to them for services. However, some students pointed out that some staff members are not friendly. This is mainly when those particular staff they referred to are leaving lunch or signing off which is an indicator or poor relationship marketing.

Currently, there is no known express relationship marketing policy for distance education in the university. This explains partly why services are wanting. The result is that quality in student support is poor which affects the quality of the DE program.

Recommendations

It is recommended that:

- A policy involving requiring special attention to DE students be formulated.
- Relationship marketing be included in all aspects of student life right from the time of admissions, registration, help-desk to be put in place and in the teaching and the learning environment.
- A draft policy statement be made and proposed to the university administration regarding initiating and maintaining good student relations.
- A fraction of the budget be set aside to allow research into students’ needs, preferences, likes and dislikes.
- A database be set up to be a repository of most of the information pertaining each student and that this should be updated regularly. This will enable tracking a student’s progress.
- All units of the university be obliged to handle DE students and fairly and they handle students on the regular programs that belong to other units.
- Staff also suggested the following to be put in place in order them improve their relationship marketing activities: training them in skills in distance education, providing them detailed appointment letters, clearly explaining the reward systems, revitalising the distance education Newsletter, deploying them to perform duties they qualified for, increasing staffing, frequent meetings between staff and students and among staff, measures to improve job satisfaction and online feedback systems. To these should be included in the policy statements.

References


INCREASING NUMBER OF OLDER PERSONS – EXPLORING OPPORTUNITIES OF DISTANCE EDUCATION

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Abstract

The complexities of the modern society have made distance education a veritable constituent for knowledge acquisition and dissemination in our present social milieu. Thus, the paper proposes distance education as a tool for addressing challenges posed by the global increase of older persons.

The paper appraises contemporary ageing and argues for the inclusion of a curriculum in Gerontological Social work in distance learning programmes; owing to the need to engage innovative and creative dynamics of distance education in engaging challenges, opportunities and threats of increasing number of older persons. The paper concludes by justifying a summary of a diploma programme in gerontological social work.

Finally, the paper unveils a new frontier in distance learning education in engaging the challenges of ageing—an emerging issue of grave social and economic consequences if ignored.

Keys words: Older persons, Increasing, Exploring, Challenges, Opportunity, Threats

Introduction

The challenges of contemporary society has instigated the need for increased access to education in various forms. One of such consequences is distance education for knowledge acquisition. Therefore, it is imperative to explore the use of distance education for human resource development in various aspects of human endeavour. Furthermore, it is most essential to engage distance education in expounding on latent and insidious issues such as ageing that has become an emergency and second only to terrorism.

In 2002, the United Nations had a conference in Madrid, Spain on older persons where it was asserted that the number and percentage of older persons in the world will continue to increase. Most of the increase is expected in developing countries where the population of older persons is to quadruple in the next 50 years (UN, 2003: 3). The expectation is 2 billion older persons by 2050. The population of older persons is to double between 2000 and 2050 from 10% to 21% and that of children is projected to drop from 30 to 21%. The reality of the situation is the need for the society to develop capacity in human and material resources to meet the challenges of the ageing population. This is because developing countries, which most countries in Africa belong, are to be highly affected by the increase in number of older persons. Meanwhile, there is a lackluster attitude of government and other agencies towards issues that concern older persons (HAI, May 2007: 2).

This paper presents an argument for the inclusion of Gerontological Social work in distance education as a means of training human resource in addressing the emanating complexities of growing population of older persons.

Human resource

In all human enterprise the human resource remains the foundation that stabilises and upon which the success of a human enterprise depends. Human resource is the contribution of man in terms of intelligence; inventing, creating and controlling material resources (Omotayo, 2001:4). Furthermore, it is man’s ability to design, organise and execute a plan to achieve a desired end.
Deductions from scholars’ submissions depict human resource as the human part of management enterprise (Wilson, 2004: 145). Inefficient human resource is tantamount to managerial cancer that degenerates the progress of any human enterprise. Suffice to say human resource is very crucial to the success of any human endeavour. Consequently, it is an integral part of production because it is the only resource that is conscious of its contributions to production. This is because it is the factor that determines the performance of one or more enterprises that are involved in the production of same products or services. From the foregoing, human resource is the fuel of efficiency that powers the material resources into achieving set goals and aspirations. Hence, the quality of human resource largely determines the success of an organisation (Akintayo, 1996:23).

Therefore, there is the need for continuous and sustained outlet for training professionals in diverse fields of human endeavour in general so as to equip the society in facing the challenges that emanate from diverse human interests. According to gerontological social work, the epicenter of this paper, is being projected as the veritable tool for human resource development on ageing. This is because increased capacity of human resource in the field of gerontology in general and gerontological social work in particular better equips the society in engaging the challenges of the ageing world. Thus, this paper argues for accelerated increase of gerontological social work curriculum in institutions of higher learning in general and distance learning in particular.

Gerontological Social Welfare

Social welfare practice concerning the elderly began. This is not because older persons were ignored but they were considered as part of the family (Johnson et al., 1997: 79). However, with the increasing number of older persons and their expected consequences such as high propensity to poverty has made gerontological social work a necessity in our contemporary society.

Historically, gerontological work started in 1945 when gerontology society was formed as a forum for professionals working with the elderly in the United State (Lowly, 1991:25). Furthermore, in the 1960s and 1970s conferences took place where the need to recognise the elderly as a special group and enabling social workers to acquire and develop special skills in the field of gerontological social work was emphasised.

Owing to the increasing number of older persons there is the need to train manpower in order to develop new strategies and address the consequences of ageing population. Hence, there is the need for accelerated increase in the training of professionals in gerontological social work so as to equip the society in addressing threats, challenges and explore opportunities in meeting older person’s needs as they emerge in our ever-changing social milieu.

University as the acme of knowledge acquisition and dissemination should be proactive in developing gerontological social welfare curricula that gives required training, knowledge and skills as demanded by contemporary social work practice.

Rationale for Gerontological Social Work Curriculum

The need to train manpower for specific area in field of academic is growing. It becomes necessary to develop new programmes that will prepare the society in addressing a number of emerging social issues owing to the increasing number of older persons.

From cursory observation, Nigeria has about 100 universities with less than 1% per cent offering courses in social welfare and none in gerontological welfare. In relation to the census figure of 2007, the estimated population of Nigeria is 140 million people in which about 4% are older persons; with this kind of population it will be appropriate to initiate means of training the human capacity in all spheres of human interest ageing is a generic trend that cut across disciplines.

This is because increase in population has its effects especially when it concerns a particular age cohort as it is with increasing number of older persons. This has been conceptualised into 4Rs...
The 4Rs of Ageing

The 4Rs of global ageing are projections from deduction of experts on how ageing will probable restructure the way the society operates. The growing number of older persons should be seen as an opportunity to develop policies that will ensure decent living standards for all members of the society.

Restructure Economy

The submissions of scholars revealed the following: The effect of global ageing will increase tax rate, as more money will be needed to pay for pension and health care programmes. Probably, governments will spend less on defence, education and spend more on health care since more money will be required for geriatric care. There will be shrinking consumer market and reduction in investment for domestic goods, owing to less preference for these goods by older persons. Furthermore, there will be over capacity in industries such as construction, durable goods and real estate. Finally, there will be refocusing on manufacturing of goods and services; for example the pharmaceutical industry will have to produce more geriatrics drugs.

Restructure the Family

Here, family commitment and organisation will shift. This is because old peoples' home will probably become a norm, as there will be less time to care for older persons within the traditional African family system. This is because low fertility and the high probability that today's working adults are having and will have less children or relative to take care of them at old age. Therefore at old age, most may have no other option than to be institutionalised, just as the effect of modernisation makes day care and nurseries a necessity for today's family.

Restructure Politics

In politics, matters relating to ageing inter alia will be critical to election victory. Policies on retirement and pension will probably become the centre for political campaign; as it was during the election campaign between Angel Markel and G. Scholer in Germany national election in 2005.

Restructure Social Institutions

Here there will be the need for social institutions such as sports and retirement to be adapted to meet the need, interest and aspiration of the ageing population. There will be the need to introduce retirement education into the adult education curricula.

Furthermore, out of 3,300 awards and grants from 47 countries, none is directly for gerontology (Grant Register, 2004). These show the dearth of programmes in institutions of higher learning and posits a danger because the society lacks the appropriate machinery for manpower training and development in the field of ageing.

Furthermore, the inclusion of gerontological social work program will create a new frontier in research, teaching, preservation of information and addressing problems of caring for human needs and other consequences of longevity. Owing to the fact that human beings cannot meet all their needs on their own, assisting people to meet their needs when they are old, which is the major function of gerontological social welfare, always be relevant to human society.

In addition, coupled with the fact that human societies continue to evolve and develop, change is inevitable and creates new challenges, threats and opportunities, that must be met by the society. Thus, the need of ‘marrying the town with the gown’, that relates to making university education more responsive to the need of the society will be promoted with programme to train professionals in addressing the various consequences of ageing.
As a result, with more experts being trained in the field of gerontological social work, the society is better equipped to meet human needs. This will make older persons self-sufficient and reduce dependence, a major objective of social welfare in general. In addition, the society will be able to address many of the social problems that transcend pecuniary needs. Here, the focus is training experts that can address the immediate needs of persons in the society and project into the future.

Key areas include teaching and research, though the United Nation Article 11 of Madrid International Plan of Action on Ageing advised the need to intensify research on ageing (U.N., 2003: 5). However, after five years, there is limited effort towards the accomplishment of Madrid International Plan of Action on Ageing (MIPPA5) (HAI, 2007: 3).

Thus, it has become necessary to push the issue of ageing to the front burner of education through training and research. Therefore it is obligatory on the academic to design courses that will train manpower in various fields such as; economics, politics, sports and other social institutions as it relates to ageing.

Objectives of Gerontological Social Work Curriculum

1. Improve capability of the society to meet human needs in general.
2. To contribute to manpower development in gerontological social work.
3. To train manpower in better understanding and management of later life crises.
4. To assist public and private organisations in the training of staff in specific area of gerontology.
5. To create an environment where various social problems emanating from increasing number of older persons will be handled by trained personnel.
6. Making the society more responsive to older persons needs.
7. To expose students to extensive and modern trends in gerontology.

Course Content of Diploma in Gerontological Social Welfare

Duration.
One academic session.

Course Description
First Semester


Second Semester

Second Semester


Thesis

Electives

011 Emotions

Conclusion

Gerontological social welfare, as an eclectic field of study will be crucial in addressing the threats and challenges of ageing. This is because gerontological social welfare has inherent elements that have equipped it to perform such functions.

Social welfare generally refers to voluntary programmes that are designed to assist people. Thus, gerontological social welfare as an academic field will be training professionals in meeting the needs of older persons. Therefore there will be need not only to accelerate the dissemination of the knowledge in gerontological social welfare but also to open new frontier in the field through teaching and research in outlets such as distance learning.
Recommendations

From the deductions in this paper it has been established that there is paucity of gerontological social work courses in Nigeria. Owing to this current situation the following recommendations are made:

There should be progressive review of university curricula to reflect changes and to meet the needs of the society.
Accelerated inclusion of gerontological social work curricula in all institutions of higher learning, especially in various forms of distance learning.
There should be regular national and international academic conferences, workshops and seminars to review curriculum on ageing.
The educational sector and concerned authorities should develop procedures to ensure that institutions of higher learning meet the required standard before accreditation of courses in ageing.
Periodic assessments by concerned authorities should ensure that universities have the required standard for social welfare curriculum in general and gerontological social work in particular.

References

Abstract

Open and distance learning (ODL) is the means of providing mass literacy and opportunities for those who could not gain admission through designated examination agencies as well as those who could not afford to leave their job to attend a full-time educational programme. Open and distance learning seeks to improve skilled manpower and also improve the skills of those already at work. The purpose of this study, therefore, is to identify both the internal and external implementation problems for ODL in Nigeria. Major recommendations are made based on the results of the study. The Nigerian government should thus subsidise ODL programmes just like the conventional school system and improve electricity supplies to the nation. In the same vein, Nigeria should emulate ODL implementation procedures of Brazil, Egypt and South Africa. ODL programmes should be seen as the avenue to produce a strong manpower for national development rather than an avenue for internally generated revenue by the stakeholders. Students should develop a good culture of maintenance of available facilities. ODL can only be sustained with the involvement of all stakeholders.

Introduction

Education is a veritable tool for establishing and managing change. Change in itself is essential for the development of individuals and the nation. A dynamic nation needs a strong educational system. Therefore, providing quality education to millions has been one of the struggles facing developing countries such as Nigeria. However, inadequate access to education may result in many people not participating meaningfully in national development. Hence, the need arises for open and distance learning to act as a succour for the affected Nigerians, irrespective of tribe or ethnic background. Open and distance learning also provides a second chance for those who had once been in the system but had to drop out for one reason or the other.

Open and distance learning equally favours workers, applicants and those who could not secure a position in an educational institution through entrance examinations. Workers benefit more because they are exposed to training on the job. Companies and industries need workers who are willing and able to update their skills throughout their lifetimes, hence open and distance learning programmes become a serious avenue for upgrading their knowledge. It is also crucial for preparing workers to compete in the global economy. It is a source for improving people’s ability to function as members of their communities.

The Concept of Open and Distance Learning (ODL)

There are several approaches to defining the concept of Open and Distance Learning. Creed (2001) defined distance learning as ‘an educational process in which a significant proportion of the teaching is conducted by someone far removed in space and /or time from the learners’. Open learning, in turn, is defined as ‘an organized educational activity, based on the use of teaching materials, in which the constraints on study are minimized in terms of access, entry, or time and place, pace, method of study, or any combination of these’. Thus, the concept of open and distance learning suggests an educational approach to reach learners in their homes/offices/shops, etc, provide learning resources to them to qualify without attending formal classes in person, or create opportunities for lifelong learning, no matter where or when they want to study.
According to UNESCO (2002), represents approaches that focus on opening access to education and training provision, freeing learners from the constraints of time and place and offering flexible learning opportunities to individuals and groups of learners. Mudasiru (2006) defined distance learning as a term to describe the student-centredness of distance education and it deals with the use of print and electronic technologies to present individual lessons to learners at a distance.

Correspondence study entails distance learning through postal subgroups, that is, learning at home and communicating with the instructor using print materials. Adebayo (2007a) defined open and distance learning as the type of education that takes place outside the conventional school system and it is imparted without necessarily having personal interaction with students or learners. The practice of ODL in Nigeria takes various forms, which include correspondence study education, distance learning (Sandwich programmes), Part-Time Teacher Training Programme (PTTP), Open University, weekend programmes, adult literacy education programmes, National Teachers Institute (NTI) and elearning.

From the above, one can deduce that distance learning not only shares the goals of the conventional school system, but it also aims to provide access to a historically underserved, place-bound, and highly motivated population.

The Evolution of Open and Distance Learning in Nigeria

Distance learning is not a recent concept in Nigeria. Akinpelu (1982) indicated that the Department of Adult Education at the University of Ibadan first proposed the need for distance learning in 1960. The programme was titled ‘pilot correspondence programme in the Science subjects’ to experiment in the field of science education at pre-university level and thereafter to expand gradually to certain other vital areas requiring in-service training. This project was renamed ‘Correspondence Courses leading to Degree and Diplomas’. This notwithstanding, there had been correspondence colleges in Britain and other places for interested Nigerians through ‘Rapid results’ as well as others where courses in business related subjects and administration were obtained.

The National Open University of Nigeria (NOUN) was first launched in 1983 but was suspended in 1985 by the military government. President Olusegun Obasanjo re-launched it in 2001 and NOUN now provides instruction for some 60,000 students as at 2002 (ODL Paris 2002 report), the new United Nations Educational Scientific and Cultural Organisation (UNESCO) chair aims to build up the supply of skilled professionals to manage and design ODL programmes through the use of new Information and Communication Technologies (Daniel, 2005).

NOUN is the first full-fledged university that operates in an exclusively open and distance learning (ODL) mode of education. The university focuses mainly on a distance teaching and learning system, and delivers its course materials via print in conjunction with information and communication technology (ICT). The National Open University of Nigeria currently has 34 study centres, which are stratified into the six geopolitical Zones of the nation.

Significance of Open and Distance Learning to Nigerian Education

UNESCO (2002) stated ‘in efforts to meet the new and changing demands for education and training, open and distance learning may be seen as a complementary approach that is at least complementary and under certain circumstances, an appropriate substitute for the face-to-face methods that still dominates most educational systems’. The relevance of ODL to Nigerian Education is outlined below.

Access

It increases people’s access to education. People who would have found it impossible to attend the conventional school system benefit from ODL. Stakeholders in the education sector are interested in open and distance learning because it allows greater access to educational
opportunities. This is in keeping with the stated objectives of the National Policy on Education that “maximum efforts shall be made to enable those who can benefit from higher education to be given access to it. Such access may be through universities or correspondence courses or open universities or part time, elearning and work study programmes” (FRN, 2004).

Social Enhancement

Open and distance learning schemes hold a number of potential benefits for various stakeholders in the education and development process. To the learner, ODL means more freedom of access and thereby a wider range of opportunities for learning and qualifications, thereby improving their social status. It is often a cheaper means of attending school for the student since some people may not be able to leave their places of work to go to school full time. Men of the armed forces and other security agencies are registered in large numbers for distance learning to enhance their social status.

Economic Growth

ODL is an avenue for institutions to improve their Internally Generated Revenue (IGR). It is also an avenue for many people to become learned and workers in any profession they choose or are currently engaged in. Students are allowed to read up to whatever level they want, hence contributing to the economical growth of the nation through better performance. For employers, ODL offers the possibility of organizing service training for their staff without necessarily releasing them for long periods of time. With sufficient number of employees being trained, ODL is often the most cost-effective means. For the government and educational policy makers, the system is a panacea for the perennial problem of provision of equitable and accessible education in an affordable way.

ODL has also reduced poverty levels among teachers, since programmes are attended while at work. The government too incurs little cost on training but develops the manpower to improve the economic situation of the nation. Nigerian prisoners or inmates enjoy distance learning programmes in Nigeria so as to be useful to the nation by contributing their quota to the development and economic growth of the nation after release. ODL has given tremendous supports to teacher training in the Universal Basic Education programmes in Nigeria. ODL is working towards the development of education and life skills for youth and the management of the available natural resources.

Implementation Problems of ODL in Nigeria

The problems that need to be addressed for the effective implementation of ODL in Nigeria are discussed under internal and external problems.

Internal problems

The Teacher Factor: Absence of teachers trained in computer to teach the practical aspects of computer skills, coupled with non-availability of computers and allied tools at the centre, militate against actual realization of the goals and objectives of ODL in Nigeria. However, the teacher factor problem calls for an urgent need for all practising teachers to brace themselves for the challenges of communication technology. Also, the successful implementation of any curriculum is dependent on the informed and rational choice the classroom teacher makes about curriculum programmes and materials required for use in school. Teachers are not adequately remunerated; hence the exorbitant rate of selling their textbooks which does not augur well for the students.

School Factor: The removal of government subsidies for staff and students’ welfare has greatly affected Nigerian higher institutions that were on the verge of collapse. Hence, ODL was used as a revenue generating venture and a way of increasing Internally Generated Revenue (IGR). This observation was supported by UNESCO’s (2001) study that the lack of government funding hindered the quality and effective coordination of distance education initiatives in Nigeria. The
institutions and their location do not always provide hostel accommodation, the conditions of the rooms and environment are always very poor, and water, electricity and cleaners are not available. Moreover, library facilities are not provided for students to update their knowledge.

Managerial Factor: The major task of a manager is to match educational purposes, administrative roles and teaching methodology to achieve the predetermined goals and objectives of the organisation. The question is how effective are managers of ODL in their various institutions? Borisade’s (2007) study revealed some ineffectiveness in the area of manager-staff, manager-student, and manager-community relationships. This was due to some extraneous variables such as temporary lecturers, non-availability of accommodation for students during the programme and community outrageous cost in the provision of accommodation for staff and students. The lecturers also face study centre managers with the problem of achieving the objectives due to faulty implementation. Most of the lecturers are interested in the monetary benefits to the detriment of what the students would achieve.

The criteria for admission of students were not the same as those of conventional institutions or as stipulated by the Joint Admission Matriculation Board (JAMB) or National Universities Commission (NUC). Primary Six, General Certificate Education (GCE), National Examination Council (NECO) Grade Two Teachers Certificate, West African Senior Secondary School Certificate (WASSC) holders were admitted for six year programme, especially sandwich programmes. Entrance examinations were not conducted admission into ODL programmes. This casts doubts on the credibility of the students as admission. The time schedule for the programme is inadequate and insufficient for the lecturers and students to adequately complete their course work.

Management admitted an outrageous number of candidates which increased the staff-student ratio and overstressed the available human and non-human resources. When the regular university lecturers cannot effectively cope with the teaching of all the courses that have to be taught, lecturers have to be locally recruited (Borisade, 2007). This is as a result of the profit-making motive behind the establishment of distance learning programmes by Nigerian institutions and it is gradually taking precedence over academic and professional reasons. Moreover, students’ results are usually delayed, lecture and examination timetables are haphazardly prepared and these directly or indirectly affect students psychologically.

The National Universities Commission (NUC) education reform programme (Draft Benchmarks and minimum Academic Standard (MAS) posed problems for the managers. According to Adebayo (2006b) most lecturers were not aware of the minimum Academic Standard (MAS) needed by their institutions.

Student Factor: The approval of ODL by the federal government and NUC gave an opportunity to Nigerians to attain their academic desires, hence the explosion in enrollment of students. The available facilities were not enough for the students, especially during examinations, which gives room for examination malpractices such as cheating, copying, bringing in scripts etc. Also, the increase in enrollment increases teaching and learning difficult for the lecturers and the students. Most students too lack a maintenance culture. The available facilities are vandalized and misused by them. Study habits are poor as courses are crammed just to pass. Students do not consider it necessary to attend orientation / induction courses at the beginning of their study. Some of the students do not know how to use the library and library facilities. Students are not interested in the acquisition of knowledge and skills rather they are essentially interested in the acquisition of certificates (Obemeata, 2000).

Borisade’s (2007) study revealed the concept of ‘sorting’ which is a recent coinage in Nigeria for a variant of academic corruption: a condition when an academically deficient student ‘sorts’ herself or himself out with the lecturer or other persons in authority in the institution with a view to securing favours that will wipe out any deficiency.
External problems

Energy related problems: Power supply is erratic in Nigeria. Successful ODL cannot be assured without the use of communication technologies (radio, television, computers). Incessant power failure creates problems for the effective integration of most instructional materials in the delivery of ODL. The poverty level among Nigerians makes alternative sources of electricity, such as generators unavailable to them.

Low Tele-Density: Access to telecommunication tools such as telephone, internet and computers among others is still at low ebb. Even with infusion of Global System for Mobile (GSM) communication in 2001 in Nigeria, access is limited, services are yet to be perfect and the service charge is too high for users.

Lack of Consistency in Programme and Policy Implementation: It is a known fact that access to any educational policy is contingent on the involvement of all stakeholders and sponsorship of the funding agency. The government in power often launches programmes as soon as the previous government steps out, the current one throws the programme into the dustbin. The political instability of Nigeria since independence has led to poor development plans and implementation of open and distance learning.

Economic Factor: Low level funding of ODL is as a result of inadequate budgetary allocation by the government to that sector. The poor state of the national economy had pauperized most Nigerians. An average middle income earner cannot afford basic technological tools such as computers, thus a computer set is still a luxury in some institutions, offices and homes. This may make the integration of necessary online resources (internet, email) into open and distance learning in Nigeria difficult. Most of the approaches adopted in the dissemination of instructions in ODL programmes, such as the purchase of book/constructoral materials, and provision of facilities such as lecture rooms and laboratory equipment, are capital intensive in a Nigerian setting. UNESCO’s (2002) study supported this observation of the cost implications of ODL when it stated that the cost per average student of distance education is more expensive than that of conventional institutions. Nigerian students consider it as highly exploitative and a way of making money by the institutions and the lecturers.

Poor Postal System: Although improvements have been made in the postal services by NIPOST, the level of services are yet to be up to international standards because the services cannot guarantee efficient two-way communication between learners and distant education institutions.

Public Image: It seems as if some Nigerians do not value the certificates of those who attend open and distance learning. They believe that ODL students are not subjected to, or rather exposed to, all the practical aspects of some courses. Some believe that their certificates were for sale that is a rich student could easily find his way. ODL students are not also exposed to direct university environments such as libraries, laboratories, university cyber cafes, student unions and lecture theatres. Hence, some employers and the Teaching Service Commission do not upgrade their staff who have acquired additional qualifications. Some secondary school principals do not recognise graduates from sandwich programmes because they believe they were not well tested (Borisade, 2007).

Conclusion and Recommendations

The aims and objectives of ODL cannot be achieved where the problems of low TeleDensity, electricity, inconsistency in programme and policy implementation, poor economy, absence of trained teachers, poor postal system, bad public image ‘sorting’ among students, poor study habits, inadequate facilities, delayed results, high cost and managerial ineffectiveness are prevalent. ODL as a tool for increasing access should liaise with conventional institutions including libraries, NGOs, community leaders, and potential students to move the programme forward. Based on the problems identified, the following recommendations are made:
The government should subsidise ODL programmes to improve the electricity supply to the nation. Nigeria as a nation could emulate Brazil’s A-Plus television series that gives teachers regular access to examples of classroom teaching together with the voices of teachers talking about their experience and concerns. These extension activities aim to assist or help teachers extend teaching practices to include community involvement, participation and development. Other worthy of emulation are Egypt’s national network distance training which uses interactive TV technology (ICT medium) and South Africa’s reorientation of teacher curriculum reform and change, titled ‘English in Action’, an interactive radio programme by a Non-Governmental Organisation (NGO). Nigerians should adopt this better education reform up to the tertiary level.

Management should admit students in line with available resources on the ground. The criteria for the admission of students should align with conventional institutions. The idea of ODL programmes being an avenue to generate revenue or improve IGR should be changed to the production of strong manpower for national development.

The use of computers for computing results will resolve the problem of delayed results.

Course materials can be delivered through radio, television broadcast, videotape, interactive telephone, satellite, cable or Integrated Service Digital Network (ISDN) Lines. Many would-be distance learners in Nigeria have access to radio, telephone, and videotape; this makes these media good potential delivery systems for open and distance learning.

With the combination of communication and technological tools, the delivery of distance learning may be effective. This can be ensured through the integrated involvement of all stakeholders and effective planning to ensure successful implementation of distance learning programmes in Nigeria.

No national educational system can rise above teachers’ quality, hence teachers of ODL should be well trained to improve their effectiveness and efficiency in the teaching learning process.

Students should be more focused, adopt a good maintenance culture for the available facilities, develop good study habits and avoid ‘sorting’.

Programmes that combine conventional and distance methods are strongly recommended for Nigeria because of its dual role of face-to-face and print learning. This could remove the society’s idea that the ODL students are undeveloped professionals.

ODL should not be seen as a cost-saving educational measure, which can be implemented without serious planning and good implementation but rather it should be seen as an educational innovation that requires greater attention to planning and guided implementation for the development of manpower.

The enthusiasm shown by government and steps taken can only be sustained with the involvement of all stakeholders (government, business groups, community leaders, teachers, students, conventional institutions, UNESCO and grassroots citizens).
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OPEN FLEXIBLE LEARNING AS A STRATEGY FOR ENHANCING HUMAN SECURITY IN NIGERIA

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Abstract

In this paper, an analysis of open flexible learning (OFL) as a means of enhancing Human Security (HS) in Nigeria, within the context of HIV/AIDS pandemic was carried out. In line with a framework put forward during the MINDEV VIII Meeting held in Dar es Salaam (2nd - 6th December, 2006), the paper attempts to situate OFL system at the centre of strategies combating the HIV/AIDS pandemic. The framework highlights the potential benefits of open learning and distance education in addressing Africa’s social dislocation, poverty, conflict and marginalization, and the achievement of the continent’s human development goals. The paper argues that discussion on the adoption of OFL in achieving the Millennium Development Goals (MDGs) need to be expanded to include its inherent potentials for enhancing HS in Nigeria. To this end, the thrust of open and distance learning in increasing access to affordable quality education that transcends all barriers was advanced and defended. It was also argued that OFL emerged as an effective and efficient tool that empowers people in developing countries thereby improving their means of livelihood, and enhancing their security, particularly, as it addresses threats emanating from the HIV/AIDS pandemic. It was recommended that the government should sustain the policy of “massification” of education through the use of modern technologies and distance education. In addition, suggestions included incorporating open and distance learning strategies in HS framework, and better planning and ensuring effective open and distance learning systems.

Introduction

In September 2000, 147 heads of State met at the United Nations headquarters—the largest such gathering ever— to resolve action on the most pressing problems of humanity and nature. To underscore their commitment, they set numerical targets and deadlines to measure performance. These are the Millennium Development Goals (MDGs) and they span a large range of topics, including infectious disease, education and gender equity amongst others. In September 2005, the heads of state gathered again for the Millennium +5 Summit to assess the five-year progress of the MDGs. As Attaharan (2005: 1) notes, MDGs have become all important, not just within the UN, but also as the zeitgeist of the global development enterprise. On an interesting note, while the failure to meet the MDGs constitute a fundamental human security (HS) challenge, particularly to developing countries, the absence of HS creates conditions that are not favourable for the attainment of the MDGs. In short, there is a one-way traffic between the MDGs and HS.

The achievement of the MDGs has emerged in the 21st Century as an ever-pressing concern. In the particular case of the first part of the goal number six, which seeks to halt and begin to reverse the spread of HIV/AIDS, the United Nations General Assembly Special Session of 2001 articulated the need for immediate action and the achievement of specific short-run targets. This particular sense of urgency is justified by the important attributes of the disease: HIV/AIDS is still an expanding global pandemic; if left unmitigated, the ravages of the disease will threaten human development in general, and the achievement of all MDGs in particular over the short and long terms; the HIV/AIDS pandemic threatens economic growth; and also HS.

The aim of this paper is to extend the argument that OFL can be used as a veritable tool for meeting the MDGs and by extension, in enhancing individual and community HS. In extending this argument, this paper follows the line of argument of Mc Lean, Gasperini, and Rudgard (2002) that the appropriateness and effectiveness of distance learning depends on why, how, and how well it is designed and delivered. They have shown that distance-learning initiatives should be undertaken for appropriate reasons, and in a manner suitable to the stakeholders of the initiative.
Conceptual issues

Open and Flexible learning

Open and flexible learning (OFL) involves instructional education, which does not require teachers and students to be present in the same place. The concept of OFL is one that operates on the premise that by making education delivery flexible to the student and his/her needs, there would be an increase in the catchments of students in the educational programmes. Delivered in a variety of modalities including but not limited to videocassettes, audiocassettes, CD-Roms, online and traditional face to face tutorials, whatever the mode of delivery, the objective is to increase access to education for those who have difficulty accessing it within the mainstream. With the recent improvement in modern information and communication technologies (ICTs), distance learning has emerged inevitable and phenomenal education in the history of educational developments internationally. While the formal system of education continues to be the mainstream of educational transaction, it has inherent limitations with regard to expansion, provision of access and equity and effectiveness. As Dickshit, Panda, and Vijayshri (2002) argues, “with the emergence of modern ICTs, it is now possible to adopt flexible, constructivist, learner-friendly and multiperspective approaches to teaching-learning, so essential for nurturing creativity, leadership, scholarship and integrated development of human personality.

In many regards, OFL is a suitable response to learners ill-served in the mainstream system (e.g. marginalised communities, illiterate with commitments that preclude full-time attendance at institutions, conflict areas, those with basic education, health, sanitation, food security, underqualified teachers in rural areas) etc., (IRFOL, 2004). As Calvert (1986) notes, OFL helps extend the market for education to clientele who have not been previously served. In developing countries, particularly in Africa, this clientele has continued to increase in geometric proportion.

Human security

The United Nations Development Programme defines human security as “safety from chronic threats such as hunger, disease, and oppression and from sudden and hurtful disruptions in the patterns of everyday life” (UNDP, 1996). A similar definition is that put forward by the Global Environmental Change and Human Security Science plan: “Human Security is achieved when and where individuals and communities have the options necessary to end, mitigate or adapt to threats to their human, environmental and social rights; have the capacity and freedom to exercise these options; and actively participate in pursuing these options (GECHS, 1999). Fundamental issues confronting Africa such as famine, desertification, epidemics, conflicts etc represent threats to HS. However, OFL offers an alternative framework in empowering individuals and communities to respond effectively to such threats.

In the knowledge economy of the 21st Century, Nigeria has been assessed as lacking in most of the indices that point towards an enhanced individual and community HS, especially those revolving around the incidence of poverty and attempts towards poverty reduction. Despite its natural resources, Nigeria remains a monolithic economy dependent on petroleum resources as its main source of foreign earnings. It has a human development index (HDI) of 159, life expectancy at birth of 44 years, with 34.1% of the population living below poverty line, and 70.8% living below US$1 per day (UNAIDS, 2006). From these grim statistics, Nigeria is riding high on the crest of HIV/AIDS with 5.8%, a threshold that constitutes a significant threat to the country’s HS. The romance between poverty and HIV/AIDS has dire consequences for HS in Nigeria as Kelly (2003: 45) reports, “not only does poverty exacerbate HIV/AIDS but also that HIV/AIDS aggravates poverty”.

Poverty has traditionally drawn significant attention by all governments and civil society if only because its fundamental characteristic is deprivation which denies the people and communities the options necessary to exercise choices about their lives. Such deprivation is strongly linked to a host of risk factors, identified by the World Bank, which includes “low level of nutrition, illness, and the inability to access information or to take advantage of educational opportunities at the primary
and secondary levels” tend to exclude its victims from the enjoyment of any developmental gains seen in the macro economy. To this list can be added risk factors such as human trafficking, famine, desertification and conflict.

The World Bank has also pointed to a reasonably strong correlation between poverty and illiteracy in Nigeria, and has confirmed the dearth of human capital among the poor in the country. However, it remains to be added that eradication of poverty eradication is ensuring that the vast majority of the people are equipped to participate in the knowledge economy of the 21st Century, especially through programmes that would enrol them in large numbers, in a wide swathe of courses for educational and skills development. Training in this case includes social skills, introduction to entrepreneurship, and workplace etiquette. Distance education qualifies to be a feasible vehicle for making such training programmes available and accessible to the country’s poor.

HIV/AIDS and human (in)security

HIV/AIDS represents a significant challenge to human security in Nigeria. As evidence of the Round 2 of the Afrobarometer indicates, large proportions of Nigerians have either lost family or friends to AIDS or suffer under the burdens of AIDS by caring for sick family members or orphans (Afrobarometer, 2004: 1). In another survey in Nigeria, it was discovered that illness (of self, relatives, or friends) combined with funerals accounted for the majority of reported absence of teachers from work (Ssengozi et al., 2004: 30). Death and illness are thus not only affecting the education sector but also all other spheres of social and economic life.

As a human security threat, disease kills far surpassing war threat to human life. AIDS alone is expected to have killed over 80 million people by the year 2012, while tuberculosis (TB) one of the various main opportunistic diseases, accounts for thousands of deaths every year, including 100,000 children (Garett, 2001: 1). The number of deaths from AIDS as of 2003 stood at 310,000, for Nigeria, 2.2 million for sub-Saharan Africa, and 26 million for the world (UNAIDS, 2004). As noted by the UNAIDS, in general, a staggering 18,000 people die each hour from infectious ailments, the vast bulk of which are caused by just six groups of diseases: HIV/AIDS, malaria, measles, pneumonia, TB, dysentery and other gastrointestinal disorders.

Nigeria with a population of about 140 million is estimated to have the highest number of people living with HIV/AIDS in sub-Saharan Africa, with the exception of South Africa. As at the end of 2007, about 5.5 per cent of Nigerians ages 15-49 were estimated to be HIV-positive, a steady increase from the estimated 1.8 percent of the adult population 15 years ago (UNAIDS, 2004). Nigeria’s epidemic is also characterised by one of the most rapidly increasing rates of new HIV/AIDS cases in West Africa. This means AIDS will soon be the leading cause of adult morbidity and mortality among those age 15-49, arguably the most productive people needed to support any society. This reality will have a devastating impact on all facets of Nigeria’s socio-economic fiber, and will hinder Nigeria’s progress in education – the very tool that Nigeria needs to teach its people and thus stem the spread of AIDS (Ambe-Uva, 2007: 3).

Tackling the HIV/AIDS pandemic: Any role for OFL?

Access, empowerment and poverty alleviation

In the absence of an effective cure to the HIV/AIDS pandemic, the onus rests on the educational sector to prevent the spread of the epidemic, and mitigate its impact on the society. Yet, conventional educational system is ill-positioned to this challenge. There is a general problem of accessing education, especially tertiary education. Access here is defined as places and facilities available for potential applicants. In the case of Nigeria, the expansion of tertiary institutions has not been able to meet the increasing demand for tertiary education. Although, there has been significant expansion of enrollment in tertiary education, this has not met the yearning of Nigerian for higher education. This is as shown in Table 1.
Table 1: Applications and admission statistics for Nigerian universities

<table>
<thead>
<tr>
<th>Year</th>
<th># of Universities</th>
<th>Total # of Applicants</th>
<th>Total # Admitted</th>
<th>Percentage Admitted</th>
<th>Total # Unplaced</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002/2003</td>
<td>53</td>
<td>994,381</td>
<td>51,845</td>
<td>5.2%</td>
<td>942,535</td>
</tr>
<tr>
<td>2003/2004</td>
<td>54</td>
<td>1,046,950</td>
<td>105,157</td>
<td>10.0%</td>
<td>941,793</td>
</tr>
<tr>
<td>2004/2005</td>
<td>56</td>
<td>841,878</td>
<td>122,492</td>
<td>14.5%</td>
<td>719,386</td>
</tr>
<tr>
<td>2005/2006</td>
<td>75</td>
<td>916,371</td>
<td>N/A</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2006/2007</td>
<td>76</td>
<td>806,089</td>
<td>123,626</td>
<td>15.3%</td>
<td>679,846</td>
</tr>
</tbody>
</table>

Source: Compiled from Statistics from the Joint Admissions and Matriculation Board, (JAMB) and the National Universities Commission (NUC), 2007

Table 1 interestingly reveals that between 2002-2006, the highest point of admission of universities has been only 15% of the total number of applicants. This only confirms that the conventional higher education system is hard pressed to meet the demands of burgeoning population of the country for highly accessible, affordable and qualitative higher education.

Distance education with its flexible mode of instructional delivery and geographical penetration thus provides a framework for African countries to launch the fight against HIV/AIDS. OFL is transforming the educational landscape through increased accessibility, flexibility of learning activities, and cost effectiveness. In addition, OFL remains the only potent means suitable for empowering the marginalised and under represented groups, especially fulltime housewives, women in purdah, working women, and the nomadic, thereby enhancing their literacy and enabling them to play a constructive role in nation building (Olakulehin and Ojo, 2006: 15).

Fundamentally, OFL is able to achieve this by reducing the cost of education while enhancing access and quality of education, thereby turning the educational triangle on its head, a triangle that has long depicted how education is constrained (Olakulehin., 2008; Daniels, 1999).

Nigeria is the leading provider of distance education programmes in Africa. With an institutionalised single-mode distance learning delivery- National Teachers Institute (NTI), Kaduna, and National Open University of Nigeria (NOUN), Lagos, and other dual-mode deliveries of distance learning, the government identified the need to adopt this medium to democratise education, to add to human capital stock in the country, and lay the foundation for behaviour change among graduates. A classic example of this phenomenal growth is that of NOUN. The University’s geographic penetration of 32 Study Centres in 2003 to 32 Study Centres in 2007, located in all the regions shows that NOUN services some of the remotest regions in Nigeria. As of 2007, NOUN had an enrolled population of 35,000 students and this is projected to grow to more than 100,000 by the year’s end (Jegede, 2007). The university is therefore an essential means of meeting the needs of Nigerians for reasons of distance, work or family commitment, cannot otherwise engage in educational opportunities. In other words, the university reaches people in communities in which they would otherwise be deprived of opportunities to learn. In addition, NOUN’s expansion of its services is expected to make a significant contribution in stemming the epidemic by increasing people’s access to education. Moreover, its educational programmes are designed in such a way as to enable people to start applying what they have learned immediately (Jegede, 2003).

Also germane and related to access as a theme of combating the spread of HIV/AIDS is the emerging role of OFL in empowerment and poverty alleviation. Indeed, it has been argued that DE remains the primary mechanism for the information-driven age, a tool that bridges the gap between developed and developing communities (Aoye and Ojokheta, 2004: 5). In a related argument, ICTs have been shown to play a major role in diffusing information to the poor living in the rural communities (Obayelu and Ogude, 2006: 55). Although little empirical evidences of the benefits of ICTs in Nigeria are available in literature, there are great potentials of ICTs as tools of enhancing daily lives, whether it be increasing access to information relevant to their economic livelihood, better access to other information sources, healthcare, distance learning or in the strengthening of kinship. In short, OFL plays an important role in access, poverty alleviation and empowerment. Through this system, the low-income people who have no
access to education in formal universities can improve their qualification, which in turn contributes towards increasing the literacy rate, which in the long run can be useful towards eradicating poverty.

ICTs and HIV/AIDS

ICT offers a wonderful opportunity to help close gaps. It can reach people in remote or rural areas, for example, and can be used to deliver the curriculum in flexible ways to suit varied needs and lifestyles of citizens everywhere. The challenge has been for governments to make development strategies to make the best use of ICT in their country so that it is used to close the gaps and not widen the digital divide.

In view of the enormity of the HIV/AIDS epidemic and the urgent need to make best use of all resources and available tools, the role of ICT as a major, potential tool among others in the global mobilisation and response to the epidemic is paramount. The promise of ICT as a tool of OFL is based on the feasibility, at relatively low cost, of providing access to information and knowledge for those working on the problem, those who are suffering from the disease or its effects and to those who need to take preventive actions (Driscoll, 2001: 5).

Reducing the impact of HIV/AIDS can be assisted by generating knowledge and its wide dissemination. A study by Peters and Olugbemiro (2005) shows that the introduction of an HIV/AIDS programme at NOUN would contribute to raising the level of awareness in the different segments of the Nigerian society, stimulate research, and create research networks on HIV/AIDS in Nigeria. The study also notes that the programme would facilitate human resource capacity building and support positive behavioral changes. An earlier study by Aderinoye and Ojokheta (2004) investigates the links between DE and HIV/AIDS. This study shows that DE in Nigeria and throughout the continent of Africa is helping to democratise and spread knowledge, even to those living in remotest, marginalised, and isolated communities. The study also acknowledges that DE has helped individuals acquire basic literacy and arithmetic skills, and in some instances, earn certificates and higher degrees, as well as obtain a multitude of broad-brush education skills that target whole populations (e.g., governance skills, life skills, AIDS education aimed at preventing and reducing spread, improved farming techniques, etc.).

It is in recognition of the above that the University of Ibadan (a dual mode university) was the first university in Nigeria to establish a Diploma program in HIV/AIDS Education at the Distance Learning Centre to assist in developing the capacity of workers on HIV prevention. This challenge was soon taken over by NOUN (a single mode university) to introduce a postgraduate diploma in HIV/AIDS Education and Management. The success of this program has informed the decision of the university to introduce the program at the diploma level. In another study, Pridmore and Yates (2006) examines the strengths of open, distance, and flexible education in HIV/AIDS prevention and mitigation. These scholars argue that to confront AIDS and meet MDGs in countries where HIV/AIDS is prevalent, governments must go beyond current efforts and accelerate conventional responses. This can be achieved by increasing access and quality of education and schooling, raising public consciousness and encouraging people to practice healthy behavior, through emerging accessible, flexible, and cost-effective distance education. Furthermore, growing evidence indicates that in Sub-Saharan Africa, a geography where teachers are in short supply and institutional capacity to support teachers training is inadequate; so are new teacher graduates to replace those teachers who have fallen victim to the AIDS pandemic, OFL remains an effective strategy for teacher training (Aderinoye & Ojokheta, 2004).

OFL is an effective strategy in enhancing HS through its ability to provide educational access to those living in rural and marginalised communities, especially in conflict and post-conflict communities where traditional education cannot effectively serve the people. Its role in poverty alleviation, and empowerment is also important in enhancing individual and community HS. As earlier noted, most Nigerian are leaving below the acceptable level of human existence. This entrenched level of poverty strongly correlates with HIV transmission, and by extension, HS threat. Therefore, by alleviating poverty, OFL has the potential to ensure HS. In addition, by providing the necessary access to information and discussion groups, OFL helps those suffering...
from the epidemic to share their experiences, 
providing training to medical, social, religious and other stakeholders involved in preventing and mitigating the impact of HIV/AIDS.

Implications for action

The previous sections show that failure to halt and begin to reverse the first part of goal number six of the MDGs represents a serious threat to individuals and communities in Nigeria. The direct consequences of illness and death, as well as the loss of labour and income, in combination with high costs of medical treatment can trigger a downward spiral to poverty, which in turn would make individuals more prone to HIV/AIDS, and stifle efforts to mitigate the epidemic. This is how the vicious cycle of the epidemic endangers HS.

However, as earlier mentioned, education provides access to information, enhances human capital formation and has the capacity of honing skills by the individual to make the choices necessary for shaping one’s life. A major challenge in the context of Nigeria is being able to provide access to qualitative education, which is sine qua non to poverty reduction. As Aderinoye and Ojokheta (2004) argue, “education serves as a tool people can use to achieve the level of freedom, that they feel is intrinsically valuable, as well as achieving rudimentary levels of knowledge acquisition, which serves as a functional key to greater educational development. Indeed, the conventional approach alone is inadequately positioned for this challenge, especially in the context where the HIV/AIDS epidemic has threatened human capital. This is where OFL has been identified with the potential to expand the catchment of educational delivery. At the university level, most face to face universities remain over-subscribed to cope with the increasing demand for enrollment from qualified teeming populations. In addition, the increasing demand for lifelong learning in 21st Century knowledge economies calls for greater commitment to a flexible system that is able to meet and serve the individual at his/her place of need.

To gain insights into how OFL can be institutionalised in Nigeria to enhance access to learning, empower the people, alleviate poverty, thereby saving their lives, this paper notes that this mode of delivery must be based on the following:

i. OFL should be set up for the right reasons and not for political and commercial reasons;

ii. OFL models and practices need to be adapted to the social, cultural, economic and political circumstances of the learners, and their environment;

iii. The involvement of individuals and communities who are supposed to benefit in the design and delivery of the programme;

iv. Gain insights from OFL experiences accumulated in developing countries in crafting pedagogical and administrative models that avoid fundamental mistakes in the past.

A caveat needs to be introduced at this stage. In adopting OFL as a strategy for enhancing HS, it is essential that appropriate delivery platforms are adopted. Otherwise, OFL may become more of a liability than an asset. When it comes to choosing technologies for distance education, Fillip (2000: 25) argues that “… it is essential to take a careful look at the infrastructure that the target population have access to, and the extent to which the same target populations can afford to make use of the infrastructure for educational purposes. This helps to avoid the trap of ‘educational overkill’ using expensive and complex delivery strategies when inexpensive and simple alternatives could be pedagogically effective. It is also important to consider at which levels distance education can be made cost effective”.

Conclusion

The Nigerian philosophy of education is based on the desire to provide equal access to educational opportunities for all the citizens of the country at all levels inside and outside the formal system. However, since the conventional approach to learning cannot handle this challenge, the alternative OFL mode of delivery deserves special policy attention. Other than the grim statistics cited above, the urgency of the situation requires the government to go “outside the box” in
providing accessible education is confirmed by the National Population Commission, which projects that there will be 22 million Nigerians of university-going age by 2010. This emerging youth's lives would not be secured unless the government intervenes in enhancing access to qualitative education through distance education. The government should therefore rigorously pursue distance learning and the use of ICTs in providing and accessing university education.

The incorporation of OFL in national frameworks is crucial for poverty alleviation, conflict resolution, gender processes and HIV/AIDS education should be stepped up. Distance education should also be used to train those working in the field of health to educate and empower those infected with HIV, and those affected by the epidemic. As noted by the COL agenda and the Swedish Policy for Global Development, innovative ICT solutions are crucial for creating an environment for people living with HIV/AIDS (PLWHA), enabling them to improve their quality of life and to give them an active role in controlling their own situation, in fighting HIV/AIDS and respecting their wish for anonymity (Sida, nd).

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Abstract

Indigenous teaching systems in Africa which were pervasively informal, equipped learners with the social and occupational skills to grapple with the challenges of their socio-cultural and natural environments. However, they were disrupted by the invasion of the continent by colonialists who thrust upon Africans, formal learning systems meant for purposes of assimilation and 'education' depending on their imperialist interests. The accompanying curricula and instructional modes of the colonial learning systems were foreign; they made learning tedious and left the learners tense. Although instructional materials remain core in the sustenance of the informality and delivery of Open and Distance Learning (ODL) programmes, a gap still exists in the efficacy and quality of such materials in new ODL institutions in Africa. This paper examines the socio-cultural elements of language, presentational and dramatic arts and folklore and their usages in the design of print and other formats of instructional materials in ODL programmes. With a review of relevant literature, bibliographic and archival materials, the writer examines and critically analyses some print course materials of the National Open University of Nigeria (NOUN) to assess the level of cultural friendliness or otherwise of the textual and non-textual inputs. The study reveals among other things that the nuances of the learners' historical and cultural peculiarities have been largely neglected in the course materials examined. Following these findings, the researcher recommends the exploration of socio-cultural elements in enhancing instructional materials for ODL programmes where their potentials have not been properly articulated in the continent. Increased use of indigenous cultural elements in the texts and accompanying graphics, illustrations, animation, etc. for instructional materials design may not only reverse the apparent negative results of colonial learning systems if fully explored but would also equip the graduates of such institutions with the necessary skills to face the challenges of sustainable development of their society.

Learning is defined by psychologists as a "change in behaviour, more or less permanent in nature, which is the result of experience and reinforced practice" (Encyclopedia Americana, 1988: 116). Indigenous modes of learning in Africa have goals, structures, contents and methods tailored to meet the needs and future challenges of the various communities. The modes involve the bringing up of the young by the older members of the society. Indigenous learning takes place when the experience of the society is transmitted from generation to generation. As Mwalimu Nyerere put it:

"The purpose of education, whether informal or formal, is to transmit from one generation to the next the accumulated wisdom and knowledge of the society, and their active participation in its maintenance and development." (Nyerere, 1982:17)

The hallmark of the indigenous forms of learning in Africa is the informality. The process of teaching and learning take place from day to day and last from the cradle to the grave. Yet the learning modes prepare the learners to meet challenges of their immediate environment which they impart upon daily and uniquely, even beyond their lifetime.

The curriculum is designed with emphasis on the living conditions of the people; their view of the universe, God, relationship between the Supreme Being and mankind as well as relationships between various groups of people. More importantly, learning forms have a lot to do with the natural environment on which the survival and wellbeing of the society depends and determines its mode of production. It is furthermore functional in the sense that it is primarily aimed at helping children in particular and adults learn and master the necessary social and occupational skills which enable them to effectively cope with their socio-cultural and natural environment. In other words, it is inward oriented as opposed to outward directed western colonial forms of education which came with the European conquest of Africa in the 19th Century.
The foreign learning and teaching systems were directed at transplanting foreign world views and life styles on the conquered Africans. The objective of education in this case was not geared to help Africans live in harmony with their environment but rather to establish and perpetuate the master-slave status quo between the colonizer and the colonized. The French and Portuguese called their westernization efforts assimilation while the British, being more polite, labeled it education (Rodney, 1985 cited in Garba Diallo, 2003). These efforts introduced very formal modes of learning and teaching which disrupted the indigenous modes and left the learners in distraught states. They now had to cope with having schools located in sacred places away from the homes and cope with all that came along with formality. Formal learning and teaching modes are not part of indigenous African socio-cultural lifestyle.

Culture is the embodiment of the people, it is the things they share and do together - language, family structure, how and when they plant, how they die, and what they hold to be sacred. Indeed, virtually everything the people hold in common is a part of their culture. Elements that make up culture include norms, values, beliefs, technology, etc. While values are abstract ideals, norms are definite principles or rules which people are expected to observe. So, elements of culture of a people include how they dress, their marriage custom and family life, their patterns of work, religious ceremonies, leisure pursuits, goods they create – and which become meaningful to them – bows, arrows, computers, books, dwellings (CSS 101: 15).

There is no doubt that Africa, as the African Ministerial Council on Science and Technology noted recently, has "a relatively rich body of indigenous knowledge and related technologies ... embodied in the cultural and ecological diversities of the continent ... used by the African people for thousands of years to solve specific developmental and environmental problems (NEPAD document).

Research into the experiences of individual learners stressed how important this dimension of enjoyment of the mode of learning in line with the cultural peculiarities and relationship can be in fostering personal transformation (Lunneborg, 1994, 1997).

Without joining issues in the dialectics of where the boundaries now lie between learner support and course development and student support services, writer like Thorpe (2002) takes the position that learner support is "that which happens after the course materials have been made." This is to distance all possible distractions from our focus here which is the impact of socio-cultural elements on course material design. Keegan (1996) identifies two distinct sub-systems within distance education: course development and student support services, "which he characterises as the essential feedback mechanisms that are characteristic of education" distinguishing it from the publishing house or material producer.

We should not lose sight of the fact that socio-cultural elements are also components of learner support when viewed against the background of (Tait 2000: 291) definition of learner support as "the range of services both for individuals and students in groups which complement the course materials or learning resources that are available for all learners and which are often perceived as the major offering of institutions using ODL." The role of learner support as means of articulating uniform course materials with the interest of diverse student groups, complements the role of the course materials – providing for personal interaction, identifying conversation and community as values which should not be lost in technicist approaches to system of learning management.

Again, like Thorpe (2008), although her subject matter is on the place of online interaction, the question of whether the impact of socio-cultural elements should be placed in the purview of course design or the realm of learner support remains moot. This is because the old notion that learner support should be placed after course production is losing ground. It, according to Thorpe (2008) "should be questioned and possibly reversed." The import of this will suffice presently. Some of her deductions hold sway for print course materials of the National Open University of Nigeria (NOUN) which we examine in this paper.
The concept of Science, Technology and Society (STS) encourages reform in science education across the globe. Emphasis has shifted from integrated science to STS by UNESCO and other stakeholders in science education. The concept emphasizes context. The goal is to achieve the teaching and learning of science in the context of human experience.

For design of course materials, Lowe (1989) hit the right cord when he asserts that “illustrations can be seen as far more than icing on the instructional cake. They can take the role of a full partner with text in the explanatory process”

This foregrounds our examination of the NOUN print course material in the School of Science and Technology - PHY 131: Hazards in Laboratory and Laboratory Safety. Giving example of “the consequences of unplanned dumping of industrial chemical wastes that affected small children of an elementary school” (97) with the disposal of toxic chemicals in Love Canal is quite remote. A much more local example such as the catalytic Koko toxic waste dumping, would have been more culturally-friendly.

Also, the illustrations demonstrating positions of safety with photographs of Indians on several pages of the book would have been more culturally-friendly with Nigerian faces.

According to Lowe, for enhanced benefits to be reaped from the combination of text and illustration, “careful analysis of the subject matter is necessary.” A careful analysis of another NOUN print course material in the School of Business and Human Resources Management - TSM 106: The Cultural Heritage would have been more culturally-friendly with full colour of the illustration photographs of celebrants during events in the examples used. Also other tourist sites exemplified in the course such as, the famoustradurbar (8, 53), the dyeing pits in Kano (55), the Afrormosia laxiflora tree - the tree from which charcoal for making fire that could smelt iron ore is made- (92), actual charcoal preparation (93), the Isundunrin Domed Furnace (95) and the aerial view of Sukur total landscape would be more culturally-friendly with colour photographs. In fact Tourism course materials and others such as TSM101: Understanding Tourism, which features colourless illustrations on pages 22, 21 and 36 among others, would be more culturally impartful with full colour photographs.

Festival performance texts employ multiple media for their messages (Gbenoba, 2006: 131). Marshall McLuhan (1964) earlier stated that the media remain expressive extensions of man’s senses and functions, adding that they affect man’s relationships with his environment. Fundamental progress or retrogression, as the case may be, is therefore made as we employ these media of speech, writing, printing, filming, etc to convey our message.

African indigenous festival performances including the popular Eyo festival in Lagos convey messages through acting and other paraphernalia – dancing, poetry rendition, singing with the attendant musicality, sculptural as well as other presentational arts. The presentation of the aspects that could be arrested in print through digitalized technology may be used to enhance instructional materials for ODL and reduce the shortcomings of the print format.

Although the potentials of indigenous African cultural elements of presentational arts as a medium of instruction may not be exhaustively explizable in the print course material format, the musicality of the written word with the ingenious combination of linguistic, stylistic and semantic aphorisms – with appropriate interplay of literary devices displayed in reader-friendly graphics and instructionally enhancing colours would go a long way in making our print instructional materials better. This would still leave, if not open up further, the great potentials of these same cultural elements (of indigenous presentational arts) for the design of other non-print formats including the web interactive.

Therefore just as the print format of NOUN course material GST 201: Nigeria’s People and Culture which is about Nigerians, would do well if spiced with the popular folksongs and folktales of the people being described, a rendition of the instrumental version of their indigenous songs should be used as interlude or background music in any web and non web instructional material of the same course. Same goes for similar materials as the TSM 106 highlighted earlier.
The song accompaniment for GST 101 demonstration compact disc would be better enhanced with the use of an instrumental rendition of "Alo alo o, alo, alo, alo" after the presenter’s instruction to the learner to ‘Listen carefully to the following passage!’

Just as Lowe rightly concludes, “like most text examples, illustrations are likely to be far more effective if, rather than simply being presented, they are set in context whereby students explore the concepts and relationship they embody.” The NOU probably poised to address these challenges as seen in some of its recently printed materials. BED 111: Introduction to Keyboarding is printed with colour illustrations. If produced without colour illustrations, the material might not have adequately instructed the learners who are expected to practice with computers which feature colour pop ups on the monitor. The 133-page course material features colour illustrations throughout for higher instructional fidelity which could also benefit other print course materials when the university extends it around. The use of more indigenous cultural elements in the texts and accompanying graphostrategies, animation, oral narrative techniques and so on for instructional materials may not only reverse the apparent negative results of colonial learning system.

The language element of culture signifies at various levels the main of which are – iconic, indexical, symbolic and aesthetic. The graphic representation signifies the medium of expression among others. Some content words, not medium, however, have indexical functions. Then, according to Ricouer,

Symbols occur when language produces signs of composite degree in which the meaning, not satisfied with designating some thing, designates another meaning attainable only and through the intenationality (1970: 16).

This means any word used (especially creatively) is denotatively and connotatively signifying. That is why Viti Elgar aptly asserts that the “Linguistic symbol is a sign of double signification” as he identifies the symbolic functions as: forification, revelation of reality and adaptation of reality. (1979: 17).

Language at the aesthetic level is no less significant for the design of instructional materials for ODL. Pierrie Guiraud situates the function of aesthetic signification as on two antithetical modes of experience – the logical and the affective (1975) while Adedotun Ogundeji much later situates it as the rhetoric and poetic. (1989: 75). The four levels of signification inherent in linguistic medium examined so far, (more with the polyglot continent) taken with the myriad of indigenous cultural elements available, larger exists for possible exploration by the instructional material designer for ODL courses in Africa.

It is exigent therefore that the design of instructional materials be enhanced through further exploration of socio-cultural elements. This is with the aim to reduce, if not totally eliminate, the harsh formality which tenses up the learner and making learning a monumental task in African ODL institutions. Increased use of indigenous socio-cultural elements in the texts and accompanying graphics, illustrations, animation oral narrative techniques among others, for instructional materials design for their programs not only reverse the apparent negative results of colonial learning systems but would equip the graduates of such institutions with the necessary skills to face the challenges of sustainable development of their society.

Notes

1 This is because the indigenous Africans continue to exert great influence on the living members of the community as dead ancestors. Indigenous beliefs in Africa especially ritual festivals are laden with the invoking the spirit of the ancestors who participate at various stages particularly at the initiation stages. According to the Ugandan poet P’Bitek (1986) "Man has a boundle of duties which are expected from him by society, as a boundle of rights and privileges that the society owes him. In African belief, even death does not free him. If he had been an important
member of society while he live, his ghost continue s to be revered and fed; he, in turn, is expected to guide and protect the living. (Song of Lawino and Song of Ocol)

Suppose that A and B are sitting together and B is telling a story about the origin of the people that A and B consider themselves to b. This story is one that is known by all of B’s generation. What is told to A by B is culture. Suppose also that B has thought about this story and has some different ideas about the elements of the story but has never told this to anyone else. So long as B keeps this to herself, it is not a part of the culture of the people of A and B. Therefore culture is said to be shared and learned. The consensual element means simply that many share it and agree to its meaning and importance (CSS 101, 15)

See pages 101, 102, 116, 117, 118 and 119 i.e Figure 6.2, 6.4, 6.5 a and b and 6.6 demonstrating the cleaning of the victim’s mouth, adjustment of the chin and head, recovery position, artificial respiration a and b and heart massaging respectively PHY 131

The popular Eyo Festival of the people of Lagos given as example is reputed for its colorfulness. Beliefs are associated with religion. Those things we hold to be true. Beliefs and values blend. Our national ideologies are also beliefs. Fundamental Christians believe that the world was created in seven days by God while the average American believes that man evolved from other forms of life over a very long period. – Both are belief systems (involving certain assumptions about what is and how things have come to be), shapes the lives of the true believers. They shape their lives by supporting their notions of what is important, what is real and how we are to believe at all times.

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OPEN AND DISTANCE LEARNING AS A STRATEGY FOR TRAINING EXTENSION AGENTS FOR SMALL SCALE FARMERS: ISSUES AND CHALLENGES

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Abstract

Open and Distance Learning (ODL) means the ‘openness’ of the teaching learning process which allows learners to operate with a degree of autonomy, and self-direction despite the ‘openness’ or ‘physical separation’ of the teacher and the learner resulting in the lack of eye contact. It offers opportunity to ambitious and gifted but under privileged people who are denied the opportunity of obtaining an education through the usual channels. ODL system has emerged as the most potential mode to reach out to a large number of learners and train them with best quality inputs. In the context of small scale farmers, training is operationalised as teaching so as to be fitted, qualified and proficient. The purpose of training is to impact knowledge and skills to an individual so that he can perform some desirable tasks which result in greater professional competence.

Therefore, this paper aims at discussing the concepts of ODL and training and the following issues and challenges: the training requirements of the small scale farmers; the organisation of farmer training programmes; competency development for extension agents to work with farmers, suggested strategies for enhancing farmers education and policy implications for training of extension agents for farmers through ODL.

Key words: Open, Distance, Learning, Training, Extension, Agents, Small, Scale, Farmers.

L’ENSEIGNEMENT A DISTANCE COMME STRATEGIE DE FORMATION D’AGENTS DE VULGARISATION AUPRES DE PETITS EXPLOITANTS AGRICOLES: QUESTIONS ET DEFIS

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Résumé

Dans ce papier, l’Enseignement à Distance – comme l’indique l’expression – signifie tout simplement ‘l’ouverture’ du processus d’enseignement et d’apprentissage permettant aux apprenants (étudiants) d’opérer avec un certain degré d’autonomie et d’auto direction en dépit de ‘l’ouverture’ ou ‘séparation physique’ de l’enseignant et de l’apprenant et, donc, du manque de contact visuel. Il offre des opportunités aux personnes ambitieuses et douées mais défavorisées qui n’ont pas la chance de bénéficier de l’enseignement par les voies habituelles. Le système d’enseignement à distance est apparu comme le mode permettant d’atteindre un grand nombre d’apprenants et de les former avec des contributions d’excellente qualité. Dans le contexte des petits exploitants agricoles, la formation s’effectue sous forme d’enseignement adapté, qualifié et compétent. La formation vise à transmettre un savoir et des aptitudes à des personnes pour leur permettre d’effectuer des tâches qui les rendent plus compétents.

Par conséquent, ce papier vise à examiner les concepts d’Enseignement à Distance et de formation et les questions et défis suivants: les besoins de formation des petits exploitants agricoles; l’organisation des programmes de formation des exploitants agricoles; le développement des compétences des agents de vulgarisation destinés à travailler avec les exploitants agricoles; suggestions de stratégies pour améliorer la formation des exploitants agricoles et, enfin, les exigences de politique de formation des agents de vulgarisation par le biais de l’enseignement à distance.

Mots clés Enseignement à Distance, Formation, Vulgarisation, Agents, Petits Exploitants Agricoles.
Introduction

Open and Distance Learning (ODL) can be seen as a strategy or instrument of development as evidenced in the Nigerian education, National policy and national development ideologies. Moreover, most countries of the world have made education the cornerstone of their training for national development. This is informed by the pivotal role education plays in all spheres of human endeavor whether economic or technological development. Jegede (2000) opined that this vital role of educating the citizenry includes the removal of illiteracy and poverty and development of a culturally and socially tolerant people who exercise ethical and moral considerations in the national and local affairs with a community spirit. Nigeria is not left out in this quest for national development via education.

Agriculture has continued to be the major sector of the economy. This is reflected by the bulk of the population acquiring their living from it with their growing development of agro-industries in the rural areas, it should be expected that the demand on the agricultural sector for raw materials and internal markets for its produce will increase more than ever before. This is the rationale for the heavy investment in agriculture the priority position in the national development plan. In pursuance of this objective, major challenge is the production of trainee and competent manpower in agricultural extension and rural development. The Nigerian small scale farmers who are the focus of the rural development programme are faced with the problem of poverty, disease and ignorance. Part of the difficulty in reaching them and helping them to cope with their problem is that of getting persons with the desirable disposition and attitude for rural development of adequate facilities necessary for the training of competent staff, in technical agriculture and extension, who in turn will educate farmers in the acquisition and use of new knowledge and skills essential to improved agricultural production and rural environment.

In nearly every part of Nigeria, we always encounter growing restlessness about the criticism of the ability of agricultural extension systems to cope effectively with agricultural development in particular and rural problem in general. This feeling generates a demand for the continued training of agricultural extension and rural development workers. This is so because the success of any organisation and/or programme depends on the extent to which it has articulate and competent professional staff to execute its plan efficiently.

The need to provide substantial, adequate and relevant training to personnel working with the small scale farmers in predominantly non-literate societies is perhaps more important than general staff training and development. Prewett spoke to this point when he asserted that “extension’s capital stock and investment is carried in its personnel. The degree of progress we make as an extension service depends on the recruitment and training of new workers who come into the organisation” (Prewett 1998: 43). In Nigeria as in most developing countries of the world with a predominantly agricultural economy, the production of trainee manpower in agriculture remains a major bottleneck to agricultural development. Where some trained staff is available, its development and effective use has been shown to be faulty. The training function is probably the single most critical function in the effective use of human resources to meet today’s pressing manpower needs.

The problem of training extension agents for small scale farmers is inherent in the nature and characteristic of the small farmers themselves, socio-physiological and attitudinal/behavioral orientation, training level and training needs of those who work with them and the ability and capacity of training institution (ODL) to develop and deliver training programmes relevant and appropriate to the needs of the extension agents (EAs) and the small scale farmers (SSF). Effective effort in staff training and development should focus on the modification of these constraints.

The concept of open and distance learning and training

Open and Distance Learning as the name implies simply means the “Openness” of the teaching learning process which allows students (learners) operate with the degree of autonomy and self-
direction despite the ‘apartness’ or ‘physical separation’ of the teacher and learner resulting in the lack of eye contact. It offers opportunity to attain and gifted but under privileged people who are denied the opportunity of obtaining an education through the usual channels. It takes care of individuals, discontent with their socio-economic status who try to change the strata in the face of many difficulties (Kanwa, 2001: 21). According to Clark (2004: 32), open and distance learning (ODL) is a way of providing opportunities that is characteristic of the separation of teacher and learner in time or place or both time and place; it is a learning system that is certified in some way by an institution or agency; it involves the use of a variety of media, including print and electronic, it is a two-way communication that involves learners and tutors to interact with the possibility of occasional face to face meeting and involves specialised division of labour in the production and delivery of courses.

Open and Distance Learning is a revolutionary concept an innovation in education which is in response to growing demands to democratise and liberalise education, which cannot be achieved by the traditional method centred around the classroom (Ozigi, 2002: 16 – 17). Distance education or distance learning grew out of the need concept wide than correspondence study that could encompass new communications technology and the delivery of education at a distance (Peters, 199: 38). Although the term has become widely accepted, it has inherent problems with regards to its exact meaning and scope. However, every attempt to define distance learning refers to the separation of teacher and student as well as illuminative perspectives.

The significance of open and distance learning system

Open and Distance Learning system has the following merits:

- ODL improves the existing teaching force as well as trains new teachers through other methods complementary to current teacher education practices so that the Universal Basic Education objectives can be achieved/attained.
- It raises the literacy level of the population incrementally so that the goals of Education for All (EFA) are met on schedule.
- It enhances community ownership and participation in the management and provision of education at all levels nationwide especially Community Resource/Study Centres.
- Overcoming physical distance: ODL can overcome problem of physical distance for learners in remote locations who are unable or unwilling to physically attend a campus. Also, learners and teacher are geographically separate because teacher in the urban setting can instruct learners in the rural setting (COL 2000: 24).
- Expanding the limited number of places available: ODL can expand the limited number of places available for campus-based institution which are few in number and which have stringent entrance requirements.
- In addition, ODL provides “just in time” training and courses at school or workplace; effectiveness is copying with mass education and serve as source of generating revenues for institutions.
- Utilised for a variety of learning situation: full time, part time, under graduate and graduate, certifications and continuing education.

The concept of training

The concept of training connotes different things to different people in different organisations. In the context of the small scale farmers, training was operationalized as teaching so as to be fitted, qualified and proficient. The purpose of training to impart knowledge and skills to an individual so that he can perform some desirable tasks. McCormick and Trifflin (2003: 81) conceptualised training as “any planned and organized effort that is specifically designed to help individuals develop increasing capabilities.” The definition suggests that training is a personnel function which aims to help workers develop their abilities in order to fit properly to the world of work in the performance of their daily activities. It is the process by which an organisation seeks, in a planned, coordinated and continuous manner, to develop in all employees, those understandings, skills and attitudes that will raise the individual’s present and future effectiveness (Sigh, 1999: 82 – 83).
It includes all the activities aimed at improving the ability of the extension workers to do their work, including the acquisition of information, development of abilities and fostering attitudes which result in greater professional competence.

The significance of the process lies in its influence on staff achievement, motivation and personnel competence on the job. This conceptual operationalisation of training emphasises organisation growth and health as well as employee development and welfare. It focuses on three important elements:

1. Improvement of individual knowledge, skills and attitudes,
2. Contribution of training to effectiveness and efficiency on the job,
3. Attainment of organizational expectations, goals and objectives.

Lukomski (2001: 28) defines training as job-oriented learning which takes place under various forms of sponsorship for various periods of time oriented towards a specific occupation. It differs from work experience (learning on the job) because it has some type of defined structure. That is, it is scheduled for a certain number of hours during a certain period of time and generally both classroom instruction and workshop are included. Training like most conceptual ideas in modern society, has evolved and developed over time.

In this paper, an attempt is made to address the following issues and challenges that is, to discuss the training of extension agents to work with Nigerian small-scale farmers. The training requirement of the small farmers as guiding principles for the operational competencies of the extension workers are enunciated. A modus operandi for the implementation of a policy implication is drawn.

Issues and challenges for the training of small scale farmers

The following issues are considered crucial for training of small scale farmers as:

1. Training Requirements of the Small Scale Farmers

   The training requirement of the Small Scale Farmers (SSF) is determined by the actual tasks which they perform in the enactment of their production, family welfare and bread-winning role. The knowledge of the management practices of the crops and livestock which engage the highest proportion of their time is important, so also is the skill, abilities and decision making proficiency essential for their family survival in the farm environment.

   The training requirements of Small Scale Farmers should be planned in relation to their crops and animals production needs as well as their level of knowledge and what they see as their most important areas of training. Because farmers’ training is a little bit different from general skill training, there is greater need for the plan to be consistent with the farmers’ needs. Rao (1999: 36) refers to farmers training as “an intensive learning activity for a group of selected farmers, assisted by competent trainers to understand and practice the skills required in the adoption of new technology where appropriate facilities exist and at a time and duration considered suitable by farmers”. This concept of farmer training articulates the basic requirement for the plan. The need for training subsumes a deficit or challenge situation in the knowledge, status and skill level of the practising farmers as well as the availability of appropriate applicable information, the use of which will correct the challenging or problem situation.

   Training should centre on the needs of both the easy and hard to reach farmers. For the “easy to reach farmers” training needs and requirements should be planned at their levels of cognitive ability while the training of “hard to reach” farmers should begin from first principles, basic or essentials of farming and livestock production. Such information as is available for the latter group should be broadened in small compact modules.
i Objectives of farmers training

The primary objective of farmer training according to Sohal and Singh (2003: 18) “shall be to attract genuinely interested farmers who are either self motivated or externally stimulated to take part in a training course.” The aim shall be to impart new knowledge, teach better skills and bring about effective performance in the production of food and livestock. A well planned training programme should aim at the encouragement of mutual interaction, exchange and experience between farmers, extension workers, subject matter specialists and agricultural research scientists. It should also inspire reciprocity of ideas between farmers themselves and enhance confidence in agricultural research results and extension service assistance.

ii Typology of small scale farmers courses

The training of farmers can be accomplished using traditional and contemporary extension teaching methods or designed as organised formal farmers training programmes. In some cases, specialised single commodity training courses may be mounted to meet the demands of a specific group. Also, general courses for young school leavers and prospective farmers may be organized. (see Table 1).

Table 1 Traditional and modern training approaches

<table>
<thead>
<tr>
<th>Item</th>
<th>Traditional Approach</th>
<th>Modern Approach</th>
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<tbody>
<tr>
<td>1 Unit of focus</td>
<td>Individual Interdependent work teams, interpersonal relationships for better group processes and group achievement</td>
<td></td>
</tr>
<tr>
<td>2 Content of Training</td>
<td>Technical and administrative skill oriented</td>
<td>Technical, interpersonal and group memberships skill, communication, problems solving, conflict management, helping others etc.</td>
</tr>
<tr>
<td>3 Target</td>
<td>Primarily front line employees and supervisors. Top managerial staff usually trained outside the organisation</td>
<td>All levels-usually, initial intervention starts with top management</td>
</tr>
<tr>
<td>4 Teaching method</td>
<td>Subject matter and teacher-oriented</td>
<td>Participant-oriented, experiential learning, problem solving and subject matter-centred</td>
</tr>
<tr>
<td>5 Goals</td>
<td>Acquisition of knowledge and skill</td>
<td>Adaptation and change; application of knowledge and skill to most needed areas.</td>
</tr>
<tr>
<td>6 View of Organisation</td>
<td>Discrete</td>
<td>An interdependent system. Systems approach</td>
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</table>

In general, farmers training may be formal or non-formal. Formal training tends to be more institutionalised and of longer duration usually 1-3 months or even longer. The training of farmers through organisations is usually an intensive teaching activity which is carefully planned and meticulously implemented with a view to educating the participants systematically and thoroughly about a pre-mediated subjects matter. The less formal approach uses the contemporary extension teaching methods of: Individual contact; group-method and result demonstration; and mass media.
contact, less formal methods are usually non-institutionalised and include village
level training programmes conducted for 1 or 2 days. This can be
demonstrations, adaptive trial result discussions, production-oriented training at
the village or farm site with emphasis on critical steps in effective crop and
animal production. The assumption in this type of extension training approach is
that the extension teacher has purposeful and relevant information transfer
objective to which favourable voluntary exposure of small scale farmer – learner
is assured.

The different types of training are complementary to each other in the
determination of training requirements of small scale farmers and the design
of the training programmes to meet these needs. A successful training programme
depends on:

1. The availability of appropriate and adaptable technology whose economic and other
   qualities are superior to that presently in use.

2. A desire by small scale farmers acquainted with subject matter specialist (SMSs) research
   scientists, and others who can be of dependable assistance in the resolution of their farm
   and home problems.

3. The existence of a large group of farmers who on their own initiative seek
   information on farming.

4. The availability of trained, qualified motivated and dedicated extension teachers and
   SMSSs competent in the science of agricultural technology and the art of its transfer to
   willing farmer learners.

5. The availability of necessary physical facilities and infrastructure – classrooms,
   demonstration plots and equipment, teaching aids.

In the determining the training needs of the small scale farmers, the specific work
environment of the trainee is of utmost importance. Also the professional capacity of the training
institution (ODL) is important. Because agriculture (farming) is a complex occupation, small
scale farmers require several discrete or concurrent training exposures for effective
performance. A variety of these training areas will be discussed briefly.

a. Technological transfer training

An important aspect of the farmer training program is the encouragement of
meaningful interaction between the small farmers on one hand and the extension workers
and research scientists on the other. In this interactive process, both the farmer and the
intervention system need competency in technology determination and technology
transfer. A good training programme for skill transfer in a predominantly small scale
farmers economy should aim at using the more accommodating and brilliant small
farmers as para-professionals in the technology system within the small farmer system.
The small group of farmer instructors should be trained in the art of information
transfer to their kins who need it. The use of multimedia learning situations via radio
and television recordings has been shown to be effective in skill development in
information transfer.

b. Production management training

This is that training which the farmer gets in the art and science of operating a single or
combination of enterprises on a farm. It includes the technical knowledge and skills
in the production of crops and livestock as well as mental capability to take correct
decisions.
The small scale farmers can be trained in production through ODL formal institutional programmes which emphasise classroom teaching and on-the-farm practicals. The training activities should include approved practices which will result in increased productivity in the farmers’ chosen enterprise, business management, use of farm inputs and overall efficient farm administration among others.

c. Functional literacy training

This, in the context of the small scale farmers, may be described as a means of helping the adult to acquire the reading and writing skills and understand work instruction for better job implementation. Functional literacy is important to the small farmer economy because the functionally literate person is better able to improve his professional skills and personal status more proficiently than the non-literate person. Therefore, the literates small farmer will be able to apply his knowledge better to the skilled occupation of farming.

It is for the above reason that non-literate SSFs require training in reading and writing skills. The implementation of adult literacy programmes are usually planned as evening classes and participation is often free and voluntary.

In agriculture, functional literacy programmes should be regarded as a supplement to agricultural extension and not a replacement or separate activity. Once the SSFs acquire the basic skills of reading and writing, they are better able to follow and understand extension teaching and participate in future farmer training programmes.

d. Farmer workshops

These are training sessions of relatively short duration designed to train farmers in the acquisition of a single skill related to a single farm enterprise. Each workshop is made up of an interested group of farmers numbering 30–45 participants, who are relatively similar in knowledge on the subject of workshop. It is often conducted by the extension workers with the expert assistance of subject matter specialists.

2. The organisation of farmer training programmes

Extension farmer training programmes need the informed and confident support of government. This administrative support should be evident in a written policy backed by appropriate legislative action. Among several issues to which such a policy statement should address itself are:

1. The purpose of farmer training,
2. statement of intent to train
3. Government functionary to which the training responsibility is specifically assigned
4. the organisation, implementation and funding of types of training to be undertaken
5. determination of training needs
6. provision for occasional evaluation
7. administrative accountability and reporting to appropriate authority of government.

It is out of such a policy statement that an appropriate organisational frame work for implementing a successful farmer training programme will develop. The programme of training should specify clearly, at least, four areas of activity:

1. training objective
2. planning for training effort
3. implementation of the training programme
4. evaluation and follow-up.
Training Objective

Even though broad training objectives may have been defined for farmer training programmes, precise objectives should be specified for each training session and activity. It is important that participants should have an accurate image of their expectations at each training course. The specificity of objectives for each training effort helps in the selection of small farmer participants and evaluation and follow-up.

Planning for training effort

One of the most important determinants of a successful training programme is a meticulously planned course content appropriate and relevant to the training needs of the participating farmers. The course content should be well planned and made known to the participants. The course content should be planned to:

1. impart relevant knowledge on newest production practices to farmers consistent with their requirements as to enhance their ability to secure higher yields in their production efforts,
2. provide direct and clear answers to specific problems and questions which may arise due to complexity of the subject matter being taught;
3. elicit problems from farmers to which the training programme may not have direct and immediate solution, but may require further investigation and research;
4. provide opportunity for dialogue and exchange of experience among farmers and between extension instructional facilitators and research scientists.

Usually, the planning process should be given due consideration to the duration of the course, time and venue of training should be planned in consultation with the participating farmers.

Implementing the training programme

The immediate post-planning activity in the organisation of farmer training programmes is the wide dissemination of programme document to prospective trainees calling for participation. The organisation of a farmer training programme should ensure that the content and sequence of the planned programme is adhered to and where changes become necessary, that participants are informed in advance. There should be frequent demonstration sessions to enable the farmers observe the practised skills to which they have been exposed during lectures. The participating small scale farmers should be appropriately recognised (certification) at the end of the training session.

Evaluation and follow-up

The information and knowledge transfer in the formal training sessions is a component of the small farmers training programme. The true cost-effective training programme is the extent to which farmers accurately apply knowledge and skills gained during training to the practical problems and production process on their farms. Evaluation and follow-up can be operationalised through personal visits by staff of the training agencies and annual conventions of trainees. An annual visit allows the training staff to assess, first hand, either the deficiency of the training approach or the difficulty of the farmers in applying to their practical problem situation.

The convening of annual meetings of trainees sustains the training spirit among trainees and helps the trainers to have a feeling of how the small farmers are doing as a group, since their last training exposure.

3. Competency development for extension work with small scale farmers

The job of the extension trainee is educational in nature and it is offered to a voluntary audience. This role suggests the need for a cadre of staff who have knowledge, skill, understanding and practical application of subject matter in agriculture and rural socio-
economics. This competency is essential to his provision of the desired assistance to the rural farmer and his household.

Usually, the information which the small farmer trainer provides is assumed superior to that which the farmer-learner has. In this information transfer effort, the extension teacher’s credibility is constantly being tested to validate the innovation. A credible, reliable, empathetic and trusting relationship is established with the farmers when the extension teacher has developed a competency package equal to his educational role. The development of this package presupposes the acquisition of scientific, technical, economic, farming and communication competencies. The components articulating the competency development process is shown in figure I.

Fig. 1 Framework for Competency and Extension Manpower Development in Agriculture

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Economic Competency

<table>
<thead>
<tr>
<th>Science Competency</th>
<th>Technical competency</th>
<th>Farming Competency</th>
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<table>
<thead>
<tr>
<th>Communication Competency</th>
<th>Technology Development Innovation Validation and Extension Worker Competency Package</th>
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<td>Successful Extension for Integrated Rural</td>
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Incidentals
- Inputs
- Administrative & Logistic support
- Response
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1. Technical competency

Technical competency the core of the sub set of the competency mode. It represents the level of knowledge, understanding and experience the farmer trainer has relevant to the crops and animal which the small scale farmers produce, the production practices involved, the status of his home and family living and the physical environment in which they live and work. Technical competency training should include knowledge, aptitude and psychomotor skill development to actually perform specific tasks in each step of a job.

2. Scientific competency

The technical competency of the extension teacher requires knowledge of basic science – physics, chemistry, biology, mathematics, etc. Agriculture is an applied science and its practice requires fundamental scientific knowledge. A basic understanding of the philosophy of science, the ability to conduct simple, replicable experiments and adaptive trials which objectively validate innovations is essential for the optimal development of the extension teacher’s competency package.

3. Economic Competency

This is the ability to weigh alternative production and product commercialisation strategies to determine whether the adoption of a technology or mode of behaviour is self-sufficient for minimal advantage. Included in the possible production input factors are guaranteed product demand and market pricing materials, fertilizers and chemicals, credit, etc.

4. Farming competency

This is the skill and willingness to efficiently perform the range of physical tasks involved in the production of crops and animals. This should not be limited to the extension teacher’s ability to perform, at least, the range of physical tasks within the existing competency of the small scale farmers.

5. Communication competency

This is the ability of the extension teacher to synthesise and present information convincingly to the small scale farmers, ensuring understanding and use. It includes the ability to plan, organise, present and obtain feedback from the small farmer group. The trainer should be able to succinctly use words to secure correct meaning for the audience and should have information that is relevant and applicable to the problems of the small scale farmers.

Suggested strategies for enhancing small scale farmers education in ODL

i. Development of technology in agricultural extension is a result of human ability to harness a central force. This flows through the creation and conversion to daily needs for shelter, food production, production of transportation and such vital development imprint and which studies in agricultural extension related areas now imply, can not be left to small scale farmers alone. This is why it is expedient that a body be formed to enhance Agricultural Extension Education (AEE) among small farmers through a carefully articulated and detailed research into the problems and with a view to finding solutions in ODL.
ii. Strategies for enhancing SSFs education should be noted in the soil of people. Obanya (2005: 26) advocated that vocational and adult education should have a bearing on the environment such as teaching agriculture in rural areas. Through such a study, the application of mathematics by way of crop spacing, ridge spacing, science by way of effect of moisture, air and heat on germination demonstrated practically can be learnt.

iii. Educational concessions given or to be given to farmers in areas of education should be designed to increase their access to education so that more of their number are educated. These measures should be in form of free education, special schools for small farmers and lower cut off points where applicable.

iv. Setting up a national consortium on open schooling for the purpose of coordination in matters of policy issues, priorities, long-term national and state needs, establishment of resource centres for development of materials, demand for human resources for the open learning system, monitoring and evaluation of performance etc. This can also be applied with special consideration for farmer education programmes.

v. Incentives and automatic scholarship for literate small scale farmers in open institutions or ODL to pursue agricultural extension courses programmes.

vi. Policy on distance education should lay emphasis on the issue of farmer education and economic empowerment.

vii. Commission for Human Rights should encourage farmers to enroll in ODL by undertaking mass literacy campaigns for small farmers through ODL system. The commission can enforce this by giving financial and moral support in the form of assistance to those able and willing to embark on agricultural extension programmes.

Policy implications of training of extension agents for small scale farmers

The training of extension workers for small scale farmers in Nigeria is a matter of top priority if government programmes on increased food and fibre production, the reactivation of the cash crop industry and integrated rural development are to be achieved. Once a nation decides on the improvement of the small scale farmer welfare and production capacity as a primary strategy for agricultural development, the demand will expand for new skills and increasing numbers of agricultural workers and technicians. It is important for the economy to have a population pool from which this category of skilled workers and proficient farmers can be drawn. It is for this reason that a National policy on Agricultural Education directed specifically at the Nigerian small scale farmer, should be formulated. Such policy would specify the purpose of training and the appropriate institutions to be charged with the responsibility for training. A national training programme needs to be worked out with specific implications for the size of the extension staff, training logistics and training implementation machinery.

1. Size of the extension staff

The effective coverage of the small farmer population in Nigeria will depend primarily on the physical number/size of the extension staff. Recent Food and Agricultural Organisation country survey suggesting an extension worker: Small farmer ratio of 1:2,000 is still very much unattainable given the limited training capacity and available trainee persons. There is a general loss of confidence in the incentive systems available to the agricultural worker both through training opportunities or remuneration and fringe benefits.

Therefore, there is a need, first, to restore confidence in agricultural professionalism so as to attract young men and women in sufficient numbers to our present training institutions. The size of the extension staff can only be beefed up through a concerted training programme expanded to meet the demand and sufficient remuneration and through education to inculcate the necessary and sufficient competencies.
2. Training logistics

The curriculum of present trainees is in favour of technical competence to the exclusion of other competencies required of the extension worker. Physical facilities are in short supply, especially library facilities and bookstores, laboratory space and equipment, field training facilities, tractors, sprayers, animals, etc. Finally, the problem of what and how to teach is yet to be resolved. This analysis suggests a need to expand logistics support for agricultural manpower development to work with the small scale farmers.

3. Training implementation mechanism

The training of agricultural extension workers for the small scale farmers can be implemented within the framework of the existing training institutions. The development of the existing training institutions and extension manpower at all levels is under the direct control of Federal or State Governments. Consequently, policy modifications can be easily accomplished.

The training of all staff at the pre-service level should take a holistic approach, a general honours degree concept, a specialisation deferred to other levels of training where staff are being assigned to narrowly specialised duties requiring specific training. The implementation of an effective extension training programme based on the competency packaged model requires that:

- trainees who show aptitude or opt for agricultural extension (farmer trainer) at pre-service training level should be identified and exposed to intensive courses to prepare them for work with the small scale farmers;
- trainees should have access to learning experiences varying degrees to competency development at the cognitive, effective and psychomotor domains in ODL. Whatever cannot be learnt at these levels should be complemented through induction, in-service and on-the-job training;
- the place of practical classes in extension manpower development has always been emphasised, but hardly fully implemented. Acquisition of farming and technical competency skills can only result from frequent practice;
- the extension worker competency grid requires lifelong learning. Therefore, as technology changes and new information becomes available, the extension worker must update his competency level consistent with available state of knowledge.

Conclusion

ODL system has emerged as the most potential mode to reach out a large number of extension teachers and train them with best quality inputs to work with small scale farmers.

In most countries of Africa, Asia and Latin America, the small farmer occupies an important position in the strategy for increasing food production. Heavy investments in rural infrastructure, agricultural research and extension are among the most supporting efforts of governments to improve the welfare of the small farmers and satisfy the food needs of the industrial and commercial urban populations. This requires the development of the small scale farmers' ability to increase food and fibre per unit areas of land via the application of improved technology. There is also the need to expand land under cultivation and improve methods of production, management, processing, storage and distribution.
The methods of small farmer production are, however, not efficient under present levels of knowledge. The farmers must be provided with new knowledge, skills and necessary motivation to produce, using present levels of known agricultural technology if they have to contribute to national development. Most governments of the developing world have coped with this problem through the development of appropriate institutions, organisations and service. In Nigeria, this has been through teaching, research and extension. Teaching involves itself with manpower development at conventional or Open University, intermediate, technical—vocational and farmer levels. Research has been concerned with the development of fundamental inquiry into the development of appropriate technology. Extension has the role of technology transfer and use. This paper discussed the third order objective of government, that of catering for the needs of SSFs through the training of agricultural extension workers. In order for the extension workers to assist the SSFs more efficiently, they must be trained in the subject matter of agricultural production and have competency in information transfer. An attempt has been made in this paper to use the competency development grid as a theoretical framework for the design and implementation of a training programme for extension workers to work with SSFs. The analytical concept suggests the development of scientific, technical, economic, farming and communication competencies into a proficiency package essential for the effective performance of the training and advisory role of the extension workers.

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PROVISION OF AGRICULTURAL EXTENSION SERVICES FOR THE REHABILITATION OF PHYSICALLY CHALLENGED CHILDREN THROUGH OPEN AND DISTANCE LEARNING IN NIGERIA

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Abstract

Physically challenged children can be described as those certified by a specialist in any field of therapy as having one or more of the following disabilities: blindness, partial blindness, emotional disorder, deafness, partial hearing, physical handicap, speech defects, learning disability, social maladjustment, exceptionally gifted and mental retardation. Rehabilitation is a process that leads to the restoration of a person to his or her fullest physical, social, vocational and economic usefulness of which he or she is capable. Meaningful and effective rehabilitation of physically challenged children must end up with making them self-sustained. The ODL system helps augment opportunities for education, ensures access, is cost effective and promotes a relevant, flexible and innovative system of education which is food. Rehabilitating children in agriculture can fulfill this thereby making them self-sustained and contributing members of the society. Agricultural extension is out-of-school system of education for farmers and their children to raise their standard living by their own resources and providing them scientific knowledge to solve problems (Williams, 1998: 37-38). Agricultural extension performs the following roles through the ODL by providing linkage for physically challenged children’s needs and problems to research institutes; obtain feedback from physically challenged children about new improved technology on agriculture, helping physically challenged children to help themselves, as facilitators of agricultural production improvements programmes, planning and organising extension activities and their willingness. Thus, this paper aims at discussing the food and nutrition crisis and its implications in Nigeria, and establish the importance of enough food supply for the attainment of living standards; discussing the concepts of agricultural extension and ODL and their functions relevant to physically challenged children; and examining the prospects for the provision of agricultural extension services for the rehabilitation of physically challenged children.

Key words: Agriculture, Extension, Services, ODL, Physically Challenged, Children, Rehabilitation
vulgarisation agricole et d'enseignement à distance
de leurs fonctions par rapport aux enfants handicapés
physiques, de même que les perspectives de
prestation de services de vulgarisation agricole
pour la réinsertion des enfants handicapés physiques.

Mots clés: vulgarisation agricole, services de
vulgarisation, services, enseignement à distance,
handicapés physiques, enfants, réinsertion.

Introduction

It is generally agreed that in a democratic society, every member (the physically challenged children inclusive) has an inherent right to an opportunity to earn a living and to contribute to the development of the society of which the physically challenged he/she children is a member. The fulfillment of the inherent right is through education which has multiple effects of enhancing an individual's ability to earn a living commensurate with his ability, talent and skill. This position is affirmed by the National Policy on Education (1988), which states that “Government has already included that the gifted and as well as those with physical, mental and learning difficulties, must be provided for under the educational system”. This paper focuses on the provision of Agricultural Extension Services for the rehabilitation of the physically challenged children through Open and Distance Learning (ODL). This is because the need for self-determination, self-realisation and self-actualisation is more pronounced and desired by them. Rehabilitation refers to intervention procedures that seek to restore someone to normal optimal functioning after injury or illness. Efforts at rehabilitation focus initially on those skills lost or impaired. In this respect, rehabilitation includes physical, occupational and behavioral therapies that seek to restore lost functions. At the same time, rehabilitation often includes efforts to assist in personal, educational or vocational adjustment and development (Eliwa, 2002: 18.20). These efforts are due to the fact that important part of a person’s self esteem is tied to the ability to enable one to live an independent life, or at least a less dependent life.

Food and Nutrition Crisis in Nigeria

Nigeria is currently experiencing a state of acute crisis. There had been shortages of food due to distortions or deformities in the operations and management of the nation's economy. Prices of foodstuff, fertilizer, energy and other commodities have increased or skyrocketed. This situation has two distinct implications. The first is the food problem and this emanates from the failure of food production to keep pace with national demand arising from higher rate of production growth. The second is the nutrition problem, which results from the qualitative inadequacy of undigested food in terms of energy and protein content and consequential constraint of under nutrition, malnutrition, disease and abject poverty. Sufficient food to relieve hunger and maintain healthy bodies is thus a necessary pre-condition for attainment of better standards of living and rising expectation under economic development and political independence.

The Concepts of Agricultural Extension and Open and Distance Learning

Agricultural extension in Nigeria has a long history which dates back to 1893. To a layman, extension simply means "something extended or projected". But to a professional the real meaning of extension must go deeper. Extension is a voluntary out-of-school educational programme for children and adults which employs the principles of teaching and learning that affect changes in the life of children, teachers and farmers. It is generally carried out in an atmosphere of mutual trust and respect between agricultural extension workers and their clientele (farmers).

It is a two-way communication process in which extension agent carries the information from research to the farmers and the farmers' problems brought back to research by the extension agents. Over the years, extension activities have been concentrated on the normal farmers, in fact the training received by extension agents does not equip them to relate with physically challenged children. With the government emphasising equal access of opportunities for all categories of people regardless of their disability, efforts should be geared towards making physically challenged farmers including their children enjoy services of extension agents.
Functions of Agricultural Extension

Agricultural extension performs three major functions which are:

1. To get the farmers into a frame of mind and attitude conducive to acceptance or adoption of technological change. This function is achieved by educating the farmers on the newly developed technology and to convince them of the viability of the new technology in agriculture. The physically challenged children can also be educated on new improved technology.

2. To disseminate to the farmers the results of research and to carry the farmer’s problem back to the research system for solution. In order to perform this function properly, effective communication must exist between the research institute, the extension agent and the farmers. This also calls for adequate knowledge in technical matters related to agriculture and be skillful in the art of communication. For the extension agent to communicate effectively with the physically challenged children, he will need the assistance or support of a special education teacher to receive on-the-job training in special education.

3. To help farmers make wise decisions in farm management. Extension is a significant tool for assisting the farmers to develop proficiency in the management of his farm. The physically challenged children should be assisted to operate in a modern commercial economy where prices and factors of production play roles.

The Concept of Open and Distance Learning (ODL)

Open learning or open education refers to the flexibility and access to instruction by the distance education mode in order to ensure that availability of education opportunities reach as many segments of the population as possible. Openness implies access to education with disregard to age, previous level of academic achievement and other factors which normally create artificial barriers to education as a lifelong encouragement by an individual in a democratic environment. Open Learning provides access to education or learning in ways most appropriate, efficient and effective to the individual learner and the material being studied.

Distance learning is a way or mode of providing education on non-residential basis to learners who are home-based and in most cases, full-time workers. Distance learning or distance education includes all teaching methods, the interactive as well as pre-based self-instructional materials. The basic aim of distance learning is to increase access to education.

Open and Distance Learning simply means the “Openness” of the teaching learning process which allows students to operate with a degree of autonomy and self-direction despite the “apartness” or “physical separation” of the teacher and the learner, resulting in the lack of eye contact. It gives opportunity to ambitious and gifted people who are denied the opportunity of deriving education through the usual channels, the care of individuals, discontent with their socio-economic strata who try to change the status face of many difficulties (Otta, 2003: 36). Open and Distance Learning according to Otta (2004: 27-28) is a way of providing opportunities that are characterized by the separation of teacher and learner in time and place; it is a learning system that is certified in some way by an instruction or agency; it involves the use of a variety of media, including print and electronic; it is a two-way communication that allows the learners and the teachers to interact with the ability of occasional face to face meeting and it involves specialised division of labour in the production and delivery of courses.
Open Learning system has emerged as a viable alternative not only for providing support to academic programme at different levels of education in general but also educative source to reach the un-reached including children with disabilities (Varma, 2003: 81-82).

The Open Learning system is suitable for physically challenged Children because they may not be able to adjust to the formal education system due to their special needs.

Today, one of the outstanding contributions of ODL innovations in software packages that address special needs. This has widened access to educational facilities from which they remained deprived for long.

The multidimensional teaching-learning methodology of ODL exposes the learners to a variety of learning resources. These facilitate the reduction of the unusual divide between advantaged and disadvantaged groups of learners.

The Importance of Open and Distance Learning

Open and Distance Learning (ODL) systems have the following benefits:

- Open and Distance Learning raises the literacy level of the population incrementally so that the goals of Education For All (EFA) shall be on schedule.
- It enhances community ownership and participation in the management and provision of education at all levels nation wide, especially through community resource study centres.
- By adopting distance learning methods, the learners can be made to tackle their studies at their own individual pace and in the comfort of their home. By so doing, the spirit of self-reliance and self-dependence can be more readily generated and fostered via Distance Learning Systems (DLS).
- Students of DLS, by studying at home, can keep their jobs as well as their families. They can become more settled in their careers while using their spare time to improve their qualifications; no risk of being unemployed since they do not have to withdraw their services when undertaking further studies.
- ODLs provide the opportunities and facilities for lifelong education for all those who can still learn. The students are not under any serious pressure to finish their courses within specific periods, since they have to work and learn, retire and learn, at the same time.
- ODL can more readily afford them the opportunities to be more academically alive and active.

Provision of Agricultural Extension Services for the Rehabilitation of Physically Challenged Children through ODL in Nigeria

For the physically challenged children to benefit from new technology in agriculture through Open and Distance Learning, the following roles are expected to be performed by agricultural extension:

- Extension agents should employ the various extension education methods to create awareness about new ideas and technologies.
- Provision of linkage: They are to provide linkage between the physically challenged children and research institutes. The special needs of physical challenged children must be well analysed by extension agents and brought to the notice of researchers. For example, the special needs of the blind will be different from that of the hearing impaired, the mentally retarded different from the socially maladjusted.
- Obtain feedback from physically challenged children: They are to obtain feedback from physically challenged children about the new improved technology in agriculture, as interests and peculiarities of the physically challenged must form the basis of any new
technology to them. Feedback from the physically challenged children on the adaptability, durability, cost, etc. to the researchers through extension agents is very essential.

Help the physically challenged children to help themselves. This is one of the philosophies of extension work which is based on working with the farmers and not for them in fulfilling this role.

Facilitators of agricultural production programs should act as facilitators of agricultural production improvement programmes. They may be achieved by trying to influence the definition of the problem, objectives (goals) and strategies. The physically challenged children should be helped to see the need to participate in any agricultural improvement programmes, and what they stand to gain by participating in such programmes.

Provision of special education in extension services employs special tools e.g. individualised teaching, Braille paper materials especially trained teachers/facilitators. The use or introduction of special education in ODL for the physically challenged children in extension education or extension services emphasises prevention. What makes extension education special and fit for the physically challenged children in ODL is the use of:

i. Appropriate facilities: This relates to infrastructure that makes it easier for the exceptional learner in the learning situations. Example, a school compound with flat terrain, gentle rising entrance to door, wide corridors with hand rails, glass louvers etc. These reduce architectural barriers and enhance mobility (Ojo, 1999:29).

ii. Appropriate materials: E.g Braille writer for writing for the blind and hearing aid for the hearing impaired.

iii. Special Methods: E.g concretizing learning experiences, providing opportunities for independent study for gifted and physically challenged children etc.

iv. Special extension teacher/facilitator: In addition to regular teacher training, he obtains specialised training to be able to teach physically challenged children.

The roles of agricultural extension agents call for a unique blend of skills and attitude. They must have the competence to understand and apply technical information related to their work as well as the ability to diagnose problems and come up with possible solutions especially those associated with physically challenged children. They should plan and organise extension activities and willingness to interact with others. The delivery systems that matter most in dealing with the physically challenged children are the specialists who will help the extension agent in educating the physically challenged children, but for the physically challenged, input delivery is also inevitable.

Extension Agent’s Views of the Physically Challenged Children through ODL

- The physically challenged children should/must be viewed as possessing good mental capacity to learn, reason, understand, remember and judge.
- They should be viewed as emotional being that are capable of feeling various emotions which include: love, hatred, confidence, fear, resistance and acceptance.
- In addition, physically challenged children should be viewed as possessing great potentials, physical strength, stamina and practical skills.

Conclusion and Recommendations

Provision of agricultural extension services in the rehabilitation of the physically challenged children is a way of linking the physically challenged children with the research institutes, and making their problems and needs known to institutions. This will help the researchers to tailor their research thrusts towards solving some agricultural problems that are peculiar to the physically challenged children.
For the physically challenged children to have contact with extension activities and programmes, extension agents should be sent to rehabilitation centres to educate the physically challenged children (with the help of specialist teachers) on the new improved technology in agriculture. Thus, extension agents will have the opportunity to interact with them.

The following recommendations have been suggested for improvement:

- Farm settlements can be created for the physically challenged children as we have for normal farmers, or better still integrated with the present day farm settlement. This will make it easier for the extension agents to make contact with them and close monitoring can be ascertained.

- The research activities should include programmes for the physically challenged children though Open and Distance Learning.

- Modification of various agricultural tools and implements should be done to suit the physically challenged children. The training of extension agents should equip them for dealing with the physically challenged children through ODL.

References


Abstract

This paper examines the historical development of nursing and nursing education in Nigeria—pre and post colonial; the entry requirements into the programme and the current trends of the rush for the acquisition of a degree in nursing by the majority of nurses. It also goes to x-ray the reforms in nursing education in Nigeria and the roles and contributions of the National Open University of Nigeria (NOUN) in this process.

Key words: Nursing reforms, education,

REFORMS IN NURSING EDUCATION: THE NATIONAL OPEN UNIVERSITY OF NIGERIA EXPERIENCE

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Résumé

Ce papier examine le développement historique des soins infirmiers et de leur enseignement au Nigeria avant et après la période coloniale, les critères d’admission aux programmes et les tendances actuelles de la ruée des infirmiers et infirmières vers le diplôme de licence en soins infirmiers. Il se penche aussi sur les réformes dans le domaine de l’enseignement des soins infirmiers au Nigeria et les rôles et contributions de la National Open University of Nigeria (NOUN) au processus

Mots clés: réformes, soins infirmiers, éducation, expérience.
Introduction/historical background

Education is the process of helping an individual to discover, develop and make use of his inner abilities, potentials and capabilities for successful living in the society. According to Addison, (1962 – 1719) 'Education is a companion which no misfortune can depress, no crime can destroy, no enemy can alienate and no despotism can enslave'.

Following the Crimean War in 1854, Florence Nightingale initiated and sustained a campaign for nurses all over the world to have an organised training. This later had a positive influence in Nigeria which was at that time a British colony. By 1930, formal apprenticeship training started in Nigeria in some mission and government hospitals with standard six and secondary class four as entry qualifications for Midwives grades II and I respectively with 1 year training period. By 1946, the Nursing Council of Nigeria was formed and it laid down the requirements for education, examination and registration of nurses. The Council reviewed the admission requirements and training to a minimum of 3 years to earn a Registered Nurse Certificate (RN). There were post basic nursing training in specialties such as Midwifery, Ophthalmic, Psychiatry, Orthopaedics, etc.

In 1960, the Western Region government of Nigeria sent qualified nurses to train as Nurse Tutors, while the technical aids afforded some the opportunity to have diploma and degree. The return of these few paved the way for the commencement of degree programmes in nursing at Nigerian universities. Nursing profession took a significant step in Nigeria with the establishment of the Department of Nursing at the University of Ibadan in 1965 with the mandate to produce teachers and administrators for the African region. This programme improved nursing and also transformed the education and practice of the profession.

By 1972, the University of Ife (now Obafemi Awolowo University, Ile-Ife) started the baccalaureate programme in Nursing in line with what operates in North America. This was targeted at fresh secondary school leavers. Today, there are over 17 departments of Nursing in various Nigerian universities running the Bachelor of Nursing Science (B.NSc) programme in line with the Ile-Ife programme. This programme is now the accepted curriculum by the National Universities Commission (NUC) for University based nursing programme.

At present, 75% of practicing nurses in Nigeria are Certificate and Diploma holders. This chunk is eager to earn a degree and move beyond grade level. However, the conventional universities cannot meet the backlog of nurses willing to earn a degree owing to lack of space, strict admission criteria and other bureaucratic bottlenecks. The roles and contributions of the National Open University of Nigeria in assisting the nurses to earn a degree while on their jobs are elucidated in this paper.

Reforms in nursing education

At the vanguard for reforms in Nigeria for nurses, the Nursing and Midwifery Council of Nigeria. It was established in 1979 by Decree No. 89 (Registration Act). This is the constituted regulatory body for the professional nursing and other specialty practices. The primary objectives of the Council are to ensure high quality of Nursing and Midwifery education in Nigeria, maintain high standard of professional practice and to enforce discipline within the profession.

In 1964, a new nursing education syllabus was approved with the ultimate purpose of ensuring a uniform standard for the profession. Today, all schools of Nursing carries the minimum requirement of five (5) credit passes at most 2 sittings in: Physics, Chemistry, Biology, Mathematics and English Language and the same is applicable to University Matriculation Examination candidates.

Nursing education in Nigeria takes cognizance of the National Policy in developing sound educational principles which are essential to the preparation of Nurses to function independently and/or as members of interdisciplinary and intersectoral teams.
The General Nursing programme is the basic education programme for all nurses in Nigeria while others are offered at the post basic levels. The programme forms the basis for the practice of nursing and continuing professional development in the field of nursing.

The overall aim of reforms in nursing education in Nigeria is to prepare different cadre of competent nurse practitioners at all levels, who will utilise problem solving techniques in providing safe, acceptable, effective and affordable health services to meet the health needs of individuals, families and the community.

The National Open University of Nigeria and the provision of undergraduate training in nursing

The National Open University of Nigeria (NOUN) as a single mode tertiary institution is dedicated to quality open access education through distance learning.

The idea of an Open University for Nigeria, as a separate and distinct institution to be organised nation-wide was appropriately reflected in the National Policy on Education which stated emphatically and unambiguously that maximum efforts will be given to ensure that maximum efforts will be given to enable those who can benefit from higher education to be given access to it. Such access may be through universities, correspondence courses, or open universities, or part-time and work study programme.

Jegede (2004) stated that "The National Open University of Nigeria (NOUN) dedicates itself to preparing professionals in various disciplines through the distance learning mode. It offers a choice of qualifications from Certificate to Degree with self development courses through flexible delivery, allowing learners the convenience to do the time, place and what to study". This forms the basis of the university's mission and vision.

NOUN admitted students into its nursing programmes from inception for both the Pre-and Post-registration programmes. These crops of undergraduates were a hybrid of fresh School Certificate leavers and Registered Nurses (RN) respectively. These groups of undergraduates had few deficiencies in their entry qualifications and were asked to run and pass NOUN access programme in the first year before proceeding to appropriate levels of study. However, the Nursing and Midwifery Council of Nigeria advised and put pressure on NOUN to suspend the Pre-registration programme because

- This group of students are not trained nurses
- They are going to handle human life
- A regular and sustainable clinical training has to be put in place for them in government hospitals approved by the Council.

NOUN has since complied and a Memorandum of Understanding (MoU) is being signed with government hospitals that passed the checklist provided by the Council during inspection. These are located in the six geopolitical zones of the country and will be used by the undergraduates very shortly for clinical training.

Study Centres and Nursing Students' Statistics

There are 35 Study Centres across the six geopolitical zones in the country. These are the main centres of student learning activities at the NOUN. Charged with the responsibility to provide guidance, counseling and tutorials for students, each of these centres has been linked up with the satellite through collaboration with NASDRA. Others will follow suit. Each of the centres has a Study Centre Manager (usually of Professorial rank) who performs both administrative and academic functions. In addition, there are counsellors and other support staff in the Centres. Instructional facilitators (subject experts) are employed on part time basis to provide the needed tutorials for learners (students) using prepared course material as a guide. As of today, there are about 3,750 students in the nursing programme across the 35 Study Centres.
Academic Manpower in NOUN

The National Open University of Nigeria has both full time and part time academics as well as other support staff. The part time staff are carefully selected and posted to the Study Centres nearest to them to provide tutorials for the students. They are holders of at least a Masters degree in their chosen disciplines to facilitate courses assigned to them by the university and evaluate Tutor-Marked Assignments. Examinations are conducted on semester basis while the category of staff mentioned above mark and return the grades to the Directorate of Examination and Assessment for processing.

Contributions of the National Open University of Nigeria to reforms in nursing education

Within the short period of the existence of NOUN and the establishment of the Nursing programme in the School of Science and Technology of the University, the latter has been able to contribute the following to nursing education:

- Provision of a solid foundation for the development of critical thinking that will allow for improved standard of education, practice and research for nurses to contribute meaningfully to sustaining humanity.

- Provide viable access to as many nurses desiring to earn a degree in nursing without resigning their appointments. There are 3750 nurses on NOUN programme across the nation which accounts for what a conventional university will have in five (5) years or more. This will help bridge the gap of the population of nurses who are desirous of a degree nursing; thus providing access to thousands of citizens (by extension) that are constantly excluded from access to education because of the limited provision of schools and facilities and stringent admission measures.

- Provision of instructional materials for students by competent course writers who are subject specialists. There is a symbiotic relationship among the course developers and writers (made up of nursing educators, clinicians and field staff from universities running nursing programme) who through a combined effort produce the materials that are rich in scope, content and practice. This provides opportunity for wider acquisition of skills and knowledge by learners through the instructional materials.

- Provision of relevant educational system by building a cultivated society, advance learning and transmit the secular view of humanity to which nursing equally belongs. With the open door for knowledge acquisition the products of the university will become future leaders and provide needed administrative and leadership roles in the health care industry.

- The formation of study groups which will assist the weak ones to make up for deficiencies. At the Study Centres, the instructional facilitators and counsellors provide the needed support for learning and the instructional materials which are learner-centred and written with didactic effect to augment for more applicants to come in and study.

- Able to meet societal expectations, societal dynamics and provide utilitarian value to life which nursing also stands for through the provision of various courses and clinical attachment which will commence shortly.

Conclusion and Recommendations

The development and review of relevant curricula is very important. Considering Nigeria’s population, the growing and increasing need for higher education, as well as the demand by employers for knowledge renewal, it has become very imperative for us to adopt distance and open education.
learning to solve the enormous challenges of providing access to thousands of our citizens that are constantly excluded from access to education because of the limited provision of schools and facilities.

- A major challenge posed by the NOUN nursing programme is the acceptability by the general public. It is anticipated that by the time the current students graduate, there will be a greater awareness of this programme among the populace.

- The clinical aspect of the education. NOUN has identified 22 Teaching Hospitals, Medical Centres and other government owned hospitals across the six geopolitical zones of Nigeria to serve as centres for clinical practice. There is a need for nursing leaders who are serving as facilitators and preceptors for the nursing programme to be honest and committed to raising the standard of their profession. Nursing administrators in clinical areas should endeavor to ensure that their hospitals provide resources that will provide quality care. For effective nursing education, the clinical areas must be strengthened and be nursing friendly.

- There is the need for the Nursing and Midwifery Council of Nigeria to understand and appreciate the peculiarity of the Open and Distance Learning (ODL) with regards to entry requirements and “giving maximum efforts to those who can benefit from higher education to be given access to education.”

- Research into the outcomes of our different nursing education programmes.

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The paper defines entrepreneur and open and distance learning, and discusses the main services provided by the School of Business and Human Resources Management, National Open University of Nigeria. A paradigm for mature students to attend conventional school at the expense of their businesses has shifted to using the ODL paripasu their enterprises. ODL provides flexible learning, quality education which is lifelong. It is cost-effective and reaches the unreach. The medium is the bedrock for training entrepreneurs who acquire the necessary education while learning and applying the knowledge in organising their enterprises (small, medium and large-scale). The ODL is an effective training medium for entrepreneurs, as a shift, in priority. Entrepreneurs improve their education as they organise their businesses alongside ODL outlet in Nigeria.

Key words: Entrepreneur, entrepreneurship, enterprise, open and distance learning, open university system, etc.
Entrepreneurship is a multifaceted phenomenon that cuts across disciplines. There is no universal theory of the phenomenon. The existing theories of entrepreneurship are propounded from a variety of schools of thought, with many authors emphasizing different variables to explain it. Among these variables are culture (Gadgil, 1954; Jenkins, 1984; Shapero, 1984); personality (McCelland, 1961; Brockhouse & Horwitz, 1986; Sexton & Upton, 1990), marginality (Geertz, 1963; Young, 1971; Shapero & Sokol, 1982; Brenner, 1987), and intentionality (Learned, 1992; Katz & Gartner, 1988). The explanations provided by these different theoretical approaches essentially match most entrepreneurial behaviour but not necessarily all.

Who is an Entrepreneur?

Brouwer (2002) defines an entrepreneur as a person who has possession over a new enterprise or venture and assumes full accountability for the inherent risks and the outcome. The term, according to him, is a loanword from French and was first defined by the Irish economist Richard Cantillon. A female entrepreneur is sometimes known as an entrepreneuse. However, with the word "entrepreneuse" being the French feminine form of entrepreneur, its usage in English in delineating sexes detracts from the meaning of the word "entrepreneur". Entrepreneur in English is a term applied to the type of personality who is willing to take upon herself or himself a new venture or enterprise and accept responsibility for the outcome.

There are many motives for entrepreneurship. In short, specific motivators include the need for subsistence, the need to innovate to survive, the need to quickly recognize and exploit opportunities brought about by developments in the environment. It is suggested that sufficiently adverse conditions leave people little alternative other than self-employment; especially in the absence of an adequate social safety net in terms of public or private welfare or related support programmes, the entrepreneur acts based on economic motives.

Entrepreneur as an Innovator

The modern myths about entrepreneurs include the idea that they assume the risks involved to undertake a business venture, but that interpretation appears to be based on a false translation of Cantillon's and Say's ideas (Binks, M. and Vale, P. (1990). The research data indicate that successful entrepreneurs are actually risk averse. They are successful because their passion for an outcome leads them to organize available resources in new and more valuable ways. In doing so, they are said to efficiently and effectively use the factors of production. Those factors are now deemed to include at least the following elements: natural resources, labour (human input into production using available resources), capital (any type of equipment used in production i.e. machinery), intelligence and knowledge and creativity. A person who can efficiently manage these factors in pursuit of a real opportunity may add value in the long-run, may expand (future prospects of larger firms and businesses), and become successful. A prominent theorist of the Austrian School in this regard is Joseph Schumpeter who saw the entrepreneur as innovators.

Entrepreneur as a Leader

A more generally held theory is that entrepreneurs emerge from the population on demand, from the combination of opportunities and people well-positioned to take advantage of them. An entrepreneur may perceive that he is among the first to recognize or be able to solve a problem. In this view, one study on one side, the distribution of information available to would-be entrepreneurs (see Austrian School economics) and on the other, how environmental factors (access to capital, competition, etc.) change the rate of a society's production of entrepreneurs.
New venture creation and development have been recognized in the literature as critical elements in the social and economic development of a nation (e.g., Schumpeter, 1934, 1950; Harbison, 1956; Young, 1971; Drucker, 1985). Many factors precipitate the emergence and development of new ventures have been researched and analyzed in depth in mature economies (e.g., Koning & Sniders, 1992) and emerging economies (Kolvereid & Obloj, 1994; Regnier, 1998).

**Why Study Entrepreneurship Programme**

Entrepreneurship development has become a Rubicon that is considered vital for the growth and sustenance of a nation's economic development. No wonder, the Federal Government of Nigeria recognized this basic fact when it directed institutions of higher learning to make the study of entrepreneurship as a course compulsory for all undergraduate students. The thinking is that a knowledgeable and empowered entrepreneur can be useful to the nation in the area of providing job opportunities, enhancing economic activities, etc.

**Role of Entrepreneurs in the Economy**

Entrepreneurs or the growth of this profession is critical to the attainment of the Millennium Development Goals (MDGs) in the area of socio-economic development of the nations. In view of this, the government has put in place necessary measures to encourage the promotion of entrepreneurship, as a discipline, in all institutions of higher learning in order to encourage and prepare the minds of young graduates to own and set up their own businesses.

Recognising the indispensability of the small-scale private sector enterprise as the dynamic impetus for general economic development, many countries have instituted enterprise support networks and structures to fuel the development of these enterprises. Nigeria is not an exception in this regard. At various times since the 1970s, the government has designed and introduced a variety of measures to promote small and medium enterprise development. These measures included fiscal, monetary and export incentives.

Fiscal incentives introduced included tax holidays and tariff concessions. For instance, small enterprises were given a tax holiday for the first six years of their operation. In terms of monetary authority support, the Central Bank of Nigeria introduced credit guidelines requiring commercial and merchant banks to allocate a portion of their loanable funds to small enterprises. A number of developmental financial institutions and schemes were established to aid the development of the small and medium enterprises (SMEs) in the country. These included the Nigeria Bank for Commerce and Industry (NCBI), Nigerian Industrial Development Bank (NIDB), the so-called Peoples Bank, the National Economic Reconstruction Fund (NERFUND), and the World Bank SME I and SME II loan schemes. There were also incentives from the Nigeria Export-Import Bank (NEXIM) to stimulate export loan facilities to SMEs, and export duty drawback schemes administered by the Nigeria Export Promotion Council (NEPC).

Other incentive programmes were technical in nature as the provision of manpower training, appropriate machinery selection and installation, machine repairs and maintenance, and extension services. These services were provided by institutions such as the Industrial Development Centers (IDCs), the Center for Industrial Research and Development (GIRD), the Center for Management Development (CMD), Project Development Agency (PRODA), and the Raw Materials Research and Development Council (RMRDC).

In the light of the above, the roles of entrepreneur as a profession and entrepreneurship as a discipline in the educational curriculum of this country vis-à-vis economic development are:

1. Reduces the cycle of poverty in all ramifications in the country;
2. Enhances the growth of trade and other business activities;
3. Encourages self-actualisation and self-empowerment;
4. Improves the standard of living of the people;
(5) has the twin advantage of increasing government revenue from taxes on individuals and business organisations;
(6) improves the country’s national income or gross domestic product;
(7) reduces the rate of unemployment with all the debilitating effects in the country; etc.

What is Open University?

We cannot talk of Open University without delving into areas such as distance education, open learning, open education, open distance learning, etc.

Distance Education: This has become the popular term to describe learning via telecommunications. The term telecommunications is used here to embrace a wide variety of media configurations, including radio, telephone and television (broadcast, cable and satellite) (Heinich, Molena, Russell, Smuldina (2002)). Distance education therefore is used as a general term to describe whatever form of education that is received without the direct presence of the teacher, but usually with the aid of one or a combination of instructional media.

Distance Learning: In most literature, both terms – Distance Education and Distance Learning are used synonymously. However, a little distinction can be made. Distance Learning is any form of studying undertaken through the use of any of the indirect media of imparting knowledge (Ojo, 1986). These media, unlike the direct medium of face-to-face teaching include printed matters, narrowcast, broadcast materials, programmed materials and self-instructional materials.

Open Learning: This has its root in the philosophy of education enunciated by many nations of the world especially those nations whose concern for equalization of educational opportunities is considered paramount. To these countries, efforts to making all and sundry receive education must be removed. In other words, education must be made available to all irrespective of such factors as gender, race, religion, social economic status, geography, occupation, age, working or non-working class etc. Therefore, Open Learning is a solution provider. Solution provider in the sense that it is planned deliberately to serve the mass of the people by making it possible for the individual irrespective of their weaknesses to acquire yet high quality and affordable education.

Flexible Learning: This term refers to the nature of distance and open education with special reference to its adaptability characteristic. In its approach, it is learner-centred, learner-friendly and learner-committed. Because of this, it attempts to build into its operation some degree of flexibility with the sole purpose of satisfying the aspirations of the learners who are regarded as very special in many respects. Some of the learners are adult members of the community who have perhaps lost hope of acquiring education, some are working class who may need to go to work and at the same time study and struggle to complete their programmes, some come from educationally disadvantaged areas, some are self-sponsored, some are married while some suffer one kind of setback or the other.

NOUN’s Getting to know your University (2006) states that distance learning appeals to anyone who wants to work and learn at the same time, and in a fast-moving environment, distance learning has become the vogue. The approach taken at the National Open University of Nigeria is composite and comprehensive. It includes personal contacts and a combination of resources such as:

The Role of the National Open University of Nigeria in Educational Development in Nigeria

The National Policy on Education is very explicit in referring to what is now known as Open and Distance Education (ODE). It describes it as a system which encompasses education for all, education for life, life-long learning, life-wide education, adult education, mass education, media-based education, self-learning, personalised learning, part-time studies, and much more. Further, the National Policy on Education states that:
Education is the most important instrument of change in any society. And that “any fundamental change in the intellectual and social outlook of any society has to be preceded by an educational revolution.”

It emphasised that Federal Government shall undertake to make life-long education the basis for the nation’s education policy and that at any stage of educational process after primary education, an individual will be able to choose between continuing his full-time studies, combining work with studies, embarking on full-time employment without excluding the prospect of resuming studies later on. The education system will be restructured to develop the practice of self-learning (NPE, 1981).

The above policy statement has practically been demonstrated in the rebirth of the National Open University of Nigeria in year 2001 whose major purpose is to make education available to as many people as have the ability and are willing and ready to benefit from the quality education provided through flexible and affordable distance learning.

The mission of the National Open University of Nigeria is to provide functional cost-effective learning which adds lifelong value to quality education for all who seek knowledge. And its vision is to be regarded as the foremost University providing highly accessible and enhanced quality education anchored by social justice, equality and national cohesion through comprehensive reach that transcends all barriers (FME, 2002).

Towards fulfilling this vision and mission, NOUN opens access to all those in need of tertiary education without compromising quality.

Built from the vision and mission statements, one could highlight some of the objectives that NOUN is out to achieve as including:

(1) ensuring equity and equality of opportunities in education generally but specifically in university education;
(2) providing a wider access to education generally, specifically university education in Nigeria;
(3) enhancing education for all and life-long learning;
(4) providing the entrenchment of global culture;
(5) providing educational resources via intensive use of information and communication technologies;
(6) providing flexible but qualitative education;
(7) reducing the cost, inconveniences and hassles of education delivery.

From the above, it is expected that the Open University will among other things do the following:

(i) Raise the literacy level in Nigeria;
(ii) Substantially increase access to university education;
(iii) Widen the catchment’s scope of beneficiaries of university education thus reaching the hitherto unreachable and ensuring that nobody is left out; and capable of having university education, is left out;
(iv) Help Nigerians to be on the right side of the digital divide;
(v) Enhance and facilitate workplace training and professional development;
(vi) Meet the yearnings of Nigerians for university education;
(vii) Reduce the pressure on university place in the national universities.

A key purpose of this study, then, is to assess the National Open University of Nigeria serves as ancillary to the Entrepreneurial Development in Nigeria.

How has National Open University of Nigeria Served as Ancillary to Entrepreneurial Development in Nigeria?

It is pertinent to mention that the paradigm where students that cut across all strata of the society with their different engagements and backgrounds have hitherto had to leave their businesses for schooling in the conventional universities has now changed with the establishment of an open and distance learning institution - National Open University of Nigeria.

From item (v) of the expected outcomes as listed earlier and we quote: “Enhance and facilitate workplace training and professional development” might need to ask the question – How has NOUN served as Ancillary to Entrepreneurial Development in Nigeria?

The School of Business and Human Resources Management employs best practices in the use of ODL for Entrepreneurial development. At the SBHRM, several specialisation programmes such as B.Sc. Entrepreneurial and Small Business Management, Cooperative Management, Hotel and Catering Management, Tourism Studies are offered with plans to run a B.Sc. Economics programme later. At the postgraduate level, the SBHRM offers PGD in Banking and Finance, Cooperative Management, Corporate Governance, Entrepreneur-Business, Financial Management, Human Resources Management, Information Technology and Local Government Management. This school also offers Masters in Business Administration (MBA) programmes in Banking and Financial Services, Corporate Governance, e-Banking, Business, Financial Management, Human Resources Management, Information Technology and Local Government Management. These programmes are tailored to meet the following:

(a) National needs and employment opportunities
(b) Popular demand, learner needs
(c) Contemporary development in the private / business sector
(d) Availability of physical infrastructure
(e) Ease of material development and adaptation
(f) Availability of quality programmes both locally and overseas
(g) Ease with which a course could be modified / adapted to suit the Nigerian environment.

The SBHRM is committed to provide wider access to professional training in different specialisations. It is therefore imperative for SBHRM to develop the nation’s business and industrial sectors using the single mode of open distance learning to achieve this vital objective. Distance Learners are exposed to well-rounded education to meet the rigorous academic demands at the secondary school level.

Specifically, the B.Sc. Entrepreneurial and Small Business Management programme prepares distance learners to acquire skills and knowledge to set up their own businesses after completing their course of study. For those entrepreneurs who already own a business of their own, it is an excellent way of acquiring the necessary knowledge to support their experiences without necessarily having to abandon their project. Only that workers in the government establishments and private organisation will find the programme as an opportunity for them to set necessary machinery in motion to quickly leave paid employment even before retirement age set up their own businesses and become masters in their field of endeavour. They can also help the government address the high unemployment rate in Nigeria.
Mode of Course Delivery

Full time and flexible modes are recognised by NOUN. Whereas a full time programme in the NOUN has the same duration for same programme as in the conventional university, the flexible mode normally spread over a maximum of double that of the full-time in the conventional university. A four-year programme may, therefore, take 8 to 16 semesters depending on the chosen mode and the learner’s effort.

Methods of Course Delivery

The SBHRM therefore provides instructions through or a combination of the following:

(i) Specially designed and packaged print materials;
(ii) Practical classes and Internship;
(iii) Face to face interaction at the Study Centres and instructional facilitators;
(iv) Video and audio tapes;
(v) CD – ROMs, VCD, DVD; and
(vi) Web-based delivery.

In NOUN, students interact more with their course materials than with instructional facilitators. In fact, to a large extent, the course materials take the place of the instructional facilitators. It is to be noted that the course materials were specially developed to provide opportunity for ‘student-tutor (instructional facilitators)’ interaction in a teaching-learning process. The language is necessarily simple, unambiguous, communicative and interactive. Context delivery is structured and sequenced in a way to cater for different types of learners. This is achieved by NOUN through investment in staff training in the area of course material development.

The delivery infrastructure has a star topology with REPRODAhq as the central hub and the study centres acting as nodes. The link between the hub and the nodes could either be the intranet / WAN, Television or Radio broadcasting or physical transportation of hardcopy materials.

Quality Assurance in NOUN

As Braimoh (2003) succinctly puts it, the hallmark of any tertiary institution’s activities, among other things, is to strive to maintain quality and excellence. This process will be at the levels of institutional performance review and the maintenance of programme quality assurance. Therefore, in order to achieve tangible successes at both levels, it becomes pertinent for tertiary institutions to embrace the philosophy of the 5ps: Prior preparation prevents poor performance.

‘Quality assurance’ refers to a set of practices introduced into public sector provision, notably in the higher education sector, as part of the changes brought by the expansion of post secondary provision of education. Quality assurance became important for open and flexible learning (OFL) during the 1980s and 90s as a result of its use by public sector providers, and also as a result of the growing emphasis on accountability in education generally (Baijnath et al., 2001).

The focus of any quality system must be to satisfy needs and aspirations of the learners and the appropriate delivery of services. There are factors that may be considered for the improvement of the management strategy of distance education programmes in order to achieve higher quality. Akinpelu (1995) and Braimoh et al (1999) have stated that the major aspects to which good attention should be paid, in a distance education delivery mode, include the following:

- admission requirements and procedure;
- development and production of instructional materials;
- structure and management of the delivery system;
• student assessment procedures;
• quality of materials used for instruction and promotion of learning;
• problem of assessment of the effectiveness of individual distance education facilitator since distance education has the element of quasi-bureaucratisation (team work);
• the student support services;
• monitoring, evaluation and feedback systems; and
• availability of adequate human and material resources for the operation of the programmes.

All these are challenges to effectiveness, and hence the quality of distance education. This situation has actively engaged the attention of scholars and managers in the field of distance education, as judged by the spate of literature in recent times (Omolewa, 1989; Tait, 1993; Halliday, 1994 and Panda & Jena, 2001).

In a bid to deliver quality education, the NOUN is collaborating with reputable local and internationally acclaimed stakeholders within and outside the country. Within the country, NOUN have linkages with the National Teachers Institute (NTI), National Agency for Mass Literacy (NAML), the Nigerian Television Authority (NTA), Educational Television Unit, institutions of higher learning, the Joint Admission and Matriculation Board (JAMB), the National Board for Technical Education Board (NABTEB), the National Examination Council (NECO), the Organised Private Sector (OPS) and the Education Tax Fund (ETF).

NOUN has established international collaborations with open and distance learning institutions that have excellent reputation and track records, UNESCO, Commonwealth of Learning (COL), UNICEF, UNDP, the British Council, the World Bank and DfID.

Further collaboration is welcome from interested organisations for partnerships in sharing of instructional materials, development of new courses/training of teachers and managers, programme evaluation, widening access and credit transfer, the use of ICTs and Student Support Services.

The role of the private sector in the maintenance of standard and quality in the tertiary institutions cannot be over-emphasised especially since its members use more of the product of the institutions than the public sector. And with government's privatisation policy of the economy, the private sector will continue to expand at the expense of the public sector. As Adesola (2002) puts it, to achieve this end professional bodies should provide registration for their members to practice should strengthen their education boards/ accreditation bodies to ensure maintenance of high standard of academic and practical training, including facilities such as laboratories, libraries, staff adequacy and class sizes.

Quality Control Mechanisms

Open and distance education programme in NOUN is comparable in content, human and material resources to those offered in residence and include provision of periodic student-to-faculty (school) interaction. Each course provides timely feedback to students about their progress and performance. Each student has access to appropriate academic support service.

The need to improve the content of education, ensure continued relevance and maintenance of quality is the urgent need to balance access with relevance and improve quality. A potent tool for achieving this, especially in a depressed economy is that which provides optimal advantage at minimal cost, in other words, increases and widens access without compromising quality and content.

This is what the National Open University of Nigeria offers. With the advent of new technologies in the information and communication sub-sector, chances of widening access to education are better enhanced now than ever before.
Significantly, standards and benchmarks are set for programmes run in the NOUN in consultation with the NUC and other agencies, both local and international, with interest in academic quality and open and distance education.

The NOUN cooperates with existing media houses during its first few years. However, it should develop its own independent capability in these areas as it attains its maximum enrolment target. Admission tests were conducted in a manner that includes a verification of the student's identity. Admission policies, procedures and practices, including all promotional information, enrollment agreement, will fully and clearly continue to represent best practices in open and distance education.

Besides learning from course materials and instructional facilitators, NOUN students are encouraged to learn from each other, and distance education institutions should actively encourage self-study groups among learners. Important to note that the instructional facilitators and counsellors employed by NOUN to support learning are knowledgeable, trained in monitoring adult, and are supported by NOUN. Instructional facilitators are being monitored and provided with regular feedback on their performance by NOUN.

Conclusion

Looking at the Open and Distance Learning and National Open University of Nigeria, one is of the opinion that it is still in its neophyte stage and pregnant with lofty potentials that are mega in nature.

Although the National Open University of Nigeria is not out to compete with the conventional universities in Nigeria, but to complement their efforts in order to engender or further improve the nation’s educational system. It is in the light of the above that appropriate harnessing of resources in the National Open University of Nigeria should be made to fundamentally develop all facets of her activities in order to place it in a vantage position over the other institutions.

There are many entrepreneurs who would be trained or equipped with the necessary tools of entrepreneurship for the betterment of the society.

When the entrepreneurial sector is well-developed through proper education and empowerment, more jobs will be created, standard of living will be enhanced, economic activities will improve leading to a growth in the socio-economic development of the nation.

References


ROLE OF OPEN / DISTANCE LEARNING IN THE ATTAINMENT OF UNITED NATIONS MILLENNIUM DEVELOPMENT GOALS IN CROSS RIVER STATE, NIGERIA

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Abstract
This study reports the view Cross River State distance education learners hold about the relevance of Open and Distance Learning (ODL) in the process of attaining the United Nations Millennium Development Goals (UN MDGs). A brief review of the concept and methods ODL uses in making information and knowledge available to people was made. Also, the UN MDGs were identified and problems encountered in meeting the goals’ targets briefly outlined. It is postulated that, greater awareness of the concept and methods of open and distance learning in meeting targets of MDGs was not being created sufficiently to meet the felt needs of targeted populations. The sample for the study is made up of 88 students purposively selected from the open and distance learning study centres in Calabar Metropolis. The study design is survey research. The instrument is a 26-item Likert-type scale questionnaire designed by the researchers. Statistics of percentages were adopted. Based on the analysis, it was found out, among others that 70% of the respondents agreed that ODL methods provided wider access, and the acquisition of functional literacy skills for all learners, which are relevant in the attainment of UN MDGs. Based on the findings, it was recommended among others that; programmes for attainment of UN MDGs incorporate the views of the targeted population in a practical attempt to attain the MDGs in the Cross River State and elsewhere. Secondly, the ODL methods of CEP, ETRP and IBEP should be relied upon for widest reach to the targeted individuals and groups for the MDGs benefits

Key words: Role, Assessment, Open/ Distance Learning (ODL), Millennium Development Goals (MDGs), Attainment, Cross River state

LE RÔLE DE L’ENSEIGNEMENT A DISTANCE DANS LA REALISATION DES OBJECTIFS DE DEVELOPPEMENT DU MILLENAIRE DANS L’ETAT DE CROSS RIVER

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Résumé
Cette étude établit un rapport sur l’opinion des apprenants en enseignement à distance dans l’Etat de Cross River State sur l’utilité de l’Enseignement à Distance dans le processus de réalisation des Objectifs de Développement du Millénaire des Nations Unies (ODM NU). On a procédé à une brève analyse du concept et des méthodes utilisées en Enseignement à Distance pour mettre l’information et la connaissance à la disposition des gens. En outre, les ODM des Nations Unies ont été identifiées et on a défini en gros les problèmes qui pose la réalisation des objectifs. On soutient qu’on n’a pas sensibilisé assez les gens au concept et aux méthodes d’enseignement à distance pour la réalisation des visées des Objectifs de Développement du Millénaire pour répondre aux besoins des populations concernées. L’échantillon utilisé pour l’étude est constitué de 99 étudiants sélectionnés au sein des centres d’enseignement à distance dans la métropole de Calabar. L’étude repose sur la méthode des enquêtes. L’instrument est un questionnaire de type Likert à 6 éléments conçu par les chercheurs. On a utilisé des statistiques à base de pourcentages. A partir de l’analyse, on est arrivé à la conclusion, entre autres, que 70% (soixante dix pour cent) des personnes interrogées sont d’avis que les méthodes d’Enseignement à Distance permettaient un accès plus élargi et l’acquisition d’aptitudes fonctionnelles d’alphabétisation pour tous les apprenants ; ce qui contribue à la réalisation des ODM des NU. A partir de ces conclusions, on recommande, entre autres, d’intégrer dans les programmes de réalisation des ODM des NU les opinions des populations ciblées en vue d’essayer, de façon pratique, d’atteindre aux ODM dans l’Etat de Cross River et ailleurs. Deuxièmement, il faudrait se servir des méthodes d’enseignement à distance de CEP, ETRP et IBEP pour arriver à atteindre au maximum les personnes et les groupes ciblés.

Mots clés: Rôle, Enseignement à Distance, Evaluation, Objectifs de Développement du Millénaire (ODM), Réalisation, Etat de Cross River
Introduction

The success of every nation’s effort in economic, political and technological development depends largely on her ability to make education accessible to her citizens. This has inspired and posed challenges on the Nigeria government to provide education for all her citizenry. The government saw open and distance learning system as a big relief to its objective of, making education available to all its citizens. (Ihieonyem and Obioma, 2007: 201) reported that, the efforts of the government in the development of an open and distance learning system dates back to Ashby Report on higher education in 1960, when it recommended the establishment of the University of Lagos, considering the concentration of people and the higher demand of university education. Open and distance learning is no longer new in Nigeria. (Ipaye, 2006:35) explained that, Open and distance learning began in the 1940s as correspondence studies, when many Nigerians enrolled in colleges in Great Britain and studied for many examinations. This, according to him continued until some Nigerian Universities, through their Institutes of Education, started distance learning programmes. Contributing similarly, (Adekanmbi, 1993; 95) revealed that:

The emergence of the correspondence system in the early part of the 18th century marked a turning point in the provision of educational opportunities for millions of people all over the world. It signified a major departure from the traditional face-to-face approach to teaching and learning by making it possible for teachers and learners to be separated in time and space.

The National Policy on Education (2004, 34) made clear, where it said “Correspondence education would be encouraged, being a low cost method of “mass education”. Mass education, according to Omolewa (1985: 5) involves:

Adult education, to the school of Thomas Hodgkin and Rowland Chadwick, known as “fundamental education”, the acquisition of reading and writing skills which are to be applied for the development of the community. Thus adult education concerned with agricultural extension, community development and social welfare. It involves the building of latrines; the construction of Maternity Homes to facilitate health delivery and the establishment of village industries to stimulate economic growth and generate a spirit of self-reliance.

Apart from the Correspondence method of mass education, (Tawo, Arikpo and Ojuah, 2008: 2) listed the multimedia approach, tutorial approach, small group problem solving approach, individualised instruction approach, use of information technology approach and support services of counseling, to form part of open and distance learning methods of instructional delivery. Tawo et al., (2008) explained that distance learning is a planned form of education that uses technology to bridge the distance gap. Adekanmbi (1993: 9) categorised distance learning approaches into four models, namely the correspondence school model, the consultation model, the integrated model and the distance teaching or Open University model. The objectives of open and distance learning according to NOUN (2006: 18) consist of:

- essentially designed to widen the access to education and to ensure equity and equality of opportunities for all and
- to use as a tool for poverty alleviation, especially in rural communities by providing opportunities that support Education For All (EFA) and life long learning. Open and distance learning is to equip the Nigerian populace for the emerging global culture of technological literacy via its programmes and use of information and communication technology.
The objectives of instructional methods of Open and Distance Learning are quite consistent with the attainment of goals of the Millennium Declaration by evidence of Fasokun (2006: 21-43) about which he disclosed that, in September, 2000, 189 nations met and committed themselves to combat poverty and make development a reality in everyone in the United Nations Millennium Declaration”... specifically, they called for halving, by the year 2015, the number of people who live on less than one dollar a day... they emphasized the need for promoting gender equality and empowerment of women, guaranteeing a basic education for everyone and supporting principles of sustainable development. Continuing, Fasokun (2006: 22-24) listed MDGs as follows

Goal 1: Eradication of extreme poverty and hunger.
Goal 2: Achieve Universal primary education.
Goal 3: Promote gender equality and empower women.
Goal 4: Reduce child mortality.
Goal 5: Improve maternal health
Goal 6: Combat HIV/AIDS, malaria and other diseases
Goal 7: Ensure environmental sustainability
Goal 8: Develop a Global Partnership for Development

Concluding, Fasokun (2006) said the achievement of MDGs will be largely determined by the extent to which rural poverty reduction is achieved.

Statement of problem

The standard of education in Nigeria has been observed to ill-equip the learners with career related functional literacy (Arikpo et al 2008: 16; Ngwu, 2003: viii; Dike, 2002: 2). Ben, C.B. (2006) observed that, “sole focus on access to education may not deliver education for all. Education for all should be accompanied with acquisition of functional literacy in order to accommodate quality and quantity. Functional literacy according to Kolawole and Adepoyi (2006) refers to literacy which goes beyond ability to read and write; it is an emancipatory practice that requires people to be able to read and understand what is read, and be able to use the knowledge to solve their socio-cultural and economic problems. Continuing Okedera (1981) remarked that, for literacy to have impacts on the recipients, it must be functional and permanent. Unfortunately, the views of learners Open/Distance learning in the Cross River State have never been assessed, in terms of how the methods are relevant in meeting the MDGs’ eight-point criteria, as far as personal and community development are concerned. Observably however, Tawo et al. (2008: 3) stressed that distance learning uses methods which focus on learners’ needs. Contributing, Perreton (1993) disclosed that distance learning involves situations in which learners’ physical separation from the educational principles is bridged by postal mail, e-mail, fax, computer conferencing, telephone or periodic tutorial sessions etc. This means ODL provides both education for all and the kind of quality needed for learners’ permanent functional literacy.

Purpose of the study

Consequently, the main focus of this study is to describe the views of open and distance learning students on the role of open and distance learning in the attainment of United Nations Millennium Development Goals in the Cross River State of Nigeria. Specifically, the objectives of this study are to:

Access the overall views of Open/Distance Learning students (ODLs) on the adequacy of Correspondence Education Programme (CEP); Radio and Television Education Programme (RTEP); and Internet-Based Education Programme (IBEP), methods in the provision of education for all.

Research questions

The underlisted research question shall guide the study:

What is the overall view of students of ODL on adequacy of CEP, RTEP and IBEP methods in the provision of education for all in Cross River State of Nigeria?
Significance

Generally, the merit of this study is that, results from the assessment of learners’ views provide critically needed data for planning programmes attainment of MDGs targets, without which the beneficiaries are either victimised or ignorant what may be happening in their lives and environment.

Assumption

It is assumed that all the respondents are adults who know the value of education in personal and community capacity building. Most of them may have suffered one form of deprivation or the other as a result of functional illiteracy and so competent and reliable as respondents of this kind of study.

Methodology

The sample is made up of 88 students of open and distance learning study centres in Calabar South and Calabar Municipality Local Government Areas purposively selected for this study. The research design is survey research. Instrument is a 26-item Likert-type scale questionnaire designed by the researchers. The questionnaire has sections A and B. Section A contains the personal data of the respondents and as the independent variables for the study. Section B has four subheadings which describe some instructional methods used in ODL instructional delivery, and also stated how ODL methods enhance the attainment of each of the eight MDGs. In order to analyse the views of respondents on the relevance of ODL in attainment of UN MDGs, statistics of percentages were adopted.

Findings and results

Table 1: Percentage analysis of the adequacy of correspondence education programme, radio and television education programme and internet-based education programme methods in the provision of education for all

<table>
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<tr>
<th>S/N</th>
<th>ITEM</th>
<th>STRONGLY AGREE – 4</th>
<th>AGREE - 3</th>
<th>DISAGREE 2</th>
<th>STRONGLY DISAGREE -1</th>
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<tbody>
<tr>
<td>1</td>
<td>CORRESPONDENCE EDUCATION SYSTEM AS PART OF ODL STRATEGIES (CEP)</td>
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<td></td>
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<tr>
<td></td>
<td>ODL increases access to learning and training through correspondence education system</td>
<td>31</td>
<td>35.2</td>
<td>48</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>ODL encourages continuous learning and retraining through correspondence education system made available directly to the learners.</td>
<td>37</td>
<td>42.0</td>
<td>47</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>ODL augments the work of conventional institutions where they are unable to admit all candidates at a particular time through CES</td>
<td>25</td>
<td>28.4</td>
<td>38</td>
<td>21</td>
</tr>
<tr>
<td>4</td>
<td>Through correspondence education system, ODL encourages the working class and family members to study at their convenience using study materials posted to them.</td>
<td>30</td>
<td>34.1</td>
<td>45</td>
<td>6</td>
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392
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<th></th>
<th>EDUCATIONAL TV AND RADIO PROGRAMMES AS PART OF ODL STRATEGIES (RTE)</th>
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<tr>
<td>5</td>
<td>ODL provides life and recorded lectures to people in their homes through satellite, cable television and radio.</td>
</tr>
<tr>
<td>6</td>
<td>ODL provides speedy and efficient training for key target groups through TV and radio educational programmes.</td>
</tr>
<tr>
<td>7</td>
<td>ODL provides life long and inclusive learning through TV and radio systems irrespective of the age, sex and location of the learners.</td>
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<td>8</td>
<td>ODL mounts educational/literacy campaigns to a larger audience through educational TV, radio jingles and programmes.</td>
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<th>INTERNET-BASED EDUCATION PROGRAMMES AS PART OF ODL STRATEGIES (IBEP)</th>
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<tr>
<td>9</td>
<td>ODL provides entrepreneurial training for learners by delivering study materials in electronic format through computers.</td>
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<td>ODL facilitates teacher-student interactions through e-mail</td>
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<td>ODL promotes student-student and, one to one interactions for effective studies through computers.</td>
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<td>12</td>
<td>ODL provides opportunities for one-to-many and many-to-many interactions through conferences assisted by computers and bulletin boards.</td>
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<th>ODL RELEVANCE IN ATTAINMENT OF UN MDGs</th>
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<tr>
<td>13</td>
<td>ODL is more suitable for giving lessons on functional and vocational literacy to all manner of learners, thereby reducing unemployment and extreme poverty.</td>
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<td>14</td>
<td>ODL is a more convenient tool for achieving universal literacy, by its strategies of providing access to all learners continuously.</td>
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<td>15</td>
<td>ODL methods provide learning opportunities and materials without bias to gender, thereby empowering women and also eliminating gender disparity.</td>
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<tr>
<td>16</td>
<td>ODL strategies provide information on child nutrition/care readily by health care bodies, thereby reducing ignorance</td>
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and infant mortality.

17 ODL methods of seminars and workshops on improved maternal care are more effective and affordable to women and concerned public, on improved maternal care.

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<td>29</td>
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18 ODL methods are better avenues for planning and educating all targeted groups/individuals on HIV/AIDS, using radio, TV, posters, jingles and town criers.

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19 ODL correspondence, seminar/workshop and jingles methods are more effective in educating members of the community on sustainability of their environment.

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20 ODL correspondence and electronic based educational programmes are more reliable for providing current information and awareness for global partnership on human and related development.

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Based on data results of table 1, it was found that:

I. Correspondence Education System (CES) as part of ODL

(1) On the issue of ODL increasing access to learning and training through correspondence education system, respondents strongly agreed / agreed by 69.70% on one hand, and disagreed / strongly disagreed by 30.30% on the other hand.

(2) On the issue of ODL encouraging continuous learning and retraining through CES, respondents strongly agreed / agreed by 95.4%, on one hand, and disagreed / strongly disagreed by 4.6% on the other hand.

(3) On the issue of ODL augmenting the work of conventional institutions, where they are unable to admit all candidates at a particular time through CES, respondents strongly agreed / agreed by 71.6% on one hand and disagreed / strongly disagreed by 28.4% on the other hand.

(4) On the issue of ODL encourages the working class and family members to study at their convenience using study materials provided through CES, respondents strongly agreed / agreed by 85.2% on one hand, and disagreed / strongly disagreed by 14.8% on the other hand.

II. Educational TV and Radio Programme as part of ODL:

(5) On the issue of ODL providing life and recorded lectures to people in their homes through satellite, cable television and radio, respondents strongly agreed/agreed by 70.9% on one hand; and disagreed / strongly disagreed by 26.1% on the other hand.

(6) On the issue of ODL providing speedy and efficient training for key target groups through ETRP, respondents strongly agreed/agreed by 76.1% on one hand, and disagreed / strongly disagreed by 23.9% on the other hand.

(7) On the issue of ODL providing life-long and inclusive learning through ETRP irrespective of age, sex and location, respondents strongly agreed / agreed by 79.5% on one hand, and disagreed / strongly disagreed by 20.5% on the other hand.

(8) On the issue of ODL monitoring educational television campaigns to larger audience through educational TV, Radio jingles and programmes, respondents strongly agreed / agreed by 86.3% on one hand and disagreed / strongly disagreed by 13.7% on the other hand.
III  Internet-based Education Programme (IBEP) as part of ODL;
(9)  On the issue of ODL providing entrepreneurial training for learners by delivering study materials in electronic format through computers, respondents strongly agreed/agreed by 76.1% on one hand and disagreed/strongly disagreed by 23.9% on the other hand.
(10) On the issue of ODL facilitating teacher-student interactions through the e-mail, respondents strongly agreed/agreed by 70.4% on one hand, and disagreed/strongly disagreed by 29.6% on the other hand.
(11) On the issue of ODL promoting student-student one-to-one interactions for effective studies through computers, respondents strongly agreed/agreed by 71.6% on one hand, and disagreed/strongly disagreed by 28.4% on the other hand.
(12) On the issue of ODL providing opportunities one-to-many and many-to-many interactions through conferences assisted by computers and bulletin boards, respondents strongly agreed/agreed by 78.8% on one hand and disagreed/strongly disagreed by 21.2% on the other hand.

IV  ODL Relevance in Attainment of UN MDGs;
(13) On the issue of ODL being more suitable for giving lessons of functional and vocational literacy to all manner of learners, thereby reducing unemployment and extreme poverty, 80.7% strongly agreed/agreed on one hand, and on the other hand 19.3% disagreed/strongly disagreed.
(14) On the issue of ODL being suitable for promoting functional literacy and access to all learners continuously, respondents strongly agreed/agreed by 85% on one hand and 15% on the other hand.
(15) On the issue of ODL methods providing learning opportunities and materials without bias to gender, and thereby empowering women also eliminating gender disparity, respondents strongly agreed/agreed by 84% on one hand and disagreed/strongly disagreed by 16% on the other hand.
(16) On the issue of ODL strategies providing information on child nutrition/care readily by healthcare bodies, thereby reducing malnutrition and infant mortality, respondents strongly agreed/agreed by 88% on one hand and disagreed/strongly disagreed by 12% on the other hand.
(17) On the issue of ODL methods of seminar and workshops on improved maternal care being more effective and affordable to women concerned public for improved maternal care, respondents strongly agreed/agreed by 81.9% on one hand, and disagreed/strongly disagreed 18.1% on the other hand.
(18) On the issue of ODL correspondence, seminars and workshops and jingles methods being more effective for educating members of the community on sustainability of their environment, respondents strongly agreed/agreed by 88.7% on one hand and disagreed/strongly disagreed by 11.3% on the other hand.
(19) On the issue of ODL methods being better avenues for planning and educating all targeted groups/individuals on HIV/AIDS, using radio, TV, posters, jingles and town criers, respondents strongly agreed/agreed by 88.7% on one hand and strongly disagreed/strongly disagreed 11.3% on the other hand.
(20) On the issue of ODL correspondence and electronic educational programmes being more reliable for providing current information and awareness for global partnership on human and related development, respondents strongly agreed/agreed by 86.4% on one hand and disagreed/strongly disagreed by 13.6% on the other hand.

Discussion and implications of findings

Based on the assessment of views or perceptions of ODL learners in the Cross River State, a higher percentage of them feel ODL methodologies create maximum access to learning for all and as well provide functional literacy skills, essential in the attainment of the eight point UN MDGs. Assessment of people, especially adults, relies on their individual perceptions for the...
needed information. Assessment according to (Denga 2006; 4) is seen to involve the evaluation of the cognitive, affective and psychomotor skills...includes qualitative statements or value judgements.

Similarly, perceptions, according to Oyedeji (1988: 110) may be defined as the process of identifying, discriminating, recognizing and judging objects and qualities or relation in our environment by means of sensory information...an individual learns to understand his physical and social world through sense organs. Any situation in which the views of people, especially adults, were not assessed and taken into consideration after an issue or programme that affects such people, the result may be oppression, victimization or outright failure in the attainment of objectives of such a programme. Bodley (1982: 110) warned that, any programme of directed culture change imposed upon a “target” population against their will would almost unavoidably violate the rights and in principle at least such programmes are usually rejected by social engineers.

Conclusion and recommendations

1) The views of the benefiting individuals, groups and nations shall have to be taken into account while designing and implementing programmes for the attainment of the MDGs in the Cross River State and elsewhere.

2) Secondly, in an attempt to consider the views of beneficiaries, emphasis on resource allocation should be placed on adult teaching and learning methodologies adopted by open and distance learning.

3) Thirdly, in line with the 2000 UN Millennium Declaration, education for all should be matched with individual functional literacy skills acquisition for all as provided by the ODL methods. This way, individuals would be better equipped for effective performance even when faced with changing circumstances both in their persons and their environments.

4) Fourthly, given the trend towards global partnership and the exclusive nature of programmes of traditional institutions, ODL methods guarantee better alternatives among individuals and nations for access to information and remedies for solving educational, social, health, political, economic and environmental issues.

5) Finally, a more comprehensive study should be carried out on a wider sample, using more advanced statistics beyond percentages, although the same theme and methodology of this study would still be followed.
References


Arikpo, A. B; Tawo, R. E. Tawo and M. U. (2008). Assessment of Literary Programme (LIPA) of Selected Nigerian Universities as perceived by Implications for Counselling. Paper presented at the International Conference on Learning; University of Illinois; Chicago; U.S.A.


Abstract

Distance learning (DL) is of significance to the training of teachers on the successful implementation of Nigeria’s Universal Basic Education (UBE) programme. Open and distance learning (ODL) has emerged as a tool for increased access to all forms of literacy education, including career and higher education needs of primary school teachers. Compared to other levels of teachers in the teaching profession, the dearth of committed and qualified teachers in the primary school system in Nigeria has continued to create a major setback in the learning needs of the citizens, especially in eradicating basic and functional illiteracy. Although several factors have been associated with the high failure in mass literacy programmes implementation, the aspect of ODL relevance in providing unique opportunities for massive training of quality teachers has largely been overlooked. This study examined how student teachers engaged in the National Teachers’ Institute (NTI) programme assessed the relevance of ODL programme of NTI vis-à-vis the mode of admission, cost effectiveness, relationship with job and business, convenience for family and other social demands, instructional delivery methods (multimedia, lecture and tutorial, individualised learning and discussion method) and support services in meeting the demand for providing quality teachers in our schools for the successful implementation of the UBE programme. Survey design was adopted and three hundred (300) student teachers were randomly drawn across study centres in Cross River State for the study. A 48-item questionnaire was used for data collection. The data was analysed using simply percentages, independent t-test and a One-way Analysis of Variance as shown in Tables 1, 2 and 3. The findings showed a significant sex difference on students support services (2.000). There was a significant difference of occupational status of students with respect to relationship with job and business (2.989), convenience with family and other social demands (2.758), instructional delivery methods (4.646) and individualised learning (3.176). Based on the result it was recommended among others, that ODL methods should be used as a means of bridging the gap in
Vigorous counselling to create more awareness, public enlightenment and advocacy should be intensified.

Key words: Role, Open/ Distance Learning, Quality Education, Teachers, Functional Literacy, Universal Basic Education

Introduction

Distance Learning can be seen as a system and process that connects learners with distributed learning resources. Its characteristics include geographical and temporal separation of the instructor from the student and of students among themselves. Nipper (1989) as cited in Tawo, Arikpo and Ojuah, (2008: 2) identified three generations of distance education as follows:

1. First generation - predominant use of a single technology and lack of direct student interaction with the originator of the material, such as in correspondence education.
2. Second generation - integrated use of multimedia, with two-way communication still mediated by a third person (tutor rather than originator).
3. Third generation - two-way communication allowing direct interaction between originator of the teaching material and students and between remote students individually or as a group.

According to UNESCO (2002) as cited in Ojo, Ogidan and Olakulehin (2006: 2) the terms open and distance learning represent approaches that focus on opening access to education and training provision, freeing learners from the constrains of time and place and offering flexible learning opportunities to individuals and groups of learners. Perraton, Robinson and Creed (2002: 1253) defined distance education as an educational process in which a significant proportion of the teaching is conducted by someone removed in space and/or time from the learners.

Hulsmann (1997) as cited in Ojo, Ogidan and Olakulehin (2006: 2) define open and distance learning from the characteristic point of view. Identified four crucial features of distance education to include, the separation of the teacher and learner in time or place; influence of an educational institution; the use of technical media; and the provision of two-way communication. Keegan (1990: 158) identified six key elements of distance learning:

1. separation of teacher and learner
2. influence of an educational organisation
3. use of media to link teacher and learner
4. two-way exchange of communication
5. learners as individuals rather than groups and
6. education as an industrialised form

Literature review

Distance learning in its broad sense as the use of educational materials or media by learners who are not necessarily linked with an educational organisation or engaged in communication with an instructor. It is convenient and flexible for both students and facilitators the students' choice to participate in education on an individual basis. Flexibility is with regards to the time, place and pace of learning. It is less disruptive to work and family obligations. Distance learning can reach groups, such as rural learners and women inadequately served by conventional schools. As Holmberg (1989: 24) states that:

demanding professional commitments and family responsibilities of many adults often make attending a conventional, full time, face-to-face course with fixed timetable a rather unrealistic proposition, and reasons why adults choose distance education are primarily, the convenience, flexibility and adaptability of this mode of education to suit individual students' needs.
Studies show that, it is as effective as the traditional instruction in conventional schools when appropriate methods and technologies are used. Also, a much cheaper form of education. Distance education offers a veritable vehicle for improving the quality of pre-service training given to teachers and it also has the potential of ensuring life-long learning for practising teachers (Perraton and Potashnik 1997: 1-39; Perraton, Robinson and Creed 2002: 1253; Yates 2000, as cited in Yusuf and Falade 2005: 24).

Distance learning, as a method of acquiring education, only stipulates roles for the instructor, the model and the technology involved, but also directs the role of the distance learner. The distance learner faces a change from the traditional learning environment of direct relationship with the teacher, to a new setting whereby he/she is led to study alone most of the time. The learner faces this new challenge with expectations, anxieties and the need to balance the responsibilities arising from such learning situations with the task of meeting obligations at the workplace and family. The distance learner is, however, characterised by self-reliance and a natural intent to pursue individual achievement in an environment different from the traditional one.

In distance learning there is limitation of dialogue between teachers and learners, and amongst learners themselves due to the shortness of time the programme is mounted. Kirkup and Jones (1996: 272-291) state that, students need dialogue with their teachers and with other students in order to consolidate and check on their own learning. Dialogue generally, allows students to assess their learning and develop a sense of comradeship with other students and this can help reduce the effect of isolation usually experienced by distance learners.

On the contrary, researchers including Keegan (1996: 158) and Lewis (1995: 242-254) have questioned the need for too much student-instructor interaction. They see a large amount of interaction as inhibiting the independence of the learner. It is observed that students who are most successful in distance learning situation tend to independent autonomous learners who prefer to control their own learning situations. Adults tend to prefer more active approaches to learning and value opportunities to integrate academic learning with their life and work experiences in the context of financial and family demands.

Distance learners have perceptions about their courses and factors influencing their performance. These relate mainly to constraints set by their activities as regards pressure of work. Holmberg, 1986: 124) states that distance learning will support student motivation, promote learning pleasure and effectiveness if offered in a way that makes study relevant to the individual learner and his/her needs. Garrison, (1990: 103) opines that the aim of distance education is concerned with meeting the educational needs of adults.

Distance Learning in Nigeria

Distance learning in Nigeria dates back to the colonial period. Owoeye (2004) opines that since the colonial period, correspondence colleges from the United Kingdom have provided intermediate and advanced level training to a number of qualified Nigerians via correspondence courses. Distance studies in Nigeria started around the 70s at the University of Ibadan and this was followed by correspondence study, part time programmes offered by conventional universities and other schools, continuing education programmes of the Education Department of the universities, programmes offered by the NTI, the National Open University of Nigeria and sandwich programmes offered by universities and other institutions. The sandwich programmes were established in the mid 80s and run by some Nigerian universities and Colleges of Education. The sandwich programmes were originally designed during the school long vacations to create opportunities for participation by workers, especially teachers. These programmes are open to all categories of learners with varied qualifications ranging from Primary School Certificate, attempted School Certificate, School Certificate holders, TCII teachers, NCE and first degree holders. More women enrolled in this programme. This was to create access for those who are not able to make it to the conventional schools because of time and other factors.
There were also the satellite campuses run by various universities with centres scattered across the country. Courses were offered that led to the award of various certificates and diplomas. The primary and secondary schools served as study centres and lectures were held in the evenings and on weekends with university lecturers as instructors. The curriculum was drawn by the respective host universities. All these institutions were established to provide education for all, eradicate poverty, provide vocational training, lifelong learning, and reduce the cost of education for the learners, among others.

While the correspondence courses and satellite cases were on, there was the National Teachers Institute (NTI) established in 1976 by Act 7 of April 1978 as distance learning outfit; with headquarters in Kaduna, Kaduna State. The institute trained teachers for the Universal Primary Education (UPE) scheme. This institution was established to provide in-service education for teachers. This was to address the shortage of adequately qualified teachers in our educational institutions. It was also to provide initial training for the development of teachers and as well as for the certification and upgrading the quality teachers in the nation’s primary schools to the required TCII Certificate. As a result of its exceptional performance, it was further empowered to provide programmes leading to the upgrading of Teachers to the NCE.

The NTI on inception offered programmes that led to the award of the Pivotal Teacher Certificate (PTTC), the TCII certificate, which was introduced in 1984 and the NCE. The minimum entry qualification for admission is five Ordinary level credits at two sittings for those undertaking the four-year programme leading to the award of NCE Certificate. For those undertaking the three-year programme, the minimum qualification is the Certificate (NTI Students’ Handbook 2005: 7).

Although the mode of study is flexible, it does not totally allow a student to determine the pace, place, time and medium of study, as the schedule is set by the school. The NTI has Zonal Offices in six geopolitical zones of the country which are: North Central, FCT, Abuja; North East, Bauchi; North West, Kano; South-South, Benin; South Western and the South East, Enugu. The zonal offices take charge of the activities of State offices of each zone. The 36 States of the Federation including Abuja have over 600 study centres located in the State capitals and Local Government Area headquarters. Lectures and tutorials are organised in the evenings of Fridays and Saturdays using government primary and secondary schools as the study centres. University lecturers, secondary school teachers and in some cases civil servants with education bias, are used as instructors.

In recent past the bulk of teachers in our public schools were without proper teaching qualification. The State governments in line with the Federal government resolve to eliminate unqualified teachers in the education system at the lower level by systematically restructuring the education system. The NCE was adopted as the minimum teaching qualification for the primary school while the Bachelor of Education was adopted for the secondary school. This arrangement has resulted in the phasing out of the TCII and Pivotal Certificates in the NTI system. The government by introducing this programme hopes to produce enough qualified teachers for the successful implementation of the UPE programme in the states.

Prior to this, teachers without the basic teaching qualification in Cross River State were given a time frame to go back to school and upgrade themselves. All those in Cross River State who were not able to meet this requirement at the expiration of the grace period were either dismissed from service or were redeployed according to their level of qualification. By this arrangement all those in the secondary schools in 2007 with NCE were redeployed to the primary schools, while those with the Bachelors degrees in the primary schools were moved to the secondary schools.

Also, all those with teaching qualification who transferred to the Ministries were moved back to the school system based on their qualification. To ameliorate the movement, government in 2007 through the NTI introduced a kind of in-service training with pay for serving teachers through a programme called the Special Teacher Upgrading Programme (STUP). The programme is funded by the government.
The programme was introduced to take care of the exigencies of the recently introduced UBE scheme which addresses the second objective of Millennium Development Goals (MDGs), which is to achieve the universal primary education (UBE) by the year 2015. In order to meet the MDGs targets, government set up an agenda for the re-training of teachers to catch up with the ongoing challenge on educational needs. The STUP training programme became imperative looking at the large number of unqualified and under-qualified teachers in our school system vis-à-vis the teeming students' population expected in the UBE programme.

The STUP programme is a two-year intensive course designed to upgrade the certificate of serving TCII teachers so as to enable them obtain minimum qualification of NCE. Teacher education in Nigeria as outlined in the National Policy on Education (NPE, 2004 rev. Sections 9, 57, 33) stipulates that teacher education will have to be given a major emphasis in all educational planning because no educational system can rise above the quality of its teachers. Also, the minimum qualification for entry into the teaching profession as seen in section 9 (1) shall be the Nigeria Certificate in Education (NCE).

Government policy on the minimum teaching qualification of NCE for teachers in the country is expected to be fully enforced by 2010. This means that teachers who do not have this minimum qualification by this year will be shown the way out. This action was already taken in the state by the last civilian government of Mr Donald Duke. The STUP programme, serving teachers are nominated by their respective State Universal Basic Education Board (SUBEB) for this special training.

STUP is a flexible programme that allows teachers to study while still on their job. The student-teacher undergoes a face-to-face lecture combined with tutorials and integrated school experiences. The curriculum contents are the same as prescribed by the National Commission for Colleges of Education (NCCE) for the pre-service students in the Colleges of Education. In addition to this, the curriculum incorporates additional components of school-based professional development such as mentorship and internship. The internship covers the period the student teachers spend in their respective schools and the normal teaching that they do. This period will earn them credits for registration with the Teachers Registration Council of Nigeria (TRCN). The mentoring component of STUP is adequately supervised and appropriately graded as an essential component of the teaching practice (NTI Students' Handbook, 2007: 1).

The goals of the STUP as contained in the student's handbook could be summarised to include:
- phasing out of TCII certificate and making NCE the minimum qualification for teachers;
- To provide alternative routes for TCII holders to attain the minimum teaching qualification;
- To increase the number of qualified teachers in the basic education sector; and
- improve the overall quality and learning in school.

Instructional Materials of the NTI programme

The NTI being an ODL programme adopts the underlisted methods among others:

Multimedia Approach

Specially prepared print instructional materials are used and the students are expected to read them on their own. In addition to this recorded audio and audio-visual materials are sometimes available for use as supplementary materials. This is supplemented with face-to-face contact sessions.

Rumble (2001: 3) argued that the factors affecting the costs of face-to-face education include:
- whether small tutorials, seminars, lectures or independent and resource-based learning strategies are adopted. It is important to note that the technology adopted plays a crucial role in the determination of the aggregate costs of an education system. In addition the recorded audio and audio-visual materials are available for use as supplementary materials.
Garrison (1990: 45) states that:

Distance education is inexorably linked to the technology of delivery. It can be seen as a set of instructional methods based largely on mediated communication capable of extending the influence of the educator beyond the formal institutional setting for the purpose of benefiting the learner through appropriate guidance and support. Without technology, a future for distance education does not exist.

A study by Yusuf and Falade (2005: 27) indicates that the print media (textbooks, graphic materials, posters, and photographs were very frequently or frequently used by distance learners. For instance, 98.47% of the distance learners involved in their study indicated having very frequently or frequently used textbooks (very frequently 83.92 and frequently 12.55).

Lecture and Tutorial: These two methods are used side by side at the study centres. During these sessions there is a face to face interaction between the teachers and the learners: the topic(s) are discussed, questions asked, answers given, reactions and suggestions made by participants, a general interpretation or explanation of issues made. Learners may be required to make individual presentation on a topic while other participants listen and critique or make additional input. The instructional and tutorial facilitators are all employed on a part-time basis. For the tutorial, each course has 80 hours contact per year and this is organised in four cycles to cover four calendar years.

Instructor characteristics which include showing interest and care for the students by providing good, clear, specific and detailed feedbacks on assignments and discussion, participating in the and giving regular spaced feedbacks on student performances and constructive suggestions for improvement where need be is important.

Discussion: The students organise themselves into small groups and meet from time to time for the purpose of rubbing minds and exchanging ideas on the study materials they have. Barron (1999a: 5) states that, it offers increased opportunities for increased interaction with students, and ensures equity in educational opportunity.

Individualised learning: The NTI uses self-instructional textual materials in lesson delivery. Distance learning lays emphasis on the promotion of independent learning. This approach promotes learning activities in a learning environment which separated learners from their teacher and from each other. The teacher, though separated the learners, had the responsibility to provide reading materials needed by the students. Learner is expected to have a substantial degree of responsibility for his own learning, to conform to the practice in the conventional schools, but is dependent on the teacher for guidance, instructions, etc. In individualised, self-study or independent learning, study methods people study on their own at home with study materials and modules that are provided for that purpose. The process may include time to time meetings in study groups for interaction with each other and the counsellor for counselling sessions. There is much reading and preparation by students to complete a task. The individual need to manage his time effectively as inability to manage time can create an imbalance between work, family life, student’s needs and studies. Good time management is more to be accomplished. This assertion was confirmed by Ekong and Jerry, (2004) cited in (Tawo, Arikpo and Ojuah, 6) who saw time as being extremely important with a rating of 68% for time management. There is much reading and preparation by students to complete a task.

Bertram (2003, 5) reported on how effective the support offered by self-directed (individualised instruction) learning, can complement distance learning. Mason (2003) and Mills (2003) as in Lentell and O’Rourke (2004: 1-17) also provided evidence on the effectiveness of individualised instruction approach. Learning is designed to suit individual’s own learning pace and at the learner’s own convenience. The learner has the freedom of studying in his own way. Distance learning is student-centred learning and the learning characteristics to learn should be considered. These characteristics to some extent, determine who participates in distance learning.
This method allows learners to plan when to study, where to study, how to study, what to study, when to visit the internet, the library, carry assignments, and go to the centre for tutorials and do other activities. It helps the student draw a personal timetable which does not conflict with what is provided by the facilitators of NTI programme. However, learning for many online students is seen by Beller and Or (1998: 4) as essentially self-directed, and requires a great amount of will power, self-discipline and motivation as well as suitable learning skills to succeed. Interaction and communication between the teacher and the learner was important for the students understanding of the course material and other tasks.

Support Services

In addition to the various methods of lesson delivery used in the NTI centres, counselling services are important for the students. Professionally trained counsellors are used to render specialised services to the learners. Every study centre has at least two counsellors. Ojo and Olakulehin, (2006: 1492-3831) state that the counselling needs of learners are better met in the conventional higher education. Counselling will make the distance learners to maximise their intellectual potentials and also learn skills to increase productivity on the job. An adult who is not educated has lost his/her sense of worth considering the changes in our present global world. For this reason the counsellor is needed to help the individual cushion the effect of frustration, anxiety, distress, sense of loss and futility experienced at this point in time. It will help the individual acquire and develop problem solving skills and coping mechanism for improved self-worth, self-concept building and capacity-development skills.

Apart from the counselling sessions, periodic assignments to be marked by facilitators are given to the students and they are expected to complete and submit them on time as part of the course requirement. These assignments are graded by facilitators and returned to the learners with useful comments to guide the understanding of questions already answered. These comments motivate students towards the completion their assignments. Ekong and Jerry (2004) as cited in Tawo, Arikpo and Ojuah, (6) saw learners' motivation in distance learning as significant. They saw motivation as being extremely important with a rating of 72%. This agrees with other studies which suggest that to be successful, the student, traditional or distance must be highly motivated (Schuemer 1993) as cited in Holmberg, (1989: 1-2); (Sankaran and Bui, 2001: 1-9). Much of adult intentional learning activity is motivated by desirous move from their current level of proficiency to a new higher level. Discrepancies between adult level and desired proficiency level directly affect motivation and achievement in learning activities.

Practical works are organised outside the centres on courses that require practicals. This forms part of students' continuous assessment score. Final programme project assignment is compulsory for the students as part of their course requirements.

The Universal Basic Education (UBE) Programme in Nigeria

The UBE programme was introduced by the civilian administration in May 1999. This was a response to the 1948 Universal Declaration of Human Rights which stipulated the right of every citizen to basic education. As a follow-up to this declaration, Section 19 (1) 21 of the Nigerian 1999 Constitution (Federal Republic of Nigeria 1999: 21-22) stipulated that government shall direct its policy towards ensuring that there are adequate educational opportunities at all levels in line with the National Policy on Education (NPE). The Constitution also provides that government shall eradicate illiteracy and shall, as and when practicable, provide free, compulsory and universal basic education.

From the inception of the UBE programme till date, available infrastructure, teaching and learning materials as well as qualified teachers are inadequate. According to Ogbuka, (2000: 29) reports, only 14.1 million children out of the 21 million children of primary school age in 1996 were enrolled in school. The completion rate was 64%, while the rate of transition to the junior secondary school was 39.8%, which was equally low. The report also shows that out of the total population of 7.2 million children of 12 to 14 years old in Nigeria, only 2.4 million pupils
were enrolled in schools. These children in many Nigerian towns instead of being in school were rather seen loitering around the streets during school hours.

The objectives of the UBE programme include among others, the provision of universal access to basic education, provision of a conducive learning environment, eradication of illiteracy as well as the ability to communicate effectively. The objectives also include laying of sound basis for scientific, reflective thinking; development of suitable attitudes; giving every child the opportunity of developing manipulative skills that would enable him or her to function effectively in the society.

The UBE programme is free and compulsory for the first nine years spanning from primary one to Junior Secondary School (JSS) class three. This shows that a child is to spend six years in the primary school and three years in the Junior secondary school. With the incorporation of the Junior secondary school into the scheme, the objectives of the National Policy on Education for the junior secondary schools include effective thinking, communication skills, making of relevant judgement, making the pupil a useful member of one's family, understanding basic facts about health and sanitation, understanding and appreciating one's role as a useful member of the country.

Tabir, (2003:1284) states that as good as the objectives of UBE was, there were some limitations to the implementation of the programme among which was the long absence of an enabling law since 1999 when the programme was launched. He opines that the effect of the long delay in implementing the scheme was government refusal to employ teachers for the programme. He however reported that the first part of the bill is about the right of the child to education and the government has the responsibility of providing education for the child.

The second part is about the Universal Basic Education Commission. The third part is about the law for the States and the Local Governments. He argued that what was being done now was to embark on enrolment campaign, the construction of additional classrooms and the provision of instructional materials as well as teachers' development. The situation today has somehow changed because the recent move in making NCE the teachers' certificate and the training of teachers without this requisite qualification by government through the NTI programme is seen as a step in the right direction.

Statement of the problem

The issues of high illiteracy rate and the fall in standard of education in Nigeria could not be effectively addressed unless serious effort is made providing quality education for all, in Nigeria at all levels. While the UBE scheme in Nigeria has the objective of providing education for all, especially at the primary school level, and distance learning programmes offered by the NTI, has the objective of providing quality education and training to student teachers intended for engagement in the teaching of pupils expected to be enrolled in the UBE scheme. However, not much studies and data is available as to whether the quality of education and training these student teachers have from their NTI programme is adequate and relevant in meeting the objectives of the UBE scheme.

Also, many of the people who engaged in distance learning are adults who may have been out of school for many years before re-embarking on learning. This group of students requires their teaching methods to be flexible, and accommodating of their diverse needs. Here, the style of course delivery, clarity of expectation and collaborative learning is important.

Purpose

This study examines how adequate students assess the relevance of ODL programme of NTI-à-vis the mode of admission, cost effectiveness, relation with job and business, convenience with family and other social demands, instructional delivery methods (multimedia, lecture and tutorial, individualised learning and discussion) and support services in meeting the
demand for providing quality teachers in our school for the successful implementation of the UBE programme in Nigeria.

Methodology

A survey design was used for the study. This allows the collection of responses on a wide range of issues. A sample of randomly selected student teachers engaged in the NTI NCE programme across the study centres in Calabar North and Calabar South Local Government Areas of Cross River State was used. One hundred were from the State sponsored special programme called STUP (31 males and 69 females), while 200 were from the regular NTI programme (69 males and 131 females). In all, a total of 100 males and 200 females took part in the study. The population had more females, because females are involved in the programme.

A questionnaire called Open and Distance Learning Scale (ODLS) was developed by the researchers for data collection. It had a total of 48 items constructed on a four-point Likert-type scale with responses ranging from strongly agree to strongly disagree. The instrument had two sections, A and B. Section A dealt with the demographic data, while Section B looked at the main variables of the study. The instrument was evaluated by test experts in the Faculty of Education, University of Calabar.

The age of the respondents ranged between 20 and 50 years. The instrument was administered by the researchers to the learners in the study centres with the help of the facilitators, after due permission to do so was taken from the State NTI Coordinator. The data was analysed using simply percentages, independent t-test and a One-way Analysis of Variance as shown in Tables 1, 2 and 3.

Research question

How adequate do students assess the relevance of ODL programme of NTI vis-à-vis the mode of admission, cost effectiveness, relationship with job and business, convenience with family and other social demands, instructional delivery methods (multimedia, individualised learning and discussion method) and support services in meeting the demand for providing quality teachers for the UBE programme.

Hypotheses

1. There is no significant sex difference in the assessment of the relevance of ODL programme of NTI vis-à-vis the mode of admission, cost effectiveness, relationship with job and business, convenience with family and other social demands, instructional delivery methods (multimedia, individualised learning and discussion method) and support services in meeting the demand for providing quality teachers for the UBE programme.

2. Occupational status of learners will not significantly affect their assessment of the relevance of ODL programme of NTI vis-à-vis the mode of admission, cost effectiveness, relationship with job and business, convenience with family and other social demands, instructional delivery methods (multimedia, individualised learning and discussion method) and support services in meeting the demand for providing quality teachers for the Universal Basic Education (UBE) programme.

Results

Research Question

How adequate do students assess the relevance of ODL programme of NTI vis-à-vis the mode of admission, cost effectiveness, relationship with job and business, convenience with family and other social demands, instructional delivery methods (multimedia, individualised learning and
discussion method) and support services in meeting the demand for providing quality teachers for the Universal Basic Education (UBE) programme.

Table 1 Percentage analysis of relevance of NTI ODL programme as perceived by students in meeting the demand for providing quality teachers for the UBE programme (N=300)

<table>
<thead>
<tr>
<th>S/N</th>
<th>ITEM</th>
<th>STRONGLY AGREE - 4</th>
<th>AGREE – 3</th>
<th>DISAGREE 2</th>
<th>STRONGLY DISAGREE -1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
</tr>
<tr>
<td>1</td>
<td>I got admitted without writing any qualifying entrance examination as done in the conventional institutions.</td>
<td>22.3 42 14.0 64 21.3 127 4.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>It is much easier to gain admission here.</td>
<td>57 19.0 6 22.0 109 26.3 68 22.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I am in this programme because I could not gain admission through JAMB into the conventional university.</td>
<td>50 16.0 47 57.7 95 31.7 108 36.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Everybody who applied is admitted but placement into a particular programme is based on entry qualification.</td>
<td>104 34.7 109 36.3 64 21.3 23 7.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>I got admitted by passing the screening Examination.</td>
<td>124 41.3 94 31.3 58 19.3 24 8.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I am nominated into this programme by the State Universal Basic Education Board.</td>
<td>65 21.7 68 22.7 76 25.3 91 30.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>It is less expensive compared to the conventional schools.</td>
<td>102 34.0 84 28.0 65 21.7 49 16.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Cost of the programme is subsidised by the State government.</td>
<td>32.3 138 46.0 40 13.3 25 8.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>The State Universal Basic Education Board pays for the programme.</td>
<td>45.0 101 33.7 40 13.3 24 8.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>It provides avenue for many people to become educated and at an affordable rate.</td>
<td>16.7 99 33.0 112 37.3 39 3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>NGO’s are involved in augmenting the cost of the programme for students.</td>
<td>36 12.0 77 25.7 99 33.0 88 29.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Most students are self sponsored by virtue of earning income.</td>
<td>30.0 107 35.7 74 24.7 29 9.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Relationship with Job and Business</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>My job cannot allow me go back to the four walls of any conventional institution as a full time student.</td>
<td>26.3 75 25.0 65 21.7 81 29.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>It is possible to get study leave from my office but there is no guarantee of getting the job back on completion of the programme.</td>
<td>82 27.3 62 20.7 94 31.3 62 20.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>It gives me the opportunity to acquire a degree while still working.</td>
<td>63 21.0 46 15.3 82 27.3 109 36.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>It allows me go to school and attend to my business more effectively.</td>
<td>126 42.0 95 31.7 36 12.0 43 14.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>I am at present on in-service.</td>
<td>63 21.0 84 28.0 81 7.0 2 72 24.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>I need this certificate even though the programme at times conflicts with my business schedule.</td>
<td>127 42.3 97 32.3 32 10.7 44 14.7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Convenience with Family and other Social Demands

19 It gives me time to study as well as take care of my home concurrently.
20 It gives matured students the opportunity to go back to school irrespective of commitments to family members.
21 It gives me enough time to interact and share information and experience with others without feeling ashamed.
22 There is mutual interaction between the students and the organisers.
23 There is mutual interaction between students.
24 There is free communication between the facilitators and the students.

Flexibility in Instructional Delivery Method

25 Only print materials (study guide) are used for lesson delivery.
26 It is more of a correspondence study based on the study guide.
27 Lectures are organised in the study centres for students using the print materials provided.
28 Tutorials are organised alongside the lecture method using variety of media.

Supplementary audio and audio-visual materials are used for instruction.

Self-instructional modules are used for lesson delivery.

Individualised Learning

31 Individuals learn at their own pace with the facilitator as the guide.
32 The problem of incessant closure of conventional schools as a result of strikes due to grievances between labour and government is eliminated here.
33 The learner has a substantial degree of responsibility for his own learning as this requires devotion and seriousness to succeed.
34 Individuals are motivated towards greater learning when they see how far they can achieve by themselves.
35 Students are required to have their private study period.
36 Individual specific needs are addressed.
37 It gives learners time to interact with each other.

Discussion Method

It gives learners time to interact with each other.
It provides access for learners to share information and experiences with others.

It encourages direct and active participation of learners in the learning process.

It increases interest in learning and reduces monotony.

It creates opportunity for students to assume leadership role and exercise control over the topic under discussion.

It is effective for increasing students’ problem solving ability.

Student Support Services

Counselling services are provided at the point of registration.

The length of time given for the completion of each assignment is based on learners’ pace.

It helps develop students’ skills in problem solving.

Courses needing practicals are systematically arranged for the students such that learning is easier.

There is compulsory teaching practice exercise to make up for the total credit required.

Students are required to write a project before graduating.

The result in Table 1 indicates that eight broad areas were considered for the study. Each area was measured using six items. The result showed that for item 1 under flexibility in mode of admission 109 (36.3%) agreed while 191 (63.6%) disagreed on whether they wrote any qualifying examination before being admitted. Item 2 had 133 (41.0%) agreed while 177 (59.0%) disagreed that gaining admission was easier in NTI programme than in the conventional schools. Item 3 had 97 (32.4%) agreed while 203 (67.7%) disagreed that they were in the programme because they could not gain admission through JAMB to the conventional school. Item 4 had 213 (71.0%) agreed and 87 (29.0%) disagreed that everybody who applied for admission was taken. Item 5 gave a total of 218 (72.6%) agreed and 82 (27.3%) disagreed that they got admitted after passing the screening examination. Item 6 had a total of 133 (44.4%) agreed and 167 (55.6%) disagreed that they were nominated into the programme by the State Basic Education Board.

In the case of cost effectiveness, the responses on item 1 showed that 186 (62.0%) agreed while 149 (49.7%) disagreed that the NTI programme is less expensive than the conventional schools. Item 2 showed that 235 (78.3%) agreed while 64 (21.3%) disagreed that the cost of the programme is subsidised by the State Government. On the contrary showed that 235 (78.7%) agreed while 64 (21.3%) disagreed that the State UBE pays for the programme. Item 4 had 149 (49.7%) agreed and 151 (50.3%) disagreed that it provide avenue for people to be educated at an affordable rate. Item 5 gave 113 (37.7%) agreed and 187 (62.3%) disagreed that the NGOs augment the cost of the programme. Item 6 had 197 (65.7%) agreed and 103 (34.4%) disagreed that most of the students are self sponsored by virtue of earning an income.

Looking at item 1 under relationship with job and business, 154 (51.3%) agreed and 146 (48.7%) disagreed that their jobs do not allow them go back to conventional institutions as full time students. Item 2 showed that 144 (48.0%) responded agreed and 156 (52.0%) disagreed on the certainty of getting their jobs back should they go to school on study leave. Item 3 indicates that 109 (36.3%) agreed while 191 (63.6%) disagreed it gives them the opportunity to acquire a degree while still working. Item 4 had 221 (73.7%) agreed and 109 (26.3%) disagreed that it allows them go back to school as well as attend to their business effectively. Item 5 had 147
(49.0%) agreed and 153 (51.0%) disagreed that they are on study leave. Item 6 showed 224 (74.6%) agreed and 76 (25.4%) disagreed that there is free communication between the facilitators and the students.

For the items on convenience with family and social demands, item 1 indicates that 182 (60.7%) agreed while 118 (39.3%) disagreed that it gives them time to study as well as take care of their homes. Item 2 had showed that a total of 190 (63.3%) agreed while 163 (53.3%) disagreed that it gives the mature students the opportunity to go back to school irrespective of commitment to family members. Item 3 showed that 255 (85.0%) agreed while 45 (15.0%) disagreed that it gives them enough time to interact and share information and experience with others without feeling ashamed. Item 4 indicates that 239 (79.5%) agreed while 61 (20.4%) disagreed that there is mutual interaction between the students. Item 5 in a total of 219 (73.0%) agreed and 81 (27.0%) disagreed that there is mutual interaction between the students and the organisers. Item 6 had showed that 240 (80.0%) agreed and 60 (20.0%) disagreed that there is free communication between the facilitators and the students.

Observation of item 1 on flexibility in instructional delivery method gave a total of 244 (81.3%) as agreed while 56 (18.6%) disagreed that only print materials was used for lectures delivery. Item 2 had 260 (86.6%) agreed while 40 (13.4%) disagreed that the NTI programme was more of a correspondence course. Item 3 showed of 265 (88.4%) respondents agreed and 35 (11.7%) disagreed that lectures were organised in the study centres using print materials. Item 4 indicates that 252 (84.0%) agreed while 48 (16.0%) disagreed that tutorial were organised alongside with the lecture method using variety of media. Item 5 had 262 (87.6%) agreed while 38 (12.7%) disagreed that supplementary audio and audio-visual materials are used for instruction. Item 6 indicates that 258 (86.0%) agreed while 42 (14.0%) disagreed that self instruction modules are used for lecture delivery.

On the use of individualised learning, item 1 had 239 (79.7%) agreed and 61 (20.4%) disagreed that individuals learn at their own pace with facilitators as their guide. Item 2 had 218 (72.7%) agreed and 82 (30.3%) disagreed that the problem of incessant closure of conventional schools as a result of strikes due to grievances between labour and government is eliminated. Item 3 had 260 (86.7%) agreed and 40 (13.3%) disagreed that the learner has a substantial degree of responsibility for his own learning as this requires devotion and seriousness to succeed. Item 4 had 265 (88.3%) agreed and 35 (11.7%) disagreed that individuals are motivated towards greater learning when they see how far they can achieve by themselves. Item 5 indicates that 269 (89.7%) agreed while 31 (10.3%) disagreed that students are required to have their private study period. Item 6 had showed that 213 (71.0%) agreed while 87 (29.0%) disagreed that individual specific needs are addressed.

For the items on discussion method, item 1 showed that 277 (92.3%) agreed while 23 (7.7%) disagreed that it gives learners time to interact with each other. Item 2 showed that 282 (94.0%) agreed while 18 (6.0%) disagreed that it provides an opportunity for learners to share information and experiences with others. Item 3 indicates that 265 (88.3%) agreed while 21 (7.0%) disagreed that it encourages direct and active participation of learners in the learning process. Item 4 indicated 265 (88.3%) respondents agreed and 35 (11.7%) disagreed that it increases interest in learning and reduces monotony. Item 5 had 264 (88.0%) agreed and 36 (12.0%) disagreed that it creates opportunity for students to assume leadership role and exercise control over the topic under discussion. Item 6 gave 234 (78.0%) agreed and 66 (22.0%) disagreed that it is effective for increasing students’ problem-solving ability.

In case of students support services provided, item 1 had 206 (68.6%) agreed and 94 (31.4%) disagreed that the counselling services are provided at the point of registration. Item 2 had 167 (55.7%) agreed and 133 (44.4%) disagreed that the time given for the completion of each assignment is based on learners’ pace. Item 3 had 252 (84.0%) respondents agreed and 48 (16.0%) disagreed that it helps develop students’ problem solving. Item 4 showed that 210 (70.0%) agreed and 90 (30.0%) disagreed that courses needing practical are systematically arranged for the students such that learning is easier. Item 5 had 272 (90.6%) agreed and 28 (9.3%) disagreed that there is no compulsory teaching practice exercise to make up for the total credits required. Item 6 gave 286 (95.4%) agreed and 14 (4.6%) disagreed that Students are required to write a project before graduating.
Hypothesis 1

There is no significant sex difference in the assessment of the relevance of ODL programme of NTI vis-à-vis the mode of admission, cost effectiveness, relationship with job and business, convenience with family and other social demands, instructional delivery methods (multimedia, individualised learning and discussion method) and support services in meeting the demand for providing quality teachers for the UBE programme.

TABLE 2  Independent t-test analysis of difference between male and female assessment of NTI ODL programme in meeting the demand of providing quality teachers for the UBE programme (N=300)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sex</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-cal.</th>
<th>df</th>
<th>P level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexibility in mode of admission</td>
<td>Male</td>
<td>100</td>
<td>14.660</td>
<td>3.266</td>
<td>1.620</td>
<td>298</td>
<td>.106</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>200</td>
<td>15.265</td>
<td>2.933</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost effectiveness</td>
<td>Male</td>
<td>100</td>
<td>16.260</td>
<td>3.128</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>200</td>
<td>16.390</td>
<td>3.165</td>
<td>.337</td>
<td>298</td>
<td>.737</td>
</tr>
<tr>
<td>Relationship with job and business</td>
<td>Male</td>
<td>100</td>
<td>17.520</td>
<td>3.922</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>200</td>
<td>18.250</td>
<td>2.985</td>
<td>1.792</td>
<td>298</td>
<td>.074</td>
</tr>
<tr>
<td>Convenience with family and other social demands</td>
<td>Male</td>
<td>100</td>
<td>19.220</td>
<td>4.135</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>200</td>
<td>19.650</td>
<td>2.730</td>
<td>1.075</td>
<td>298</td>
<td>.283</td>
</tr>
<tr>
<td>Instructional delivery methods</td>
<td>Male</td>
<td>100</td>
<td>17.010</td>
<td>3.319</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>200</td>
<td>16.355</td>
<td>3.070</td>
<td>1.695</td>
<td>298</td>
<td>.091</td>
</tr>
<tr>
<td>Individualised learning</td>
<td>Male</td>
<td>100</td>
<td>18.650</td>
<td>3.163</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>200</td>
<td>19.035</td>
<td>2.740</td>
<td>1.068</td>
<td>298</td>
<td>.286</td>
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<tr>
<td>Discussion method</td>
<td>Male</td>
<td>100</td>
<td>19.530</td>
<td>3.160</td>
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<td></td>
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<tr>
<td></td>
<td>Female</td>
<td>200</td>
<td>19.690</td>
<td>2.852</td>
<td>.442</td>
<td>298</td>
<td>.659</td>
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<tr>
<td>Students support services</td>
<td>Male</td>
<td>100</td>
<td>18.120</td>
<td>3.273</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>200</td>
<td>18.860</td>
<td>2.886</td>
<td>2.000</td>
<td>298</td>
<td>.046*</td>
</tr>
</tbody>
</table>

*p<. 05; df = 298; Crt .t =1.960

Table 2 shows independent t-test analysis of difference between male and female assessment of NTI ODL programme in meeting the demand of providing quality teachers for the UBE programme with t-values ranging from 2.000 for support services to .337 for cost effectiveness. Out of the eight independent variables, sex had a significant influence on students support services (2.000) only. Others, such as, flexibility in mode of admission (1.620), cost effectiveness (.337), relationship with job and business (1.792), convenience with family and other social demands (1.075), instructional delivery methods (1.695), individualised learning (1.068) and discussion method (.442) were not statistically significant at 0.05 p level.

The table further shows that females had higher mean scores on flexibility in mode of admission (15.265), cost effectiveness (16.390), relationship with job and business (18.250), convenience with family and other social demands (19.650), instructional delivery methods (19.035), discussion method (19.690) and students support services (20.000) while males had a higher mean score on instructional delivery methods (17.010) only.

Hypothesis 1 is therefore rejected in terms of flexibility in mode of admission, cost effectiveness, relationship with job and business, convenience with family and other social demands, instructional delivery methods, individualised learning and discussion method. In any case, the hypothesis is upheld with respect to students support services.
Hypothesis 2

Occupational status of students will not significantly affect their assessment of the relevance of ODL programme of NTI vis-à-vis the mode of admission, cost effectiveness, relationship with job and business, convenience with family and other social demands, instructional delivery methods (multimedia, individualised learning and discussion method) and support services in meeting the demand for providing quality teachers for the UBE programme.

Table 3 One-way Analysis of Variance (ANOVA) of difference in occupational status of students on their assessment of NTI ODL programme in meeting the demand for providing quality teachers for the UBE programme (N=300)

<table>
<thead>
<tr>
<th>Group</th>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexibility in mode of admission</td>
<td>Between Groups</td>
<td>23.103</td>
<td>3</td>
<td>7.701</td>
<td>.823</td>
<td>.482</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>2770.693</td>
<td>296</td>
<td>9.360</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2793.797</td>
<td>299</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost effectiveness</td>
<td>Between Groups</td>
<td>87.528</td>
<td>3</td>
<td>22.509</td>
<td>2.300</td>
<td>.077</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>2896.419</td>
<td>296</td>
<td>9.785</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Total</td>
<td>2983.947</td>
<td>299</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship with job and business</td>
<td>Between Groups</td>
<td>97.966</td>
<td>3</td>
<td>32.655</td>
<td>2.989</td>
<td>.031*</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>3234.021</td>
<td>296</td>
<td>10.926</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3331.987</td>
<td>299</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convenience with family and other social demands</td>
<td>Between Groups</td>
<td>86.725</td>
<td>3</td>
<td>28.908</td>
<td>2.758</td>
<td>.043*</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>3102.261</td>
<td>296</td>
<td>10.481</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3188.987</td>
<td>299</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructional delivery methods</td>
<td>Between Groups</td>
<td>134.708</td>
<td>3</td>
<td>44.903</td>
<td>4.646</td>
<td>.003*</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>2860.678</td>
<td>296</td>
<td>9.664</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2995.387</td>
<td>299</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individualised learning</td>
<td>Between Groups</td>
<td>80.802</td>
<td>3</td>
<td>26.934</td>
<td>3.176</td>
<td>.025*</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>2510.585</td>
<td>296</td>
<td>8.482</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2591.387</td>
<td>299</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discussion method</td>
<td>Between Groups</td>
<td>31.486</td>
<td>3</td>
<td>10.495</td>
<td>1.205</td>
<td>.308</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>2577.911</td>
<td>296</td>
<td>8.709</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2609.397</td>
<td>299</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student support services</td>
<td>Between Groups</td>
<td>49.638</td>
<td>3</td>
<td>16.546</td>
<td>1.810</td>
<td>.145</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>2705.509</td>
<td>296</td>
<td>9.140</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2755.147</td>
<td>299</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p< 0.05; df = 2, 297; Crt .F =3.840

Table 3 shows the result of a one-way analysis of variance on occupational status of students involved in the NTI ODL programme which produced F-ratio in the range of .823 for flexibility in mode of admission and 2.300 for cost effectiveness, discussion method (1.205) and student support services (1.810). This result was not statistically significant at 0.05 p level. By this, it means that occupational status of students not significantly influence their participation in the NTI ODL programme which is aimed at meeting the demand for providing quality teachers for the UBE programme.

The F-ratio analysis was significant on students’ relationship with their job and business (2.989), convenience with family and other social demands (2.758), instructional delivery methods (4.646) and individualised learning (3.176). As seen from this result, Hypothesis 2 is rejected with respect to flexibility in mode of admission and cost effectiveness, discussion method and student support services. While the hypothesis is upheld in respect students’ relationship with their job and business, convenience with family and other social demands, instructional delivery methods and individualised learning.
Discussion of results

Looking at the result in Table 1, it was established that the flexibility of mode of admission (63.6%) was not necessarily a factor in meeting the demand for providing quality teachers for the UBE programme.

The NTI ODL programme was seen to be less expensive (18.6%, 62.0%) than the conventional schools. This is in consonance with other researchers who stated that the cost structure and pattern of instruction of ODL allows for economies of scale and convenience in learning thereby making it an attractive model of education for a broad category of learners (Hulsmann, 1997; UNESCO, 2002) as cited in (Ojo, Ogidan, and Olakulehin, 2006: 2). Also most of the students like those in the STUP programme were fully sponsored (235; 78.7%) by government.

On their relationship with their job or business, responses showed that their job (154; 51.3%) did not allow them go back to the conventional schools, but they can do so (221; 73.7%) through the NTI programme.

The ODL programme was seen as giving the mature students (190; 63.3%) the opportunity to go back to school irrespective of commitment to family members. Both lecture and tutorial methods (252; 84.0%) of lesson delivery was used. The tutorials supported by Rumble (2001: 31) who states that established distance education providers consider considerably on tutorial, showing how relevant it is. Lewis (1995, 242) states that tutorial is the main source of support for the student beyond the course materials. Also studies by Barron (1999a); Butcher (2003;) and Tooth (2000) as cited in Yusuf and Falade (2005: 24), Falade and Gunawardena (1996: 403-437; Riedling 1999: 8-13) confirm the fact that the print media is the most used form of material in lesson delivery of distance education institutions.

The importance of individualised learning (239; 79.7%) was established. Gibbs and Simpson (2002: 42) have provided evidence on the effectiveness of individualised instruction approach. Bertram (2003,5) reports on how effective is self-directed (individualised instruction) learning can compliment distance learning. Mason (2003) and Mills (2003) as in Lentell and O’Rourke (2004: 1-17) have equally provided evidence on the effectiveness of individualised instruction approach. Also discussion as a method of learning (277; 92.3%) was seen as giving learners time to interact with other

ODL teaching programme has great role to play in teacher education when harmonised with conventional teacher education (Perraton and Potashnik, 1997:1-39). They assert to the fact that their counselling needs (206; 68.6%) was attended to at point of registration. Ojo and Olakulehin, (2006: 7) agreed that counselling service of the learner is better met in ODL than in the conventional higher institution.

The result in table 2 showed that sex has a significant effect on the assessment of NTI ODL programme in meeting the demand for providing quality teachers for the UBE programme in the area of the students (2.000) support services. Mean score for the females were higher in most of the variables (flexibility in mode of admission 19.265; cost effectiveness, 16.390; relationship with job and business, 18.250; convenience with family and other social demands, 19.650; individualised learning, 19.035; discussion methods, 19.690; and students support services, 18.860) with males showing a high mean only on instructional delivery methods (17.010).

The analysis in Table 3 on occupational status of learners showed a significant effect on relationship with job and business (2.989) concerning with family and other social demands (2.758), instructional delivery methods (4.646), and individualised learning (3.176).
Recommendations

Open and distance learning is advantageous for people. For the learners, it means more freedom of access, wider opportunities and qualification. It is adjudged to be cheaper than other forms as it gives more learners the chance to study school while still working. Organisations see this as a better way of providing in-services training for their workers without having them leave their duty posts.

For the government and educational policy makers, it seems to be a form of relief towards solving the problem of equitable and accessible education at an affordable rate for all, and hence enhances the realisation of the objectives for which the UBE programme was established.

In view of the numerous barriers facing the distance learner, it could be suggested that courses should be presented in modules and a certificate awarded on the completion of each module. This method may motivate them to desire continuous learning.

Distance education will help bridge the gap between traditional education which caters for fewer learners. It also increases access to education many through non-traditional system, hence it should be encouraged. It will help provide access to education for those engaged in other activities, such as those who are working for government and private organisations, insofar as their jobs do not allow them attend conventional institutions. Government should create awareness, more public enlightenment and advocacy be intensified to encourage citizens to avail themselves with this opportunity of acquiring education at the least cost.

There are still others who are very far away from schools are located but desire to have some education. In a bid to tackle this problem, government should open up more centres, especially in remote communities to give access to those in the remote areas who may not be able to access this programme where they are currently located.

Lastly, more emphasis should be laid on the support services such as adequate counselling strategies which help learners make the right decision in their programme of study.

Conclusion

Open and distance learning is an organised educational activity. This is based on the use of teaching materials, which minimises the constraints on study in terms of access, entry, or time, place, pace, method of study, or the combination of above factors. It is a kind of educational approach fashioned to reach learners in their homes, workplaces, etc by providing learning programmes that offer quality education to learners without attending conventional schools. It creates opportunities for lifelong learning, opportunities and learning materials are accessible regardless of where, when and what to study.

Distance learning programmes before now relied mainly on text books and papers in place of lectures. This situation has changed, due to the innovations made through the information superhighway. The new trend has brought diversity style and format of lecture delivery to many distance learners. Open and distance learning programme allows greater access to educational opportunities, in meeting with the objectives of National Policy on Education (2004 rev. ed.). Also, the flexibility in the learning system allows learners to stretch beyond the study period at a convenient pace, in terms of the study time and ability to pay their fees at an affordable rate.

Distance education is based on creating the potential for greater independence of the learners. It is convenient, flexible and adaptable to learners circumstances.

What is needed is the ability to access and use the right type of method and techniques. Research comparing distance education to traditional face to face instruction indicates that teaching and studying at a distance can be as effective as traditional instruction, when the method and technologies used are appropriate to the instructional tasks, there is student-to-student interaction, and when there is timely teacher-to-student feedback. The strategies adopted depend on the type of programme and the needs they are designed to emphasise. In distance education, the emphasis is more on the learners rather than the teachers.
References


SUSTAINABLE HUMAN DEVELOPMENT THROUGH OPEN AND DISTANCE LEARNING: TOOL FOR HIV/AIDS AWARENESS AND PROMOTING HEALTHY ENVIRONMENT FOR CHILDREN

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and
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Anambra State University
PMB 02, Uli
Anambra State

Abstract

Sustainable education gives answers to human development questions. Human development demands that men and women have rights to be appropriately informed about the global crisis level of HIV/AIDS. This paper examines the premise of Open and Distance Learning (ODL) as the tool to disseminate sound education about HIV/AIDS to people of all walks of life and to rural communities. The prevalence of the disease given data collected from a hospital in Anambra State shows that women are more infected than men. Possible reasons judging from the social standards of the area, in Ihiala Local Government why children are infected are given. Children are vulnerable to diseases but given enabling environment they can grow to their full potentials. ODL can serve as tool to impact on this nation to consciously conserve the environment for human development / children's well being. ODL could be a means to reach the masses to enhance the quality of life and bring about attitudinal changes for meaningful living, HIV prevention and treatment.

Introduction

The focus of all types of development – economic, social, cultural and political is human development. Open and Distance Learning (ODL) is an education process for enhancing human development while offering flexible opportunities to people of all walks of life to be adequately informed about themselves and their environment. According to Rodes, Knaczyn, Chapman and Chung (2000), the most significant premise of distance education is reaching the non-traditional learners who cannot enrol in formal school. With the current trend of many people of adult age longing to be educated, ODL offers opportunities to individuals to attain their full potentials without being deterred from fulfilling their family and health care responsibilities.

Lack of employment, constant industrial actions and insecurity in Nigeria have made long years of school unattractive (Egbue, 1999 and Zeile, 1999). The ODL system may be used reach out to several people in the country to provide them with quality information/sustainable education on human development. This is very because a high percentage of Africans are not literates and one of the ways of increasing literacy rate is to encourage distance learning which will accommodate:

i. 'drop-out' citizens
ii. citizens who want to enhance their educational status
iii. citizens who lack formal education and those who require in-service training

(Adeniji, 2002:78)

This could be achieved through correspondence students through Internet, weekend or evening programmes in schools institutions that provide enabling environment for effective/meaningful learning.

In addition, many people in Nigeria are suffering (HDR, 1996:1) and they seek accurate answers on human development questions:
Can human beings live long? Can they escape avoidable diseases? Can they be well nourished? Are they able to read and write and communicate and develop their minds? (HDR, 1996:1)

Human beings can live long if they can escape avoidable diseases like HIV/AIDS. Human beings need to have sound knowledge and be adequately informed about the crisis level of HIV/AIDS globally. Thus, one of the essential tasks of ODL must be to educate the public (rural and urban communities) about HIV/AIDS crisis. The facts must be known and information aggressively disseminated to eradicate as much as possible ignorance about the scope of AIDS crisis, the causes and intervention for change. Although education and prevention have been existing since the 1980s, the rate of spread of the disease has been so alarming that it requires maximum attention, politically, socially and educationally. This paper urges ODL to shift from the type of educational policies in Nigeria which focused on general literacy level by increasing teachers’ training, building schools and tertiary institutions (Nzelibe, 1999), while neglecting the fundamental human care for effective sustainability. There is need for ODL to reach the masses to enhance their quality of life and bring about some attitudinal changes vital for meaningful and responsible living. The flexibility of time and location that ODL provides, gives her opportunity to address the urgency of awareness need of HIV/AIDS especially in rural areas.

A look at the global level of people suffering from HIV/AIDS suggests that despite campaigns, workshops and conferences so far mounted to create awareness, a lot more can be done through ODL to encourage people to participate in the fight against HIV/AIDS. Research has shown that 42 million people worldwide are living with HIV/AIDS:

Of the estimated 42 million people, more than 28 million, some 70%, live (and die) in sub-Saharan Africa. According to UNAIDS, 2.4 million Africans died of AIDS in 2002, and 3.5 million new infections occurred in the region. In 16 African countries, at least 10% of people aged 15 to 49 are infected with HIV/AIDS:

(UNAIDS, 2002: 34 – 36)

The data below show the extent of the global spread of HIV/AIDS in some African countries.

Global Data

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults and children living with HIV/AIDS by 2007</td>
<td>33,200,000</td>
</tr>
<tr>
<td>Adults living with HIV/AIDS (aged 15 and over) by 2007</td>
<td>30,800,000</td>
</tr>
<tr>
<td>Prevalence rate of adult HIV/AIDS (15 – 49)</td>
<td>0.8%</td>
</tr>
<tr>
<td>Number of men living with HIV/AIDS (aged 15 and over)</td>
<td>15,400,000</td>
</tr>
</tbody>
</table>

Country Data

People living with HIV/AIDS by 2005:

<table>
<thead>
<tr>
<th>Country</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>5,500,000</td>
</tr>
<tr>
<td>Nigeria</td>
<td>5,500,000</td>
</tr>
<tr>
<td>Kenya</td>
<td>1,300,000</td>
</tr>
<tr>
<td>Uganda</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Cameroon</td>
<td>510,000</td>
</tr>
<tr>
<td>Ghana</td>
<td>320,000</td>
</tr>
<tr>
<td>Central African Republic</td>
<td>250,000</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>49,000</td>
</tr>
<tr>
<td>Gambia</td>
<td>20,000</td>
</tr>
</tbody>
</table>


In Nigeria, there is a state-wide variation prevalence ranging from 10% in Benue, 8% in Akwa-Ibom, 2% in Ekiti and Jigawa (UNAIDS, 2006). Between December 2006 and March 2008, data collected from only one hospital in Ihiala Local Government, Anambra State showed that 68 children (35 males and 33 females) and 777 adults (237 males and 540 females) were suffering from HIV/AIDS. Out of this number, the adults were receiving counselling in the VCT section of the hospital. The data shows that females seem to be more affected. This figure of 540 females against 237 males seem to agree with earlier research about “systematic discrimination” against women (Irwin, Millen and Fallows, 2006:31). Violence against women and rape is widespread and where sex is forced the risk of HIV infection is high.

One may deduce why as many as 68 children are HIV-positive from only one hospital in Local Government in Anambra State. Research has shown that adolescent girls from ages 11 – 12 years expose themselves to pre-marital sex with bus conductors, drivers and adult men during the process of street hawking (Ezeji, 2007). Female genital mutilation and girls’ trafficking have also increased the vulnerability of girls to HIV/AIDS. Many school girls expose themselves to “sugar daddies” to provide their basic needs. Some parents resort to self-medication due to financial constraints. In some rural areas, traditional attendants without formal training and medical skills circumcise children in their local clinics. Owing to poor or lack of appropriate sterilisation procedures, HIV infection is transmitted. Unskilled midwives jeopardise the health and lives of pregnant women and their unborn foetuses (Anyanwu, 2006). In addition, early marriage and lack of sexual empowerment expose young ones into high risk of HIV.

That women are more affected agrees with the research that women are discriminated against (Irwin, Millen and Fallows, 2006:31). According to Onyegegbu (2006), gender roles affect the risk of reproductive health, e.g. HIV/AIDS when it interferes with the women’s ability to communicate and negotiate on issues of sexual health. There are other factors which are correlates of HIV transmission. For example, men are traditionally permitted to have many sexual partners. In many areas in Anambra State, including Ihiala Local Government Area, polygamy is still acceptable. Many women and children are forced into prostitution because of poverty. “Low socio-economic status of women exposes them to early sexual abuse” (Onyegegbu, 2006:31).
17 – 19). Hence, the number of women suffering from HIV/AIDS continues to increase in spite of the global level of the crisis.

Akudinobi, (2005) found that many young people in Ekwusigo Local Government still do not believe that HIV/AIDS is a reality. In some areas e.g. Ekwerazu, Ahiazu Local Government, of Imo State, infected persons are discriminated against (Ohaegbulam, 2007). AIDS education therefore cannot be overemphasised. Apart from embarking on campaign through ODL, the rights of men and women to be informed through formal education in schools is today a welcome programme in school’s curriculum. ODL becomes a more aggressive option to provide continuous education through the media (television, radio, magazines, newspapers, signposts) for adults of all walks of life. The stigmatisation attached to the disease because of the general belief that HIV/AIDS is promiscuity driven may begin to reduce. People will no longer be afraid of undergoing HIV test. Infected patients will be opted for counselling and voluntarily accept Antiretroviral (ARV) treatment.

Also, this paper examines promotion/maintenance of healthy environment to reduce the rate of infant diseases. Environmental issue is as much a universal problem as HIV/AIDS. With the current explosion on environmental issue as it affects the health of human beings, ODL can go beyond what science education in Nigeria has failed to address.

The danger of uncontrolled usage of chemicals, dumping of toxic wastes, oil spillage, mining, radiation especially for children aged 1-5 is frightening. In Africa, it is estimated that one-fifth of total number of children in the region do not live to their 5th birthday because of environmental related diseases (WHO, 2003). Malaria, diarrhoea, respiratory and skin infections, are some of the diseases. Agwubike(1985) estimated that 1,000 children in Nigeria die yearly from the poor environment related disease such as diarrhoea disease. Research conducted in three health centres in Azia, Ihiala Local Government showed that out of 80 children brought to the health centres in April 2008, 50 were treated for malaria and diarrhoea, 30 for both anaemia and malaria. Unfortunately, some children who survived malaria may suffer long-term consequences of the infection. According to Gracey (1997), malaria and diarrhoea are major environmental diseases that lead to death of many children.

Children have the right to healthy environment and attain their highest potentials as they grow to maturity. The disregard for the environment informs may be curbed by increase in learning activities (formal or informal) which may continue to create equal but reverse the effect of the discomfort of humanity (Gusau 2007). The state of affairs in Nigerian cities calls for conscious enlightenment of the public if the environment must be conserved.

Though efforts are being made at both Federal and State levels to manage waste in the cities, the problem of heaps which seem to have characterised urban environments in Nigeria has become the most intractable problem facing the general public.

ODL may introduce into the curriculum for distance learning, environmental sustainability for human life. If the essence of technology is to solve human problems, one may infer that conservation of the environment may also supply answers to human development questions. “Can human beings live long? Can they escape avoidable diseases?”

People are the real health of the nation. Basic objective of development is to create an enabling environment for people to enjoy long healthy creative lives. (HDR 1990-9).

Therefore, applying ODL can make considerable impact humanity’s understanding of development by placing the dimension of human health at the centre of sustainable development.
Conclusion

The facts about HIV/AIDS must be known. People can live long if they are adequately informed through education. The tool for appropriate education is ODL because it can be used to reach out to several people, – the media, weekend, and holiday programmes. Using ODL will not only increase the literacy level in Africa but also provide answers to human development questions. When people live long because they are well informed about how to avoid, prevent and treat diseases like HIV/AIDS, the economic, political and social life of any nation are invariably sustained.

In addition, the right of children to grow in a healthy environment is unquestionable. Efforts so far made by the Federal and State Governments to keep the environment in Nigerian cities have yielded little fruit. Hence, children continue to suffer from preventable diseases. Learning activities such as ODL offer forums to understand the implication of healthy environment for healthy living and national development.

References


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CHANGING ROLE OF HIGHER EDUCATION LEARNER: REASONS FOR ESTABLISHMENT OF ODL AT MOI UNIVERSITY

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Abstract

Demands for opportunities at university level continue to increase as a result of population growth and the necessity for continuing education in order to upgrade or learn new skills. This means that the majority of learners in ODL are generally adults who have other commitments or responsibilities. They form a highly disparate and heterogeneous group with varying processes, existing stock of knowledge, skill values, prior experiences, age and worldly responsibilities. This in effect, is a new situation reflecting a change in learner profile.

This paper, examines ODL as a mode or strategy of providing opportunity for accessing education. Thus, ODL provides avenues for obtaining formal qualifications for those who could not do so it earlier or through conventional means due to a variety of reasons. In such cases, ODL provides a means for individuals to pursue a degree of choice without giving up one’s job or other responsibilities and commitments, hence increasing access to academic programmes at university level.

Under these circumstances, the paper will highlight the significant role, potential and impact of ODL as a means of equalizing opportunities in education in today’s new and challenging scenario. We perceive ODL as a flexible mode of education provision which is not limited by most of the constraints associated with conventional mode of education. Also the paper attempts to look into challenges faced in establishing ODL programmes, taking Moi University as case study.

In recognition of the changing learner profiles, Moi University has established a Directorate of Open and Distance Learning to cater for the varied needs of the potential learners. These needs cannot be satisfied through the conventional face-to-face approach to education provision. As such, Moi University intends to be on the right path towards meeting some of the challenges of the millennium development goals. In Kenya, ODL system of education today is developed at post-secondary education level, and most of its students have a variety of reasons for pursuing learning at a distance: constraints of time, distance, finances, the opportunity to take courses or hear outside speakers who would not otherwise be available, antigrade contact with other students from different social, cultural, economic, and experiential backgrounds (Willis, 1993). As a result, they get not only new knowledge but also new social skills, including the ability to communicate and collaborate with widely dispersed colleagues and peers whom they may never have seen.
Introduction

The population growth in Kenya has increased rapidly during the past 20 years, and today stands at about 36 million. This growth has created pressure for expansion of primary, secondary and higher educational institutions in the country, also prompting the government to review its education policy leading to the inclusion of ODL in approaches to education provision. For example, in 2003, the Kenyan Government proclaimed free primary education for all school-going children. This proclamation portends to exceed the nation’s capacity to provide adequate educational services at higher education levels. This would easily be allayed by the ability to take higher education to change and induce change for progress in today’s society which is increasingly becoming knowledge-based. The Kenyan higher educational system therefore, like in any other developing country, is confronted with formidable challenges which require radical changes and renewal in the face of economic constraints, as stipulated by UNESCO 1998, higher education needs to:

- Provide opportunities for higher learning and for lifelong learning throughout life, giving to learners an optional range of choice and a flexibility of entry and exit points within the system, as well as an opportunity for individual development and social mobility in order to educate for citizenship and for active participation in society (UNESCO 1998:21).

The UNESCO (1998) stipulation thus, leads to a demand for diversifying higher education models and recruitment methods and criteria to meet rising demands for higher education such that access is made possible to accommodate a wider public and lifelong education through flexible entry and exit points. With 7 public and about 30 private universities, the race between Kenya’s education provision and population growth, particularly in higher education continues to be challenging. The pattern of growth in Kenya shows the trend in the following table, a growth that higher education stands to provide satisfactorily with access. This demand continues to be a challenge to the country’s higher education system.

Table 1 Population trend – Kenya

<table>
<thead>
<tr>
<th>YEAR</th>
<th>POPULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1969</td>
<td>10,942,705</td>
</tr>
<tr>
<td>1979</td>
<td>15,327,061</td>
</tr>
<tr>
<td>1989</td>
<td>21,448,774</td>
</tr>
<tr>
<td>1999</td>
<td>29,500,000</td>
</tr>
<tr>
<td>2008</td>
<td>36,000,000</td>
</tr>
</tbody>
</table>

Like any other developing country in Africa, Kenya therefore is faced with demands for innovative educational approaches and is turning to open, distance and e-learning as a means of providing the much-needed opportunities in higher education. This is a significant change in Kenya’s higher education, marking the collapse of elitism and opening-up of universities to large numbers of students. Open and Distance Learning (ODL) is increasingly breaking bricks and mortars of both inner and outer walls of the university which had for long been recognised as a citadel of higher education and therefore, has started to provide an important alternative for the economically challenged countries of the South. Possibilities afforded by ODL are today very broad. Apparently, it is emerging that it can be used in conjunction with conventional education, reaching large number of persons who cannot afford time to enter into the schedules of conventional university system. It also makes use of the ubiquity of powerful Information and Communication Technology (ICT) and attitude changing techniques for the users.

However, ODL is most vulnerable when its operations are not run smoothly. The problems will often occur when slow and cumbersome bureaucratic procedures and administrative procedures tend to engulfs the ODL operations. At Moi University, administrative procedures often create bottlenecks that tend to slow down smooth running of ODL activities.
Emerging Kenyan learner characteristics

The advent of technology and in particular, the unprecedented advances in information and communication technologies, have helped turn the world into a global village. Political, economic and cultural changes now influence people worldwide almost instantly. The field of education has significantly been affected by these developments and the tremendous advancement in recent years in ICT is perhaps the most important contributor to the rapid expansion of open and distance education. In fact, as expressed by Peter in Keegan (1995:5) in the early 1970s,

Distance education and technology are intrinsically linked. The developments in technology of the Industrial Revolution in the 19th Century gave birth to distance education. By separating the teacher and learner and using technology to establish communication between them, it became possible for the first time in history to teach at a distance.

What is being observed worldwide is that the reach of electronic media, both in terms of area and population served, has expanded significantly. Type of student, the reliability of the technology and the availability of adequate technical support, are examples of critical components for the continued development of distance education approaches. With the Kenyan government’s expansion of secondary school education since 1980, the number of graduands from these schools has created a high proportion of qualified students that the capacity of public universities cannot absorb. Many of these secondary school leavers get their ways into tertiary colleges and some get employed in lower levels in government institutions, corporate institutions, while others join the ‘Jua kali’ – the self-employment ventures. The number of these graduands continues to rise, as demonstrated in the following table 2, which recent public university admission figures establish capacity restraint.

Table 2 University admission trend

<table>
<thead>
<tr>
<th>YEAR</th>
<th>CANDIDATES</th>
<th>QUALIFIED</th>
<th>ADMITTED</th>
<th>MISSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>260,665</td>
<td>68,040 (26.1%)</td>
<td>10,000 (14.9%)</td>
<td>58,040 (85.3%)</td>
</tr>
<tr>
<td>2006</td>
<td>243,453</td>
<td>62,926 (25.8%)</td>
<td>16,151 (25.7%)</td>
<td>46,795 (74.4%)</td>
</tr>
<tr>
<td>2007</td>
<td>276,239</td>
<td>82,134 (29.7%)</td>
<td>20,000 (24.4%)</td>
<td>62,134 (75.6%)</td>
</tr>
</tbody>
</table>

For example, as given in table 2, out of 260,665 candidates who sat for Kenya Certificate for Secondary Examination only 68,040 (26.1%) qualified admission into public universities. However, out of all these, only 14.9% were admitted leaving 85.3% missing access to the country’s public universities.

Table 3 Admission trend graphic representation

![Graphic representation of admission trend](image-url)
However, the ubiquity of ICTs today has played a significant part in keeping hope for the pursuit for higher learning among many secondary school leavers, - those in ‘Ju’kalé, white collar workers, technicians, and those in health services. Today, such thirst for higher education among Kenyan population cannot be accommodated in traditional instruction system in the universities as shown in table 3 above. But this characterizes the case for the increasing demand for higher education and more important, the need for universities to get away from the pedagogics of traditional instruction and create and implement the pedagogics of enablement in its place.

Drawing from Table 3 a summative overview can be used to express the worrying situation as for the last 3 years (i.e. 2005-2007, for 46151 students) only a percentage of 5.9% of 780,357 secondary school leavers were admitted into public universities in Kenya. Thus, Kenyan universities face the need to incorporate tensions between national realities and international trends, thus the forces of globalization cannot be held completely at bay, such forces are dictated from afar. The advent of ICT is rapidly changing social behaviour of most Kenyans. Many spend most of their time on internet, surfing for information and interacting with friends or transacting official matters.

Undeniably, ICT has captured the attention of Kenyan learners in today’s modern times when the population is embracing individualistic social behaviour. And what is becoming more apparent is that most of the Kenyan learners are beginning to enjoy the novelty and mutual excitement generated by the use of ICT in connecting them to the ‘superhighway’. They have become entranced with opportunity to join the academic world. The essence of this is to enable the Kenyan population participate effectively in the information and knowledge based economy. Thus, there is a changing scenario for enabling pursuit for higher education among Kenyan working population who earlier missed access to public universities for a variety of reasons, among them limited access and lack of fees.

This group of Kenyans comprise learners whose study programmes may not conform to the traditional access which has been developed in traditional universities. They would therefore benefit from ODL programmes which would accommodate their characteristics as Peters (1998:22-23) proposed as:

- First, they will usually have much greater experience of life. This means that they approach their studies quite differently, have different attitude and assess it differently.

- Second, most of them bring considerable experience of working life to academic courses, and this also has an effect on the ways in which they study, in particular when the studies and the professional experience cover the same field. A serious consequence of this special feature affects the organization of distance teaching. Most of them in fact would have to study while they are working.

- Third, they are students who want to reach a higher socio-economic status as a result of their experience at work. They are therefore the upwardly mobile students.

- Fourth, some of them decide to resume studying at a relatively late age which has in general, a completely different function than 18-25 year old students. They would find ODL provision fitting into their plans for life and life cycles in different ways.

- Fifth, it is interesting that Kenya today has the oldest learner in primary school classes – a Mzee Kimani Murage, aged 88, currently in class Five at Marula Primary School in Nairobi, ostensibly the oldest pupil in Kenya.

Thus ODL learners have aims and goals which may be quite different from those of traditional students. Wills (1993) had observed that distance learners have a variety of reasons for pursuing learning at a distance. Such reasons would include constraints of time, distance, finances, the opportunity to take courses or hear outside speakers which would otherwise be unavailable, and the ability to come in contact with other students from different social, cultural, economic, and experiential backgrounds.
An interesting task for distance education to emerging group of learners is its offer of a much needed access to higher education. As such ODL, aiming to provide opportunities for these learners, would respond to the following questions for its establishment in universities:

- Should we offer these students the same teaching as in traditional universities?
- Should we take into account their age, their greater experience of life and employment, their different motivational situation, and even their double or triple load of studies, job and family?
- Should we develop a learning and teaching programme tailored to their special needs?
- Is it essential to plan and establish adult studies

Every educationalist will answer these questions with ‘yes’. It is quite natural that teaching is developed with regard to students in their special situations, and how this is done is, however, a complicated problem that engenders pedagogical considerations.

The demand for the adaptation of studies to the special requirements of adults in employment usually is a challenging task, because most university teachers reject it from the start. Why? Their attitude is connected to their academic socialisation in traditional universities.

Traditional university education has primarily laid claim to a scientific character, assumed that students are capable of learning and valued, or even ignored, the educational aspects of teaching. Expository teaching processes were the most suitable for this way. The primacy of the scientific character was internalised and created an attitude among university teachers that there is only one form of scientific teaching, which arises from the relevant research. This form of teaching must in principle be the same for all students. In their opinion, the reception of teaching and the acquisition of the corresponding knowledge is a matter for the students. (Schulmeister, R. 1995).

What is completely forgotten in this approach to teaching in traditional universities is that:

- Learners are individuals who bring their own needs and history to the learning environment.
- A person’s individual profile or learner characteristics will determine the way he/she responds both to formal and informal learning environment.
- Every learner is an individual and general learner characteristics should only be used as a guide.

Factors influencing learner characteristics

Many important issues stem from the characteristics of distance learners, whose aims and goals are often quite different from those of traditional students. The characteristics are influenced by a number of factors, which include the following:

- Cultural Background

Facing an ever-increasing evolvement of learner characteristics, it is paramount to be sensitive to the needs of different cultural groups of learners, issues such as language and cultural diversity. Diversity should be seen as a positive aspect in sharing knowledge and experiences to promote understanding and tolerance. It is important to ensure that the learning materials do not cause offence to learners from different cultural groups (esp. Graphics etc.)
· Religion

Various religious practices e.g. specific times for certain activities – prayers, food types, holidays, fasting, and mode of dressing, deserve careful approach in designing instructional programmes and materials to help overcome feelings of isolation.

· Personality

Personality traits including maturity level, adaptability and attention span will impact on the way a learner interacts and participates in a learning situation. It is therefore imperative to use a range of methods and strategies in the design of instructional materials to ensure that learners with different learning styles are met.

· Age

A person's age may affect how he/she learns and interacts with other learners. Mature individuals often have a wealth of experience, which they bring to a learning situation. They create a diversity that can be used as a learning resource when learners share their experiences in chat rooms or through blogs.

· Health

Learners with physical challenges, hearing impairments and those with visual challenges who may require Braille, larger print in learning situations will often need special attention. It is in ODL environments where all these varieties may be possible as individual learners are targeted and their needs taken into consideration.

· Gender, marital status and family ties

Every learner is an individual and should not be disadvantaged because of gender, partner status or their family commitments. Learners with other commitments (e.g. family, work) often need flexible learning approaches that provide them with a range of learning, schedule, and assessment options.

The growth of student enrolment in ODL programmes stems from the added advantage of course flexibility. Students can take courses from preferred locations that are convenient to their schedules. This advantage is appealing to most learners because it accommodates their work schedules and permits flexibility to manage their family life.

The dominant feature of ODL is the physical and temporal distance that separates the teacher and learner. This portends well for the various learner characteristics as demonstrated earlier. The students will often find themselves in unique situations in which neither teachers nor fellow students are physically present to clarify, discuss or provide feedback. This aspect of ODL has brought in the need for effective learner support systems in its structures and effective use of ICT.
Why ODL at Moi University

With the current trend of public universities increasing minimum entry grades year after year and private universities becoming expensive for many learners to afford, only a small fraction of qualified applicants, for example, out of 62,926 candidates who qualified in 2006, about 30,000 (i.e. 47.8%) found places in the 40 public and private universities. It is astonishing that 53% of the qualified graduands did not find access to universities. This demand-supply misalignment in Kenya will continue for the foreseeable future. Therefore, many of the developing countries of Africa, Kenya today is turning to ODL as a means of increasing higher education supply.

The Directorate of Open and Distance Learning (DODL), Moi University, was established in November 2007. Its main function is to coordinate implementation of ODL programmes. In the academic year 2008/2009, Moi University had a capacity for 3,404 students. This is a meagre 4.1% of the total qualified secondary school graduands in the year 2006. It is just a drop in the ocean as the number of students who qualify for university places has increased and they continue to seek for more admission places. Even the provision systems (Government and Privately Sponsored Student admissions, PSSP) practised in Moi University, cannot effectively absorb the number of these applicants. The university, which was established in 1984 as a single mode university – a Conventional Education mode (CE), incorporated the ODL approach from the year 2007. The philosophy that guided the establishment of ODL was motivated by the ideals propounded by Otto Peters (1997), a Guru in the field of distance education thus:

We must think the unthinkable, namely that our traditional system of education in school and university buildings, in face to face classes and lectures, can never cope with the tasks ahead. Hence teaching and learning must be organised in another way, more flexible, variable, convenient, and cheaper and geared to many different kinds of students, among them also the large group of employees in the professions. (Peters, 1999:46)

The popularity of ODL within the country is high evidenced by the large number of learners in 2007 (i.e. of the qualified 29.7% and those missing admission 75.6) subscribing to programmes offered by foreign institutions either singly or in collaboration with local institutions. This is an indication that the implications of ODL programmes at Moi University is a measure intended to increase student enrolment.

In the Moi University 10-Year (2005-2015) Strategic Plan, the University Council approved the establishment and full implementation of ODL between 2005 and 2007. The background behind this was that the University's physical facilities were overstretched and could not cope with any extra residential students. Although the University responding to this challenge by opening up satellite campuses, the response is still largely constrained by the limited available physical facilities. With establishment of ODL, the ideal is to attain a status which will eventually lead to a reduction in direct and indirect running costs for the institution in light of dwindling government support and within a scenario of limitless student population. In addition, it is expected to post better economies of scale through optimal use of lecturers and course materials, while the learner benefits from lower tuition and living costs.

The working practice in the Directorate of ODL at Moi University, though still at its initial stages and with a thin staff, encompasses:
Promoting synergism – working together cooperatively to provide creative solutions to the building of DODL

Planning for preparation of learning materials that are effective for DE and e-learning

Planning the implementation of learning of meaningful motivational learning materials for varied experiences

Sensitising lecturers on the role of DE teaching learning

Developing an e-learning platform

Conclusion

In an ideal ODL environment, there is no need for permanent classrooms, big physical libraries or accommodation facilities. Learners study from locations desirable to them and may only periodically need institutional space for face-to-face sessions such as during orientation and examination times. Space can therefore be hired for the required periods.

ODL is flexible and is suitable for all potential learners and more specifically to those with job commitments or social responsibilities that would otherwise prevent them from attending the conventional classes. As such, the student population is limitless. In addition, ODL narrows gender and other disparities where learners find it difficult to join the conventional mode of education. It also opens access to all other disadvantaged and marginalized groups. Hence, ODL attempts to expand access to capture all those who actually support the funding of public universities, thus the rational stated by Douglas (1996) here below should be embraced by all public institutions:

Surely a state-supported institution such as the university cannot discharge its full obligation by ministering merely to the needs of the relatively small group who can establish residence on its campus. A forward-looking aspiring university should say to the citizens who sustain it: our campus is the state. If you can't come to the university, then the university will come to you. (Douglas, 1996:875).
References

Agalo. J. (2002). Approaches to Distance Education in highly industrialised and developing countries with specific reference to Germany, United Kingdom and Kenya. D.Phil Thesis, Moi University, Eldoret, Kenya.


Abstract

Bangladeshi societies often impose physical restrictions on women's mobility. The impact of cultural norms on women's education is visible. We know that attitudes are difficult to change, but changes are required in those attitudes of men, that are derogatory or patronising to women. The lives of Bangladeshi women are very complex, and no simple solution is possible to their problems. It is impractical, in the present context of the Bangladeshi scenario to suggest any overnight or radical changes. Through education, a woman can become self-reliant, more aware of the changes in her surroundings, and have better self-esteem. The submission is that women must have wider access to education, which can be possible through distance education. Distance education overcomes many obstacles faced by the Muslim girls and women in Bangladesh because, in distance education time, needs and places of the students are regulated according to their convenience. This paper highlights the use of distance education through a series of case studies of Muslim women of Bangladesh Open University and identifies some of the common problems and solutions in strengthening basic education through open and distance learning.

Introduction

This article examines the role that open and distance learning plays in providing access to secondary education for women in Bangladesh. Open schooling provides a flexible and adaptable approach to learning that is compatible with the cultural roles and responsibilities that often restrict and constrain females from continuing secondary education. Education statistics show that there is a significant decline in the number of females enrolled from primary to secondary school (UNESCO, 2000). Primary net enrolment ratio - 88% and boys 80%. Here gender gap is 3%. Secondary gross enrolment ratio is boys - 56% and girls - 52%. Here gender gap is 4%. (Sources: Statistical Yearbook 1999). Reasons for this are many and include poverty, early marriage, ill health, pregnancy, and cultural constraints on female education.

The case for formal education is well documented. Education is seen as an indispensable agent to bring about a qualitative change between what we are and what we want to be. In this context the role of distance education is not an option but an unavoidable imperative for many of us (Dhanarajan, 1996). It has been demonstrated categorically in a wide range of studies that an informed and educated mother can cater for the health and nutritional requirements of the child in a much better way than an uneducated mother can.

The significant impact that education has on women and their households is well documented. It has been shown that educated mothers are able to be more efficiently to enhance the quality of their children's education. (Raj, 1982; Haudy, 1995). What makes the task of educating women potentially more difficult is that illiteracy is concentrated in countries with low per capita income. Poverty and illiteracy in general are positively correlated. The poor can ill afford to forego current earnings in favour of education that may possibly lead to higher income later on. In the case of girls from poor households, choice is even clearer. Given the social construction of gender roles, boys will be given preference over girls in matters of education. Especially since after marriage, women leave to join their husband's families and, hence are not regarded as being useful to their own families in the long term (Lunnborg, 1994). When resources are limited and opportunity costs are high, the girl is doubly condemned. The second factor that works more directly against educating women is the dominant social code in some parts of the region that prohibits intermixing of the sexes.
Societies often impose physical restrictions on women's mobility. Studies from Bangladesh, India, Nepal and Pakistan have clearly shown that parents refrain from sending their daughters to school not so much because they fear for their safety, but because they are wary of upsetting traditional gender roles which give girls little choice in matters of education (Kanwar and Taplin, 1999). The impact of cultural norms on women's education is clearly visible. The only way to increase literacy levels among women and young girls is to generate the demand for literacy, implying thereby that it is not lack of resources but the absence of demand, which is the constraining factor. We know that attitudes are difficult to change, but changes are needed in those attitudes of men, that are derogatory or patronising to women. The lives of Bangladeshi women are very complex, and no simple solution is possible to their problems.

It is impractical, in the present context of the Bangladesh scenario to suggest any overnight or radical changes. One must, therefore, find out ways that are acceptable. Through education, a woman can become self-reliant, more aware of the changes in the surroundings, and have better self-esteem. The importance of education is affected by the various forms of discrimination against women based on their social and economic dependence on men in a male-dominated society. In order to improve their situation, women must have wider access to education, which can be possible through distance education.

Distance education overcomes many of the obstacles faced by the Muslim girls and women in Bangladesh because, in distance education times and places of the students are regulated according to their convenience. In this article, the main concern is to highlight the use of distance education through a series of case studies of Muslim women of Bangladesh Open University and to identify some of the common problems and solutions in strengthening basic education through open and distance learning.

Open and distance learning in Bangladesh

The Open School is part of the Bangladesh Open University (BOU), and it offers secondary education through two formal programmes – the Senior Secondary Certificate (SSC) and the Higher Secondary Certificate (HSC). This paper is concerned with the former. BOU was established on 20th October 1992 by an act of the parliament with the objective of transforming the vast human resources into an educated and trained work force. The University is composed of six academic Schools (faculties), and the Open School accounts for roughly 40% of the student enrollment.

The Senior Secondary Certificate (SSC) exam is the first public examination; the minimum entrance requirement is 8 years of schooling. There is a great demand for admission into the SSC course and students are allowed up to five years to complete their course. The following table shows enrolment for the last seven years and the percentage of males and females.

Table 1 – Enrolment for the Senior Secondary Certificate

<table>
<thead>
<tr>
<th>YEAR</th>
<th>TOTAL NO. STUDENTS</th>
<th>MALE</th>
<th>%</th>
<th>FEMALE</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>16,199</td>
<td>8,938</td>
<td>55.18</td>
<td>7,261</td>
<td>44.82</td>
</tr>
<tr>
<td>1996</td>
<td>12,855</td>
<td>7,082</td>
<td>55.09</td>
<td>5,773</td>
<td>44.91</td>
</tr>
<tr>
<td>1997</td>
<td>15,881</td>
<td>8,352</td>
<td>52.59</td>
<td>7,529</td>
<td>47.41</td>
</tr>
<tr>
<td>1998</td>
<td>16,281</td>
<td>8,866</td>
<td>54.46</td>
<td>7,415</td>
<td>45.54</td>
</tr>
<tr>
<td>1999</td>
<td>23,854</td>
<td>13,413</td>
<td>56.23</td>
<td>10,441</td>
<td>43.77</td>
</tr>
<tr>
<td>2000</td>
<td>25,694</td>
<td>14,132</td>
<td>55.00</td>
<td>11,562</td>
<td>45.00</td>
</tr>
<tr>
<td>2001</td>
<td>31,783</td>
<td>17,481</td>
<td>55.00</td>
<td>14,302</td>
<td>45.00</td>
</tr>
<tr>
<td>Total</td>
<td>142,547</td>
<td>78,264</td>
<td>55.00</td>
<td>64,283</td>
<td>45.00</td>
</tr>
</tbody>
</table>

(Source: Examination Division, BOU)

Table 1 shows the total number of students enrolled in the Secondary School Certificate programme over the past seven years. Interestingly, the gender ratio is 55% male and 45% female. This is an encouraging way forward in bridging the gender gap.
Data collection

We conducted in-depth interviews and case studies with a wide range of female learners. The case studies help to illustrate the various experiences learners encounter. The women selected, as depicted in this paper, were seen as representative of other women.

Case 1 – Noorjahan: Search for identity

Noorjahan is from Naogoan. She is 28 years old. When she was 12 years old, her parents divorced. She had two younger brothers and a sister. Her mother was very frustrated by the divorce. She spent most of her time praying and engaged in religious activities. All worldly things became meaningless to her. Their living conditions were difficult. They did not have enough money to pass their life smoothly. When she was in Class 8, her mother wanted her to give up school work in a garment factory to earn money. However, Noorjahan expressed her strong desire to continue her studies. But the practical situation did not allow her to do so. Noorjahan’s younger siblings were admitted to primary school. At the same time, her Dark Age confined her within the four walls of the factory. She was disappointed that she was not allowed to continue her studies.

After working for eight years in a garment factory, her marriage was arranged by her mother. Her husband was a small businessman. After two years of marriage, she gave birth to twin sons. She experienced great difficulty during this time. When her children became five years old, she expressed her desire to be educated. But her husband was a little bit conservative. He asked her, what is the necessity of women to be more educated? He also added that as a Muslim woman, her first and foremost duty was to serve the family. Though he was not completely against her doing it, he was not in favour.

Finally she was able to make her husband understand she would study through distance education, which would not actually hamper her stereotype role. After that she started her struggle to fulfill her dream. She was admitted in BOU.

In her first semester, she was not very clear about this new system of education. But gradually she became used to it. English and Maths were the most difficult subjects for her. Her tutors helped her with English and Maths. She liked to attend her tutorial classes. She did not face any problems regarding the tutorial centre, and it was effective during her first semester. She could not pass in English and Maths in her final exam. Meanwhile, she re-appeared for the courses and passed. Last year she passed SSC exam successfully. She has a desire to continue her studies.

Noorjahan believes that no woman should miss any chance for further studies in order to enlighten her mind and upgrade her status. Through distance education her dream has really come true.

Case 2 – Mina: Ray of hope

Mina was born and brought up in Chittagong. She is 25 years old. She has four elder brothers. At the age of 14, her father died. Her brothers dropped their studies and started working to assist the family. Mina became a burden to the family. In Bangladesh society and religion, girls are considered not an asset but the burden of any male person. Before marriage, the father or brother were responsible and then after marriage, the husband, and in old age, the son. Mina’s mother arranged a marriage for her with a 20 years older than her. The husband’s first wife had died, and he had two children. Mina had to cope with the undesirable situation. She had to perform all the chores and take care for her stepchildren.

At the age of 20, she had her own daughter. When her daughter was 5 years old, she sought permission from her husband to enroll in her study. Her husband was not very well educated, and he did not give her permission. Spearedly sought permission. At last, her husband relented, but on condition that she has to do all household tasks without any interruption.
Distance education provided a ray of hope for Mina. She enrolled for schooling through the distance mode.

The course materials that BOU provided were satisfactory, and she had no difficulty negotiating them. She had no classes to attend and only went to a designated centre for taking her exam and attended tutorial classes twice a month. She received academic help from the tutorial centres and her course mates. It seemed like a place of social gathering.

This year, she wrote her SSC exam. She prepared for exams after 11 p.m. after finishing all her domestic duties. During this interview, she started crying to say that she was experiencing many difficulties without any cooperation from her husband. She expressed her desire to continue her study through distance learning. She believed that distance mode of education had helped her to rebuild her life according to her desire. She believed that after finishing her study, she would be able to help her children in their education. She believed that distance education could help anybody who has social and religious barriers to cross.

Case 3 – Fatema: Overcoming barriers

Fatema is from Khulna. She was the fourth of six children in the family. Her father was the only breadwinner of the entire family. Her father was finding it difficult to carry on the education of the children. Fatema's mother knew how to teach people to read the Qu'ran. To help support the family, she took a job of teaching the Qu'ran to some female students. She received a meagre wage, but it helped to buy books and school items for her children. Fatema had to do the household chores when her mother was away from home. She had to cook and take care of her younger brothers and sisters. She was spending more time with household activities. This led to her failure in the SSC exam though she was not a bad student. She felt disheartened. She thought that it would be humiliating to go back and sit in the same class for another year while her other friends would be seniors. But Fatema's parents were very positive in their attitude about her study. Though her mother was not well educated, she believed that education should be a prior concern to everybody, especially for women because their lives are unpredictable.

Fatema was so frustrated that she did not want to study further. She got engaged in spiritual matters and in domestic works. Her mother encouraged her to start her studies again. She had heard about the potential use of distance education through her relatives. She had collected more information from the nearest regional centre of BOU. Despite many difficulties Fatema started her education again through distance education. When she first began her new studies, she was afraid of coping with the different mode of education. Slowly she overcame her apprehension. Apart from her knowledge, she gained self-confidence and self-reliance. The social contact through the tutorial centres had broadened her outlook. The course materials of BOU are according to standard and the needs of the students. The books are written in such a manner that a student can help herself. The only difficulty Fatema faced was that the tutorial centre was far away from her house. Last year, she passed her SSC exam successfully. She is now eager to continue her study, because she has learnt from her experience that there is no alternative to education. She believes that only due to strong will power and self-respect can one gain some valuable things in life.

It is her message to other deprived girls that social barriers are not any problem for education. It is possible to be educated in all stages of life. She wishes that BOU will provide women with more facilities and opportunities with which they can enrich themselves through education. She also hopes that, if tuition fees for women can be reduced, then it will encourage women to participate in distance education.

Case 4 – Rokeya: Coming out of the mute life

Rokeya is from Jessore. She was born in a conservative family 23 years ago. She is from the lower middle class. Her father is the only earning member of the family. She has two brothers and one younger sister. Her father works as a clerk in a bank. Her mother is a housewife, who engages in the stereotypical role of wife. Rokeya’s eldest brother went to secondary school and the other brother went to a primary school. Her childhood memories were bitter experiences.
because she spent most of the time assisting her mother in household activities. After coming back from primary school, her main duty was to perform the domestic tasks and then, if she had time, she could study.

When she was in Class 8, her younger sister was born and her mother became sick. The family insisted that she should stay at home and care for her mother and the new born sister. Although she desired to continue her studies, the practical situation did not permit her to do so. She had no option but to leave school. After two or three years she expressed her interest to continue her education, but her parents were hesitant to give permission. They believed that it would hamper their family prestige. According to them women should be confined within the four walls of the house. They also believed that if they were unable to provide food and clothes for the woman, then she should leave.

When she was 18, she married a man who was a dubious businessman. Actually he was involved in women and child trafficking. Unfortunately the marriage brought nothing to Rokeya except misfortune and physical abuse. Her in-laws forced her to bring money from her parents as dowry, and they made her life miserable. Her family was unable to pay. They also threatened her with divorce. Finally, her marriage ended in divorce. Her parents gave her emotional support, which was badly needed at that time. With their encouragement, she gained strength to fight for the future. She had to explore available options to continue her study and at last she got it, which was distance education through BOU.

After that, she enrolled in BOU. At first, she was hesitant to join this programme because she had no idea of this new concept. But the idea of becoming a student after a break had excited her.

During the first semester, she sat for five subjects and afterwards for another five subjects. She told her friends that the benefit she got was that if she failed in some subjects in exam she could retake the exams. The only difficulty she faced was that the exam results were very slow in coming and each time she had to go to Gazipur to collect her testimonials. It was time consuming and wasteful.

Despite all these constraints, she revived her dream. She took her SSC exam this year. She is now working in a garment factory. She desires to get more education for job mobility. She is getting emotional and moral support from her course mates. She praised her tutors who supported her in her studies. She is now happy, because she believes that the certificate will be a great milestone in her life. She also believes that if anyone fails to achieve first chance of education, she must take the second chance through distance education. Only education can bring women out of their mute lives.

Case 5 – Rupa: Enlightening by herself

Rupa is a girl deprived of her basic rights. She is from Sylhet. She was born as the fourth child in a family. She has three elder brothers and two younger sisters. When she was only three years old, she lost her mother. Her father remarried. He was the owner of a small piece of land. He was the only breadwinner of the family. He cultivated his land. When Rupa was 6 years old she was admitted in a free primary school near their house. She was very unfortunate that neither her father nor her stepmother were interested in her education.

From childhood, Rupa was interested to pursue higher education. She is a girl of strong will and leadership quality. In every sphere of life she does her work in a self-reliant way. After passing Class 8, her father became sick and could not work, so Rupa was not able to continue with her education. However, she was enlightened and decided to compromise and to combine work with schooling. She worked in a tea garden for half shift and also to continue her studies. She knew that formal schooling was not possible for her, so she had to find an alternative. She got it. She was informed by one of her friends that through distance education she could fulfill her dream. So without any hesitation she got admission in BOU.

In the first semester, she did not do well in all subjects. She received very low marks in some subjects. At that time she was disappointed and wanted to leave her studies, but her course mates
encouraged her and helped her keep her dream alive. Gradually, she became comfortable with distance education. The flexibility of the system suited her very well. She hopes that audiovisual programmes could be extended to assist the students. In that case, the tutorial centres could provide TV sets for them to watch and learn. She believes that she can continue her education through perseverance and strong desire to gain knowledge. She knows that she can continue her education through distance learning. What is needed is that one has to be rational in her thinking and sincere at work.

Case 6 – Halima: Education is a lifelong process

At over 45 years, Halima wants to revive the dream she had as a young girl. She is from a very remote area of Rangamati district. Her father was a labourer and her mother worked in a paddy field. She had three brothers and sisters. When she was in class 8, she was married to a shopkeeper. Her husband also had a small plot of land to cultivate. Her mother-in-law also stayed with them. Though her husband had no objection, her mother-in-law did not allow her to receive any more education. She declared that it is the duty of the wife of a son to give birth to children and take care of the family. According to her, those who want to be educated are the devil’s friends. So Halima’s dream was buried for that period.

She gave birth to four children. From dusk to dawn she had to do hard labour. Due to malnutrition and extra load of the family, she was becoming sick and looked older than her age. When she was 44 years old, her mother-in-law died. In the meantime, her children grew up and were able to take care of themselves. Halima has a little poultry farm. From her earnings she met the expenses of her children’s education.

Now she started to feel inferior because she was not educated. She heard about distance education and took admission in BOU. She had to spend whole nights studying. She had to bear extra loads to fulfill her dream. When she encountered some difficulty on course material she took help from the tutors. She said that if the counseling session could be extended from twice to four days in a month, it would be helpful for her since they did not have enough money to keep private tutors, nor are their parents educated enough to guide them. The course materials are not hard to her, except English and Maths. She took help from her son. She was asked why she had come for further education in the middle of her life. She told us that she did so to enhance her social value and family prestige. She believes that the age should not be a barrier for education. Education is a lifelong process, which could materialise through distance learning. What was necessary, was to manage everything rope away. She is now very happy to have education. She believes that distance education have a strong impact on women empowerment. That is why, the terms and conditions of distance education should be more flexible and opportunities should be extended. She hopes that if more optional subjects related to women’s issues are included in the curriculum they could be more encouraged in distance education.

Case 7 - Rashida: Education should continue

Rashida is 35 years old. She is from Bogra District. Her father was employed as a typist in a private farm. Her mother was a housewife. She was very unfortunate that she could not get any formal education. She had only religious education. She could recite the Holy Qu’ran by heart. Rashida had five brothers and sisters. She received early education from her village school. Afterwards, she could not continue her studies because her family and relatives were very conservative. Most of the female members of her family observe seclusion. Rashida was different in her attitude and her dream was to become educated. Her father was not
financially well off and he preferred to educate his sons. As a result, Rashida had to withdraw from her studies.

Rashida’s parents arranged a marriage for her, but her husband was not well educated. Her marriage was based on the dowry her father paid. Her in-laws were not satisfied with the dowry and considered it very small. They continuously pressured her for more money. In addition, her husband started to beat her. She was experiencing a terrible life. Although in Islam divorce is permissible in practice it is not desirable. In the event of divorce, the girl is blamed. Rashida suffered in silence. Ultimately, she could not cope with the worsening situation. She left her husband and her parents provided her with emotional support.

She applied to BOU and was accepted for admission. Besides studying she started private teaching. She understood that she had to pass a long path alone. That is why she wished to continue her study while working for money. This was only possible through distance education. At first, she was reluctant, her daughter was already in school, and she was doubtful whether she would adapt to the situation. However, once she started, she found many of the women enrolled in distance education courses were older than her.

She found English and Maths the most difficult subjects, but she enjoyed home economics. She said that if other subjects related to women’s issues were included, the number of female students would increase. Sometimes she got depressed when she did not get the course material in time. Often, she had to borrow books from former students. She expressed her difficulty in collecting testimonial from Gazipur main campus of BOU. They faced accommodation and other financial constraints. She hopes that the observance of purdah should not stop education. Distance education is the second chance for those women facing social and religious barriers. This encouraged her to share her success with other women. She believed that being a “mature” student.

The seven case studies depict the various obstacles Muslim women have encountered to continue their education through open and distance learning. Each story is unique. However, similarities in the cases show the determination and willingness of Bangladeshi women to succeed. They also help to highlight some of the cultural constraints to female education in Bangladesh such as early marriage, motherhood, the institution of purdah, and kinship obligations.

Some of the commonalities that are derived from these cases show that:

- Most of the women are from the lower middle class.
- Most of them have religious and social barriers.
- Almost all women dropped out of schooling because of poverty.
- Many women continue their study side by side with their other jobs.
- BOU gave them second chance for education.
- English and Maths are the most difficult subjects.
- They received cooperation from their tutors and course mates.
- They could continue their study without hampering their stereotype role.
- Distance education helped them to overcome fears and worries about being a student after a long break.
- For some respondents, tuition and course fees were high.
- It is difficult for them to collect testimonial from the main campus of BOU.
- Finally, it enhanced their status feeling them with dignity and self-respect.
Recommendations

The access to audio-visual facilities should be provided in RRCs and in tutorial centres. Tuition fees could be reduced for female students. Some financial incentives could be given to female students. There is a need for girl’s education below secondary level. They can be uplifted through distance education.

To empower women and bring them under the umbrella of BOU, it needs more advertisement by distributing booklets. BOU should have a section for empowering women and should go for further research. Coordination among GOs, NGOs and BOU is very much essential for getting positive results.

Issuance of testimonials at BOU should be decentralized. Counseling cell for female students should be decentralized in the RRCs. Media of BOU can play a vital role for public awareness campaign for women empowerment through distance education.

Conclusion

The results from the case studies show how women were able to overcome social and religious barriers by their own will power and with emotional support from kin groups. It is very encouraging that through distance education, women are becoming an asset to the family. In the urban areas and also in some rural areas, the purdah is taking a more symbolic form. The young, generally are more influenced and educated women may not live as the past generation did. With wider contact, the necessity for both partners to earn and other contemporary changes in the everyday lives of the people, many urban and some rural women are becoming aware of the need to become independent.

This paper shows that open schooling can provide an adaptable and flexible approach as an alternative to formal schooling for Bangladeshi women.
References


WOMEN IN PURDAH: THE CHALLENGES OF OPEN AND DISTANCE EDUCATION IN NIGERIA

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Abstract

In Nigeria, purdah system exists as a viable institution among the Muslim population as we have in other parts of the world. As a consequence of purdah system, a woman is allowed to see only her biological sons, brothers, father, uncle, and husband, or any other relation in position of trust. She cannot even go to mosque to pray, and must wear veil if she must go outside the house. This practice is more popular in northern Nigeria, where there is a predominant Muslim population.

Literarily, purdah means curtain or veil and refers to various modes of shielding women from others’ sight. It can also refer to the veiling or covering of the entire body. According to Naim (2004), purdah is a practice of the seclusion of women inside their homes. In this sense, seclusion means restrictions on women’s movement outside the home.

However, part II of the Nigerian constitution guarantees education for all citizens without barrier coupled with international instruments which Nigeria is signatory to and has adopted. The UNESCO declaration of Education for All (EFA) by the year 2015 is one of them.

Also, going by the tentative result of 2005 population census conducted in Nigeria, indicating more women than men, Nigeria has more married women than men. Hence there is possibility of having an army of uneducated women in purdah lacking access to functional education which is a violation of many international treaties such as the UNESCO, African Charter on Human and People's Right, and part II of the 1999 Nigerian constitution.

This paper will examine the government policies, legislations and innovative strategies of the National Open University of Nigeria to bring education to the doorsteps of all without prejudice to culture or religion.

Keywords: Purdah; Women; Education; Open and Distance Education; Programmes.
University of Nigeria en vue de mettre l’éducation à la portée de tous, sans discrimination quant à leur culture ou religion. Mots clés: Purdah, femmes; Education; Enseignement a Distance; Programmes.

Introduction

Education of people in purdah has suffered various forms of neglect in Nigeria in the past by various governments. But now that National Open University (NOUN) has been established, it is the only institution among others that has the capacity to reach the unreached such as those in purdah. NOUN is an institution that transcends all barriers.

Conceptual framework of NOUN as contained in the blueprint setting it up is to make education available and accessible to citizens irrespective of their age, sex, tribe, religion etc. While various acts and government policies are targeted towards solving problems with specific education sector. For example, NOUN has the course materials written in Braille, this is meant to provide education to those who are physically challenged, i.e. the blind. NOUN also provides education for prison inmates.

At a point in Nigeria, a government policy was directed at solving the educational needs of the Nomads through Nomadic education, and it is still in operation till today. But regretfully, women in purdah except in very few cases in the southern part of the country, have access to formal education and employment. Their educational status/qualification remained what it was before they were put in purdah. There was no opportunity for them to mix and interact and therefore could not attend school in the conventional educational system.

Women in Purdah

Literarily, purdah means ‘curtain’ or ‘veil’ and refers to various modes of shielding women from others’ sight, or covering their entire body. It also refer to the veiling or covering of the entire body Naim (2004), defined purdah as a practice of seclusion of women inside their homes. In this sense, seclusion means restrictions on women’s movement outside the home. Thus a woman in purdah is in seclusion within the home. In Women and Law project (1999 pp.13), a 24 years old unmarried Sudanese woman said seclusion seems to her;

that women are created to be prisoners. First, by always staying at the back of the house to serve the daiwa; second, by seeking permission from brothers to go out and third, by having everybody including your young brothers telling you what you should and what you should not wear...

This shows the significant dimensions that women express and define the practice. Women in purdah are prevented from interacting with the outside and from access to conventional education because of the restriction. This makes it difficult for women in purdah to contribute to the social, economic and other forms of development in the country.

It is the practice whereby men are also restricted from seeing and interacting with their women counterpart at will. For both males and females, interaction with opposite sex is limited. Purdah is also a practice of segregation of the sexes and the requirement for women to cover their bodies and conceal their womanhood. Restricting them to household endeavour rather than involving them in tasks, also shield them from unwanted male advances. This practice is however associated with prestige and high rank Moslems. Husbands employ servants to perform the domestics’ house jobs and supervision; most women in purdah make rare appearances in family functions where matured males from extended family were expected to attend. They are not allowed to talk to men other than their close relatives.

Purdah system is found among the Muslim communities all over the world. However, the practice is not different in Nigeria, it is also found among Muslim community but more pronounced in the Northern part of the country because vast majority of the Northerners are Muslims, and more so, Islam came into Nigeria through the Northern protectorate. This perhaps accounts for one of the reasons Islam and the practice of purdah are more pronounced in the North. Women in purdah are not by practice allowed to study in co-education schools and colleges and there is no separate institution established for them. Thus, women in purdah have no more access...
to education once they become secluded. Occasionally, women in purdah go out, they will cover all the entire part of their body with special black dress.

It can therefore be deduced that being in purdah is depriving some citizens their fundamental right of not only interacting with other members of the society but also that of access to education. Hence possibility of having an army of uneducated women lacking access to functional education in a violation of many international treaties including (UNESCO, African Charter on Human and People’s Rights), and part II of the 1999 Nigerian constitution.

However, part II of the Nigerian constitution guarantees education for all citizens without prejudice or barriers coupled with international instrument which Nigeria is signatory to and has adopted including the UNESCO declaration of Education for All (EFA) by the year 2015. It is expected that all Nigerian citizens are entitled to education, but the practice of purdah that restricted movement, interactions and contact of those in purdah also restricted them from access to education and this may not make UNESCO declaration a reality by the year 2015.

In developing countries in general, and Nigeria in particular, the women’s role in the economic growth and social development is quite clear and hard to underestimate especially in their ability to work in different occupations, such problems are still waiting for solutions. Differences between men and women are found in workplaces and opportunities as well as opportunities in education, income, political representation and gender stereotype. Various interpretations of actions of women and men, dominate most of the developing countries.

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Total Number of Female Population in Nigeria


Figure 4
The Population Crises Committee (2000) found out that the smallest percentage of women in the official paid labour force is in Africa. Work outside the household in Nigeria is constrained by many factors including the level of education. The level of education of women in purdah is low compared to those who are not and those who do not take up paid employment or any white collar jobs with any organisation. They have been restricted to their husbands, immediate family and their close environment and rely on their husbands for the provision of all their needs.

Table 1.2 Total population of female in Northern Nigeria as at 2006

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</table>

Table 1.2 reveals that there are more states in the Northern Nigeria. Out of the 36 states and the federal capital that make up the country, 19 states and the Federal Capital Territory are in the Northern zone, while 17 states are in the Southern and Eastern zones. The table also shows that the population of females in the Northern zone comprises 33,959,448 out of the total female population of 68,293,683. This implies that there are more women in Northern Nigeria than the South of the country. Women education, particularly those in purdah deserves special attention.

The right of women to education

The fundamental objectives and directive of state policy by section 13 of the 1999 constitution of the Federal Republic of Nigeria states:

> it shall be the duty and responsibility of all organs of government, and of all authorities and person, exercising legislative, executive or judicial powers, to confirm, observe and apply the provisions of this chapter of the constitution.

Section 18 (1) of the 1999 constitution also prescribes that:

(i) government shall direct its policy towards ensuring there are equal and adequate educational opportunities at all levels;

(ii) government shall strive to eradicate illiteracy; to this end government shall as and when practicable provide:
(a) free, compulsory and universal primary education;
(b) free secondary education;
(c) free university education; and
(d) free adult literacy programme.

Women education has also found expression in many international instruments and treaties i.e. The convention on the elimination of all forms of discrimination against women, the Universal Declaration of Human Rights and the African Charter on Human and Peoples Right, and all these international instruments have been adopted by the Federal Republic of Nigeria, thereby making it part of the Nigerian Law. Hence, the right of women in Nigeria is constitutional.

Legislation

The importance of legislation on any subject matter cannot be overemphasized. It is envisaged that the National Policy on Education will stimulate government to reinforce all relevant laws to protect women education.

The legal framework of a nation is perhaps the most direct measure of its commitment to new policy initiatives. A national policy on education of women in purdah will be an incomplete exercise without the necessary legal backing. Raising legal reform or legislative protection in this context are a means of enforcing existing laws (if they exist), and initiating the enactment of new ones to protect new policy guidelines in consonance with the call in the convention on the elimination of all forms of discrimination against women. The Nigerian constitution is explicit on the government’s aspiration that all citizens be treated as equals under the law.

However, the challenges of education for women in purdah have made us to examine existing legislations for education of women and the National Policy on Education for women. It was discovered that there are inadequate or practically no law or policy on education for women in purdah.

Purdah and the Universal Act

The various laws which establish universities provide for the control of their programmes by the university authorities. Wide powers are conferred on the Vice-Chancellors and governing council of the universities. These are designed to maintain order and good conduct in these institutions and to enable them achieve the objectives for which they are established. The relevant provision in all the universities in Nigeria is substantially similar.

A close examination of all the provisions in the university act indicate that there is no provision specifically for women in purdah.

Education and Women Empowerment

Women’s educational status in any nation correlates with its level of development. Consequently, the higher the level of women’s educational status, more developed the nation. For Nigerian women and women in purdah, the full benefit of temporary living and to contribute meaningfully to the development of the country, they require education.

Women in Purdah and the Challenges of Open and Distance Learning (ODL)

NOUN is the only ODL institution in Nigeria. Its establishment brought a new concept in Nigeria’s educational system. Apart from the fact that NOUN provides affordable, accessible, and economical and convenient education, the institute is expected to mop-up the excess left over by the conventional universities because it is designed to be a mega university. This is evident from the student population. NOUN has over 90,000 students from just three admission exercises conducted so far.
Table 1.3 Total number of admitted students by NOUN since inception

<table>
<thead>
<tr>
<th>Set</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>10,027</td>
</tr>
<tr>
<td>2nd</td>
<td>24,017</td>
</tr>
<tr>
<td>3rd</td>
<td>47,254</td>
</tr>
<tr>
<td>Total</td>
<td>91,288</td>
</tr>
</tbody>
</table>

Source: ICT Unit NOUN, May, 2008

Apart from the general challenges facing the Nigerian environment, such as irregular electricity supply, low level of technological advancement, road network, etc., NOUN is able to cope with the size of the students and by the next admission exercise, students’ population in NOUN will be over 150,000 considering the rate at which it is growing.

Table 1.4 Total population of NOUN students by sex distribution from the Northern Nigeria

<table>
<thead>
<tr>
<th>S/N</th>
<th>States</th>
<th>M</th>
<th>F</th>
<th>T</th>
<th>M</th>
<th>F</th>
<th>T</th>
<th>M</th>
<th>F</th>
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<td>31</td>
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<td>47</td>
<td>246</td>
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<tr>
<td>3</td>
<td>Benue</td>
<td>192</td>
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<td>255</td>
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<td>565</td>
<td>1103</td>
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<td>60</td>
<td>56</td>
<td>18</td>
<td>74</td>
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<tr>
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<td>18</td>
<td>04</td>
<td>22</td>
<td>24</td>
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<td>221</td>
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<td>22</td>
<td>24</td>
<td>03</td>
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<td>23</td>
<td>221</td>
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<tr>
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<td>141</td>
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<td>274</td>
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<td>06</td>
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<td>3729</td>
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Source: ICT Unit NOUN, May, 2008
Table 1.4 reveals that there is a wide gap between the total number of male and female learners admitted by the National Open University of Nigeria since inception. In 2003/2004, 357, out of 1,932 admitted from the Northern zone are females; in 2005/2006, 1,556 out of the 4,811 admitted are female and out of 12,686 admitted in 2007/2008, only 3,729 are females. At present, out of 19,429 learners admitted by NOUN from the Northern part, only 5,639 are female. This signifies that there are more female learners that have not been reached.

NOUN is to serve as a vehicle to reach the unreached. An example of the unreached are women in purdah. NOUN is to provide education that transcends barriers; NOUN provides education to all intending learners from across the country at either Certificate, Diploma, Degree, Postgraduate or Graduate levels depending on the entry qualification. Students are admitted into various programmes based on educational qualification, and work experience.

However, NOUN can only provide education to only those that have passed through secondary education, who are desirous of improving their educationally, socially, politically, economically, and even spiritually. Students in this category can be admitted for Certificate, Diploma or Degree programmes depending on their qualification at the secondary school. Those who are already graduates of any university invited recognized by the senate of NOUN and holders of Higher National Diploma before graduatio can also benefit from NOUN by being admitted for Certificate, Diploma, Degree (such a learner wants a new environment) Post Graduate Diploma or Masters programme from CCEWT, Schools of Education, Arts and Social Sciences, Business and Human Resources Management, Law as well as Science and Technology.

Those that are practically uneducated i.e. women in purdah with primary school leaving certificate or those who had not had any access to education in their lives can also benefit from...
ODL if the government can put in place a supporting structure at the lower level of education as we have in India and other countries where there is ODL at primary and secondary education levels.

The discriminatory practices against women in purdah are sustained by attitudes that define and restrict them to a secondary role in the society. These attitudes are reinforced through religion and constitute a major obstacle to action and legislation designed to remedy the educational inequalities they experience. NOUN should bridge the gap.

Women in Purdah and Development

Education is one of the major forces that influence women’s opportunities regarding: social, political, employment and earning power. Research shows that women in purdah have a lower literacy rate than women who are not in purdah (Sudanese Government, 1999). Historically, women in purdah have not been allowed to participate fully in economic activities. They have been held back by religious belief and practice that limited their access to education and training and thus limit their chances of production and employment as well. The NOUN was established to bridge all gaps and inequalities caused by any form of barriers to education by bringing education to the doorsteps of all citizens at affordable cost.

Women in purdah, if educated through ODL, can gainfully gain functional employment. They can also participate in online activities which are now the order of the day in the business world. They can apply for jobs or apply and be educated at NOUN fully without destroying the culture of purdah. She can earn wages to support the family, improve the basis and shake up the boredom associated with purdah. There will also be improvement in the management of environmental hygiene to reduce communicable diseases. They may have access to the internet and make a right choice where there is the need.

Conclusion

Women constitute the majority of the world’s population yet; there is still no society in the world where women enjoy full equality with men. The full and equal participation of women in education, political, civil, economic, social and cultural life at the national, regional and international levels, and the eradication of all forms of discrimination based on gender or sex remain priority of the NOUN.

The only window/access to education of the women in purdah is education provided by NOUN, i.e. ODL. The ODL system can be used to take care of the educational needs of uneducated married women in purdah but, if ODL shuts the door to women in purdah this means they will be deprived of their right to education which is the basis of establishing NOUN and making it impossible to achieve EFA 2015 target.
References


Chioma, K. A. (1993). Women’s right in law and practice: Perspective on employment In women in law In: Akintunde, O (ed), southern law center and faculty of law, University of Lagos.


SUB THEME III

CAPACITY BUILDING IN OPEN AND DISTANCE LEARNING
Abstract

The Indian State, Bihar, has the lowest literacy rate (47.53%) and maximum number of people living below poverty line. Male literacy rate is about 60.32% whereas the female literacy rate is 33.57%. This could be compared with all India average of 65.38%. The status of primary as well as higher education is also deplorable. There are more than 250,000 untrained primary teachers in Bihar that need immediate training. Since it is impossible to train such a large number of untrained teachers by conventional education, the Government of Bihar approached Indira Gandhi National Open University (IGNOU) to train them.

IGNOU Regional Centre, Patna, has taken up this challenge and started the process of training these untrained teachers from July 2007 session. The programme to be offered is a 2-year Diploma in Primary Education (DPE), which has three Modules; Module-I (6 months), Module-II (6 Months) and Module-III (1 Year). All important aspects like identification and orientation of academic counsellors, establishment of programme study centres, printing of self instructonal study materials and admitting untrained teachers have been completed in record time.

We have identified more than 1300 Academic Counsellors. These counsellors will assist us in academic counselling, workshop activities, school-based activities, practice of teaching and evaluation of examination answer books. The Regional Centre has oriented these Academic Counsellors. All the 37 District Institute of Educational Training (DIETs), one in each district, have been chosen for the establishment of Programme Study Centres. The Principals of the DIETs have been appointed as the District Coordinators. The Govt. of Bihar has identified 32532 untrained teachers for July 2007 session. The Regional Centre has printed Study Material of Module I of DPE and has supplied to all the 37 Programme Study Centres for onward distribution to the teacher-students. The Regional Centre has prepared a unique scheme of academic counselling which is being held at 37 Programme Study Centres and 400 Cluster Resource Centres (CRCs).

This paper will present the feedback of this programme, perhaps the largest training programme, in any part of the world. The feedback has been collected from teacher-students, academic counsellors and district coordinators throughout the state on a 5-point scale. The parameters of feedback are the counselling sessions, the quality of academic counselling, subsequent group discussions, radio counselling and study materials.

Introduction

The Government of Bihar and IGNOU have signed an MoU to train about 0.25 million untrained teachers. The Programme to be offered is Diploma in Primary Education (DPE) designed for in-service untrained/under-trained teachers working in primary/elementary schools. The curriculum of this programme has been framed in keeping with special needs of primary/elementary school teachers. The untrained/under-trained permanent primary/elementary schools with minimum two years teaching experience and having passed, at least, matric/HSC/+2 standard (under new pattern of education) are eligible. The programme is being delivered through a network of 37 PSCs (one in each district) and about 400 Cluster Resource Centres (CRCs). To start with, 32532 teacher trainees have been enrolled for July 2007 cycle.
Course Structure of DPE Programme

The course structure of all the three modules of the programme along with other relevant details is presented:

Module-I: CERTIFICATE IN PRIMARY TEACHING

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ES-201</td>
<td>Teaching Language</td>
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<tr>
<td>ES-202</td>
<td>Teaching of Mathematics</td>
<td></td>
</tr>
<tr>
<td>ES-203</td>
<td>Teaching of Environmental Studies</td>
<td></td>
</tr>
<tr>
<td>ES-204</td>
<td>Teaching Health, Physical Education, Art and Work Experience</td>
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</tr>
</tbody>
</table>

Module-II: Certificate in Primary Curriculum and Instruction

<table>
<thead>
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<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
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<td>Teaching-Learning at Primary Level</td>
<td>4</td>
</tr>
<tr>
<td>ES-212</td>
<td>Integrated Learning and Teaching in Primary School</td>
<td></td>
</tr>
<tr>
<td>ES-213</td>
<td>Foundation Subjects</td>
<td>6 each</td>
</tr>
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<td></td>
<td>Practical School Based Activities</td>
<td>4</td>
</tr>
</tbody>
</table>

Module-III: Diploma in Primary Education

<table>
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<th>Course Title</th>
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</tr>
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<tbody>
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</tr>
<tr>
<td>ES-222</td>
<td>Education in Emerging Indian Society</td>
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<tr>
<td></td>
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<tr>
<td></td>
<td>Workshop Based Activities</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Teaching Practice</td>
<td>10</td>
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</tbody>
</table>

Instructional System in IGNOU

The DPE programme delivery system includes the following approach as mentioned below:

- Self-instructional print material
- Audio/video components
- Assignments
- Counselling sessions (face-to-face and AIR)
- Practical work in schools
- Workshops

Assignments

Assignments in IGNOU are an integral and compulsory component of the instructional system. Teacher-students will have to work on one assignment per course. These assignments are to be submitted to the Programme Study Centres (PSCs) in accordance with the submission schedule to be provided by the District Coordinators.

Academic Counselling in IGNOU

There are eight counselling sessions for each course. The total number of sessions in each module is as follows:

- Module-I: 32
- Module-II: 28
- Module-III: 16

The Regional Centre in close collaboration and consultation with the Principal Secretary, Department of Human Resource Development, Govt. of Bihar, has worked out a unique scheme of counselling for Module-I which for a given district, PSC and CRC will work as follows:

Number of teacher-students per CRC = 100
Number of batches: 5 of 20 teacher-students each (B1 to B5)

<table>
<thead>
<tr>
<th>Week</th>
<th>Days</th>
<th>Batches</th>
<th>Counselling Courses and Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 &amp; 5</td>
<td>1 to 5</td>
<td>B1 to B5</td>
<td>ES-201</td>
</tr>
<tr>
<td>2 &amp; 6</td>
<td>1 to 5</td>
<td>B1 to B5</td>
<td>ES-202</td>
</tr>
<tr>
<td>3 &amp; 7</td>
<td>1 to 5</td>
<td>B1 to B5</td>
<td>ES-203</td>
</tr>
<tr>
<td>4 &amp; 8</td>
<td>1 to 5</td>
<td>B1 to B5</td>
<td>ES-204</td>
</tr>
</tbody>
</table>

The profile of teacher-students admitted

As mentioned earlier, 32532 teacher-students were admitted in July 2007 session. Their district-wise distribution is given in Table 1. There was no teacher-student admitted for three districts viz. Gaya, Khagaria and Saran because of various reasons. The male and female variation, SC/ST distribution and rural/urban variation is also given in the Table 1 and is discussed below:

Male/Female Ratio

The female ratio varies from as low as 24.38% to as high as 50.75% with state average as 44.55%. There are four districts where the female ratio is more than 50%.

Rural/Urban Variation:

The rural/urban variation indicates that almost all teacher-students belong to rural category, which attaches more significance to the training of these untrained teachers. It would have been difficult for these teacher-students to come to urban areas without affecting their teaching assignments in their respective schools.

The response of teacher-students

Since this was the first of its kind of training programme launched by the University on such a large scale, we planned to take the feedback from the teacher-students on various aspects of training programme. The feedback was taken on a five-point scale. For example: If the teacher-student feels that area mentioned is not the main reason, s/he may encircle 1 and in case the reason turns out to be the most important reason, s/he may encircle 5 and so on. The following were the five categories of questions on which responses were obtained.

1. Study material received well in time
2. Study material not received before start of counselling sessions
3. Counselling sessions not held as planned
4. Quality of counselling sessions was poor
5. Attended all counselling sessions

The response was collected through District Coordinators and the same is analysed in the following sections:

Almost 98.04% of the teacher-students responded strongly that they have received the study material well in time. This was possible because Regional Centre took the responsibility of printing and distributing the study material. This indicates that if the University decentralizes completely printing and distribution of study material to the Regional Centres, this problem could be solved for ever.

About 7.66% of the teacher-students said that study material was not received before start of counselling sessions. This may be due to the fact that some of the district coordinators might have delayed the distribution to the teacher-students.
Regarding counselling sessions not held as planned and quality of counselling sessions, about 16.77% of the teacher-students responded by saying that quality of counseling sessions was not up to the mark. This may be due to fact that this was the first session for almost all the academic counsellors. This scenario is going to be changed in subsequent sessions.

Almost 95 % of the teacher-students attended these sessions, which indicates that they have enjoyed and have found these sessions very useful. The remaining teacher-students could not attend these sessions because of their personal reasons.

Acknowledgements

The author is thankful to the District Coordinators, Assistant Coordinators, Academic Counsellors and Teacher-students for responding to our requests for giving their valuable views on various aspects of students support services.

Table 1 Teacher-students admitted in July 2007 session

<table>
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<tr>
<th>S.No.</th>
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BLOGGING AT UNIVERSITY AS A CASE STUDY IN INSTRUCTIONAL DESIGN: CHALLENGES AND SUGGESTIONS TOWARDS PROFESSIONAL DEVELOPMENT

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Abstract

Although the potentials of ICT such as blogs seem to be obvious, universities find challenges in using them pedagogically. For example, there is dissonance between blogging and pedagogy, or rather a gap between rhetoric about blog potential and blog practice, which has prompted this investigation and professional development in the use of blogs at the University of New England (UNE). Preliminary findings show fundamental implications for professional development in pedagogical uses of Information and Communication Technologies (ICT).

Key words: Blogging, Instructional Design (ID), University Education, Information and Communications Technology (ICT)

LE BLOGGING A L'UNIVERSITE: UNE ETUDE DE CAS EN CONCEPTION EDUCATIVE: DEFIS ET SUGGESTIONS EN VUE D'UN DEVELOPPEMENT PROFESSIONNEL

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Résumé

Même si les potentialités des TIC, telles que les blogs, semblent évidentes, les universités éprouvent des difficultés à les utiliser sur le plan pédagogique. Par exemple, il y a une différence entre le blogging et la pédagogie, ou plutôt un fossé entre la rhétorique sur les blogs à l'University of New England (UNE). Les conclusions préliminaires montrent des implications fondamentales pour le développement professionnel en matière d'utilisation pédagogique de la Technologie de l'Information et de la Communication (TIC).

Mots clés: blogging, conception éducative, enseignement supérieur, technologie de l'information et de la communication.
Introduction

The University of New England (UNE) aims at student-centred constructivism, in a paradigm it refers to as active learning – that is, students should be actively involved in constructing their knowledge. Therefore, first, technology is indispensable for online resources at UNE, much more so because of a proportionately large number of distance learners. Secondly, UNE has to develop online constructivist frameworks to the knowledge that, students born in or after 1980 were found to be largely digital natives (Kennedy, Krause, Judd, Churchward, & Gray, 2006). Hence, staff must be professionally developed only technically, but also in the pedagogical use of the ever-changing Information & Communications Technology (ICT). Thus, UNE designed projects to identify challenges that debilitating staff and students against pedagogical ICT use, to formulate frameworks for staff professional development, and ultimately to enhance student learning through ICT.

We refer to Instructional Design (ID) as described for example by Dick & Cary (1990), but including designing constructivist-learning environments. In that light and in concert, Sims, Dobbs & Hand (2002: 137), recommend investigating users’ needs and problems, and then identifying an appropriate ICT to meet or solve problems. However, lately, ICT are adopted in education without focussed pedagogical goals (Mandinach, 2005: 2). Thus, the challenge is to design pedagogical strategies for each ICT (Sims, 2006: 2). This approach makes ICT the problem, for which pedagogical use has to be redefined and questions the grounds upon which institutions acquire ICT. Sims (ibid.) complicates the problem in stating that learning means different things to ICT natives. Apparently, traditional pedagogies might not be applicable, and transformation is required in institutional policies implementation of ICT, as well as on staff professional development. The rapid change abandons ICT without exhaustive utilisation or research, and pressurises staff in ICT skills and use. Thus, ICT adoption requires serious attention.

It was from such attention that a research project started at UNE, using blogs as a case study, to identify challenges and formulate frameworks for professional development, as well as pedagogy suitable for ICT. This paper, the first of three, is about the first part of a study, and illuminates upon the utilisation of blogs at UNE and nine other universities in Australia. ‘Use’ is open and difficult to evaluate, since it is multivariate, and includes access and interactivity, which are complicated terms. Not withstanding, in this study ‘use’ includes all interactions staff and students made through blogs. The aim of this phase of the study was to find out how UNE uses blogs.

The study
Sample size
All the blogs at the UNE were studied between March 2007 and March 2008. A survey was carried out on blogging between February and March 2008 in nine other Australian universities.

Methodology

Bartlett-Bragg (2003) advises for investigating pedagogical roles of ICT in context, such as subject area and uses. However, traditional experiments about ICT adoption without clear pedagogical objectives are complex. For example, defining control study groups or variables is difficult (Mandinach, 2005: 1-2). Therefore, this study adopted a survey.

At a university home page, we browsed for blogs by typing the term ‘blog’ in the search link. The UNE was the main focus because that’s where the authors work, and wish to design a professional development in ICT framework. Two other universities, the Australian National University, and the University of Sydney were selected on the basis of having busy and apparently useful blogs. Another seven whose names are held back for ethical reasons, were randomly selected from a list of Australian universities (http://www.australian-universities.com/list/).

Blog sites index a blog with the most recent post at the top. Therefore, active blogs, for example,
in the past 12 months (i.e., up to March 2007) to find. A sample of the blogs at the other universities that were active in the past 12 months were opened and browsed to determine their objectives. We communicated with administrators of blogs where academic discourses were happening. The date of inception of a blog was determined by looking at the first posts in a blog’s archives. The survival of the blog was considered to be the period between inception and the most recent post.

Limitations of this study

- Blog data can change on a daily basis, and certain university blogs could have been difficult to access by just typing the term ‘blog’ in the search box.
- The reasons behind blogging is still to be investigated.
- It was not possible to find out whether bloggers had more than one blog.

Literature

General ICT use

The ICT potential to enhance improved student-centred learning and research is abundantly stated (E.g., Sims, 2006; Richardson, 2004), although practical pedagogical examples seem scarce. An example is the scarcity of pedagogy necessary to translate the voluminous information through Blogs into useful knowledge. In that regard, Gløgg (2005) wonders whether virtual communication can lead to useful virtual communities. Furthermore, the rapid ICT change leads to:

- Little time for reflective assimilation of ICT;
- New or no rules or procedures / processes;
- Ad hoc, trial and error;
- Students becoming co-designers; and
- Determining pedagogy;

Blog

A blog is a website where entries are written and displayed in a reverse chronological order (Scott, 2001). Apparently, blogs started around 1994 (Wikipedia, a) or mid 1990s (Framer, Youe, & Brooks, 2006: 1). So, blogs have persisted; 14 years is ‘old’ on the ICT scale. Blog survival and pervasiveness is due to the ease of (Bartlett-Bragg, 2003: 2), which excludes sophisticated technical knowledge of Internet publication protocols (e.g., file transfer, coding, and hosting set-up). Blog educational potential also seems to woo participants.

The role of blogs is widely recognised in education that the Department of Education and Training [Australia], (2007) states that:

- Weblogs provide a communication space that teachers utilise with students whenever there is a curriculum need to develop writing, share ideas, and reflect on work being undertaken in the classroom.

University web sites, and a number of leading ICT pedagogy experts, such as Ferdig & Trammel (2004), Armstrong, Berry & Lamshed (2007), Downes (2004), Richardson (2004), Kennedy (2003), Glenn (2003), O’Donnell (2005), and Bartlett-Bragg (2003) claim a plethora of pedagogical blog potentials such as:

- Exchanging insights and information, which publishers are too critical to print;
- Collaboration between diverse communities. Blogs encourage integration of personal, peer, and expert narratives;
- Hosting e-portfolios, archives and student publications;
- Reflective or journal writings as an alternative to ‘traditional’ forums or bulletin boards;
- Group work, which could be synchronous or asynchronous within or between groups;
- Learning portals;
- Assignment submission and review; and
- Sharing course-related resources.

Hence, teachers use blogs in place of standard web pages (Downes, 2004), and blogs have taken over some roles of other web tools such as Blackboard.
However, O'Donnell (2005: 1) questions the location of blogging in current pedagogy, claiming that blogging is a part of cybercultural practices which provides new ways of thinking. This suggests rethinking and remodelling pedagogy around blogs, as with other ICT, in concord with Sims (2006). The suggestion challenges users and innovate around blogs, as with other ICT, in concord with Sims (2006). However, O'Donnell (2005) argues that beyond rhetoric and simplistic claims, academic institutions are more concerned about blogging efficiency towards production. That is, the advancement over previous online learning environments (OLEs) (Farmer, Yue, & Brooks, 2007: 263) is much more with numbers, for example, of students reached through blog discussions, assessments instead of the improvement in pedagogical quality blogs could make. This productivity model ride the crest of progressiveness – the modernist feel of being a part of cutting edge technology instead of the changes blogs could bring about in the learning environment. Nonetheless, successful pedagogical blog uses have been abundantly reported (e.g., Richardson, 2004), especially important considering that Kennedy, et. al. (2006: 3) in 2006 found among the 26-year (or less) students at Melbourne University, that 38% read, 27% commented, and 21% maintained blogs. That is, blogs could be used to reach a substantial number of students.

Blogs offer a socially situated, student centred, contemporary, technical solution (O'Donnell, 2005), catering for individual self-expression and socially driven learning (Farmer, Yue, & Brooks, 2007: 262). Pedagogical interests include monologues that enhance constructivist cognition or metacognition (higher order thinking). Farmer, Yue, & Brooks (2007: 263) recorded metacognitive reflections leading students to develop new strategies for continuous learning, explaining that:

- the interactive, hypertextual capacity of blogging is ideal for enabling associative thinking as students linked concepts taught in subject with current issues and events in the wider social context as represented through web.

- Additionally, students in Ohio (USA) reflected improved on their reading and pronunciation skills by playing their audios. Walker (reported in Bartlett-Bragg, 2003: 9) explains this phenomenon as resulting from creative interaction with one's own development which ensures that new knowledge is incorporated in, and integrated with existing knowledge. Another argument supporting these observations is that students are conscious about their postings, broadcasted without restricted access to the public, and so have to be more careful about the way they say things, and how they collect their thoughts and summarise their understanding (Armstrong, et. al., 2007).

Consciousness to the public relate with dialogues characteristic of Vygotsky's social constructivism. Ferdig & Trammell (2004) highlight blog roles in social interaction and pedagogy, stating that

’... knowledge construction is discursive, relational and conversational in nature. Therefore, as students appropriate and transform knowledge, they must have authentic opportunities for publication of knowledge’ (Ferdig & Trammell, 2004).

Thus, blogs could provide an opportunity for engagement and scaffolding within and outside classrooms. An example was the blog community, involving students and their parents (Richardsen, 2004). Another example was a journal project, which encouraged tutor-student engagement in dialogue and which increased student's participation by offering an additional mode of response and feedback, while monitoring and guiding individual students' learning (McGuinn & Hogarth, 2000). Additionally, O'Donnell (2005) draws on Papert's constructionism, claiming that students converse about the transformation of their ideas for the public – the ideas become artefacts, chronologically ordered by the blog, which are in other words ecological environments of minds and constructs. O'Donnell and Lowe (2003), who believes that a constructionist blog caters for personal, knowledge management within a social environment.

Pedagogically valuable blogs involve careful planning and considerations (Bartlett-Bragg, 2003: 6). For example, blogs should be made mandatory to cultivate educationally sound perceptions among students (Cheung, Li, Lui, & Choy, 2006). Additionally, O'Donnell (2005) advises for blog-use across classes over the duration of a degree course instead of focussing on a specific assignment or a single semester. Apparently, this approach allows students to grow in a blogging community, while working out the course ways of learning.
The purpose of the blog should be made clear to students. For example, Farmer, Yue, & Brooks (2007: 264) instructed students at the inception of a blog to reflect upon and discuss course content that arose out of their learning experiences. Furthermore, Huann, John, Yuen (2005) believe that students should be scaffolded on creating good posts and feedbacks right from the blog creation, giving students clear pedagogical objectives. In this regard, the University of Sydney (http://blogs.usyd.edu.au/support/getblog.html) advises that the most successful blogs are those which consistently address a well-defined topic. A good blog will reflect that topic in its title, descriptions and (obviously) the content of its posts.

To achieve blog growth, Bartlett-Bragg (2003) recommends five stages of students’ guidance including: establishment; introspection; reflective monologues; reflective dialogue; and knowledge artefact, emphasising that, posing structured questions as guides, especially focused on students’ experiences or recollections motivates students. Indeed, Farmer, Yue, & Brooks (2007: 263) decided to integrate blogging into the subject as a formative assessment exercise.

With regard to motivation, Armstrong et al. (2007) advise that the invitation for responses should be structured for serious thoughts. For example, ‘Comment’ could be seen as very passive to ‘Discuss’ or ‘What do you think?’ Students’ opinions on critical thinking and deep reflective qualities of learning should have surfaced by stage 5 (Bartlett-Bragg, 2008). Additionally important are technical design considerations, which include the blog capacity to upload photographs, drawings and documents, as well as students’ access blogs immediately they have thoughts to post (Armstrong et al., 2007).

On the other hand, there are reports against the use of blogs in education. The most common is the possible misuse of blogs by students (Cheung et al., 2006). Other concerns include dissatisfaction with access, privacy, and security (Richardson, 2004), which, in the opinion of Downes (2004), might lead to students writing trivial and eventually losing interest to the extent that few blogs survive beyond a year (12 months). Glenn (2003) claims that blogs lack rigorous scholarly work and O’Donnell (2005) reported findings, which showed a gap between blogging rhetoric and blogging practice. O’Donnell also reports complaints that blogging ends up being “forced writing”; and that blogs tend to focus on the personal that celebrates individual egos. From the above, Blogs might be suffering from what we might refer to as the ICT disease – that users expect miracles to emerge without any exploration of pedagogical potentials and developmental work.

Findings
Blogging at the University of New England (UNE)

Brief notes:

Students did not post academic discussions
There were blogs by the ICT support group to encourage people to blog. These included EDIT; GIS; Longlive Education; UNE blogs; and Rainy Days.

One blogger ‘Jon’ started two blogs.

Table 1 shows a majority of blogs belonging to the personal category (59%). The Administration follows in the number of blogs.

Table 1: Summary of blogs at UNE. as on the 8 March 2008 (Number of blogs = 34)

<table>
<thead>
<tr>
<th>Category</th>
<th>%</th>
<th>Information for</th>
<th>Started</th>
<th>Survival (inception to last post) - Months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>About an individual</td>
<td>Student</td>
<td>General</td>
</tr>
<tr>
<td>Personal</td>
<td>59</td>
<td>44</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Administration</td>
<td>24</td>
<td>4</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>Faculty / School</td>
<td></td>
<td>Educ. Arts</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Society / group</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>9</td>
<td>44</td>
<td>3</td>
</tr>
</tbody>
</table>

Key: Numbers represent percentages.
However, it is notable that Faculties or Schools have not been keen on starting blogs. It would therefore be expected that blogs about individual concerns (44%) were the highest, and that blogs about ‘General Information’ scored 44% - this was information not directed to any particular audience. Information for students specifically was just 9%. The table also shows that most of the blogs were opened during 2007 (68%), although blogs started during late 2006 at UNE.

Table 2: Deleted (Were recorded in March 2007 but not appearing in the blog list) (21/55 = 38%)

<table>
<thead>
<tr>
<th>Category</th>
<th>% Information for Started</th>
<th>% Information for Started</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>Administration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty / School</td>
<td>Educ. Arts</td>
<td></td>
</tr>
<tr>
<td>Society / group</td>
<td>24</td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>19</td>
</tr>
</tbody>
</table>

However, Table 2 shows that there were at least 21 blogs by March 2007. This number, compared to only eight new blogs so far initiated between January and March 2008, implies that the rate of opening new blogs dropped in 2008. The survival rate of blogs shows just 41% beyond 12 months. This figure is low bearing in mind that Table 1 shows that 26% had posts for less than two months only, while Table 2 shows that 38% of blogs had been discontinued by March 2008. In Table 2, the majority of discontinued blogs belonged to those about personal concerns (76%), and, of course none of these survived beyond 12 months. None of the Faculty/School blogs had been discontinued.

Blogging at other Australian universities

The rest of the data on blogs in other universities were checked during March 2008. It is reiterated that the focus of this paper is the pedagogy in blogs. Hence, particular interest was focussed upon student participation in blogging at these universities. In that regard, there were interesting blogs at the Australian National University (ANU) http://cnma.anu.edu.au/blogs/ This blog had a group of 12 students and a convenor in the Faculty of Arts. The convenor of the blog stated that, The main reason for the blog was to provide an e-journal space for students to write about their ideas and comment on the class sessions. In class we discussed various approaches to writing and identity and used the blog as a more informal space (Gates-Stuart, e-mail communication, February, 2008).

The following quotations attest to the reflective nature of the postings on this blog:

Following on from my thinking in the last post, I have a few last words on visual effects and their changing role in the documentary. Visual effects are typically used in documentary, ...

One of the most interesting things to come out of the second research forum (for me) was ... (http://cnma.anu.edu.au/blogs/adeline/)

The same student has a project proposal at http://cnma.anu.edu.au/blogs/andrej/?cat=183


Other serious blogs appear at the University of Sydney but the university excluded student personal blogging by a policy, which required a student blogger to apply for blogging space. The blog policy appears at http://blogs.usyd.edu.au/support/getblog.shtml, which among other issues states that blogs are intended for supporting university staff research, academic work, and for collaboration. It further advises students looking for a personal blogging space to look for other blog providers like Blogger.com. This could have accounted for the fewer number of blogs about personal affairs and the higher number of blogs on serious academic discourses and reflections.
Tables 3 and 4 show samples of blogs at two universities.

Table 3 University A (started during 2005). Number of blogs sampled = 12

<table>
<thead>
<tr>
<th>Category</th>
<th>No</th>
<th>Personal</th>
<th>Student</th>
<th>General</th>
<th>Not clear</th>
<th>Started</th>
<th>Survival (inception to last post) - Months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2006</td>
<td>2007</td>
</tr>
<tr>
<td>Personal</td>
<td>50</td>
<td>8</td>
<td>33</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Faculty / Educ.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>School / Arts</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Society / group</td>
<td>40</td>
<td>8</td>
<td>8</td>
<td>33</td>
<td>24</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>8</td>
<td>16</td>
<td>67</td>
<td>83</td>
<td>16</td>
<td>8</td>
</tr>
</tbody>
</table>

Students participated in 16% of the blogs in university A (Table 3), and 22% in University B (Table 4). A similar trend between universities regarding information for students appears, with UNE at 9%, university A, at 16%, and University B at 33%. On the other hand, UNE had the highest personal blogs (59%), compared to 50% for university A, and 11% at university B.

Table 4 University B. Number of blogs sampled = 9

<table>
<thead>
<tr>
<th>Category</th>
<th>%</th>
<th>Stu. Partic.</th>
<th>Information for</th>
<th>Started</th>
<th>Survival (inception to last post) - Months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Personal</td>
<td>Student</td>
<td>General</td>
</tr>
<tr>
<td>Personal</td>
<td>11</td>
<td></td>
<td>11</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Administration</td>
<td>22</td>
<td></td>
<td>22</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td>Faculty / Educ.</td>
<td>22</td>
<td></td>
<td>22</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>School / Arts</td>
<td>10</td>
<td></td>
<td>11</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Cultural studies</td>
<td>33</td>
<td></td>
<td>33</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>Society / group</td>
<td>11</td>
<td></td>
<td>11</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td></td>
<td>33</td>
<td>33</td>
<td>33</td>
</tr>
</tbody>
</table>

Notes: There was a blog focussing on first year students at University B.

Other Seven universities show literature about blogs, but have none.

Discussion

Blogging in the sample of 10 Australian universities revealed that the majority (7) did not blog. While in another 3 universities, bloggings ranged from laissez-faire writing where anyone could write anything legal, to serious academic discourse.

Blogging at UNE competed for staff attention against Wikis, and the introduction of Sakai and WebCT, both of which were mandatory for staff to use. Thus, while there were clear and firm guidance to staff to use Sakai, for example, there were no rules or requirements to start blogs. Blogs were free for all who were registered at UNE, which seems to have accounted for the large number of personal blogs, as compared to, for example, blogs at the University of Sydney. Furthermore, there was no policy on blogging, which seems to have encouraged higher incidences of personal blogs, albeit on individual interests, as well as many discontinued ones at UNE. This open policy appears to be sometimes abused in cases where there are single post blogs.
Another outcome of the open policy was the lack of pedagogical blogs or blogs on serious academic discourses. There were only two blogs, which shared course-related resources. Additionally, bloggers at UNE did not invite students for serious academic discourse. Blogs at UNE proved Downes (2004) fears of bloggers writing trivia, and to the extent that few blogs survived beyond 12 months. Hence, Glenn (2003) stated that blogs lack rigorous scholarly work and O’Donnell (2005) reports about findings, which show a gap between blogging rhetoric and blogging practice were proven correct at UNE. Pedagogical blogs seem to require clearly guided objectives (Huann, John, Yuen, 2005; Farmer, Yue, & Brooks, 2007: 264; Armstrong et. al., 2007; Bartlett-Bragg, 2003: 8). This explains the relatively more successful blogging at the University of Sydney, and at the Australian National University. Clearly, blogging at UNE was yet to show the pedagogical potential set in Ferdig & Trammel (2004), Armstrong, Berry & Lamshed (2007), and others, and lecturers have not attracted students to blogging (Shimabukuro, 2005).

O’Donnell’s (2005: 1) as well as Sims (2006) argument for shifting pedagogical framework to suit a cybercultural practice might be plausible but requires a major paradigm shift, which seems to be difficult for most staff. Findings are suggesting that such a shift is necessary since the potentials of blogging are not utilised, but remain rhetorical in literature. The shift requires researching ICT skills, and beliefs among staff about how pedagogical blogs could be. However, such research has to involve staff, since some might not be aware of such potentials and could be lacking in ICT skills. In other words, it has to be action research, which, along the advice from Farmer, Yue, & Brooks (2007: 263), should examine blog potential beyond productivity, to include quality of learning.

Implications for professional development in ICT pedagogical use

Apparently, the benefits accrued from a blog have to be determined at the planning level, at which the objectives are determined and communicated to potential participants. Although the laissez-faire blog could be manifestations of freedoms of expression, there are serious challenges to academia to extend blogging interest to include more pedagogical discourse. This extension of blog use requires professional development among staff, not only involving blogging technical skills, but more importantly, including planning of blogs that would involve students, in social constructivist and active learning blog environments. As a first step, we started a blog on blogging, named Blogging @UNE (http://blog.une.edu.au/blogs/), which appears to be gaining momentum.

Results from surveying the use of blogs indicated a need for establishing new policies for professional development (PD) in ICT uses, which pay attention to pedagogical, besides technical aspects. For example, the high rate of adopting new ICT suggests a need for designated time for staff to engage with ICT. The new policy requires ICT specialists who would support staff on a daily basis with highlighting the pedagogically useful features of an ICT. However, there appears to be important imperatives; managing, for staff to re-examine their teaching strategies with a view of incorporating ICT in a way that supports constructivist and active learning; and shifting towards virtual and open spaces in which the distinction between lecturer and students is obscure. That shift would be a steep for academia since it currently lacks concrete evidence of form, structure, and outcomeless academia participates in researching ICT-supported pedagogy. Thus, PD requires ongoing research that would be the source of data to inform the university about levels of ICT and pedagogical skills among staff, in concert with changes in ICT. Additionally, universities are obligated to prepare for younger ICT natives that are increasingly becoming reliant on ICT.

The short ICT life spans have to be considered for example, it might be cost-effective and easier on staff to perfect the use of a selected ICT than to adopt every new ICT on the market.

Suggestions for practice

Action research

One suggestion is to get students and staff involved developing technical and pedagogical skills for blogging. Figure 1 illustrates some of the suggestions towards framework for professional development in ICT among UNE staff.
Staff are presumably well grounded in their preferred pedagogical frameworks. The framework requires staff to be aware of the features of selected ICT, such as blogs, which they would use to design online educational resources in consideration of pedagogical preferences. The production phase, which is Step 4, might involve ICT specialists and administrative staff.

![Figure 1. ICT development plan for staff](image)

The data seems to suggest that, while personal blogs do not cause any harm, pedagogical blogs require rules at the outset. Secondly, the pedagogy behind using a blog ought to be thought out. A blog for information transmission is simple. However, a constructivist blog that actively involves students requires careful planning, including the exact times when the convener would offer scaffolding to students. Appendix I suggests some of the planning that might be taken: it is a graphical map showing challenges, and activities for role players, for a blog on biological environments. The graphic organiser shows that constructivist activities might occur between students and lectures as students start to post their findings. It is assumed that students would be informed from the outset that their posts would be assessed, and finally be accessible to the public.

Blogging projects planned for the School of Education, UNE

The goal of this research is to provide feedback to universities, in particular UNE, that would inform the processes necessary in the adoption of blogs and other ICT. This study is continuing and focusing on challenges staff face in using blogs pedagogically. It will be followed by workshops to train staff in blogging for pedagogically.

References


Framer, B., Yue, A. & Brooks, C. (2007). Using blogs for higher order learning in large-


467
Appendix I – Modelling for a pedagogical blog. E.g. a lesson on environments
RE-THINKING THE INTERNAL QUALITY ASSURANCE PROCESSES OF DISTANCE LEARNING SYSTEMS

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Abstract

One of the fundamental imperatives that devolve on open and distance learning (ODL) institutions is the need for quality assurance. This stems from the extant perception of distance learning system as less credible than the conventional approach to instructional delivery. As a result, open and distance learning institutions have introduced a number of quality control initiatives in their activities; in some cases, ODL institutions have become subject to national and/or regional accreditation processes. Thus, distance learning institutions have responded to the challenge of ‘lack of credibility’ by adopting quality assurance measures that focus on enhancing best practices in the activities undertaken by its various sub-systems: including, course materials development processes, support services, evaluation of learners’ achievement, appropriateness of instructional transactions and adequacy of technology support, among others. However, amidst the implementation of all these quality assurance activities, the second-rate perception of distance learning systems in Nigeria has not abated. This paper investigates the internal quality assurance mechanisms that are currently used by distance learning institutions in Nigeria, considered the weaknesses and subsequent inadequacies of these strategies for meeting the wider “education for all” goals from the point of view of learners specifically, and other stakeholders in the education system, in general. It concludes with a proposal for a more robust quality assurance framework to reinforce the existing initiatives on one hand, to ensure that distance learners benefit optimally from their learning experiences, on the other hand, and also to ensure that the developmental objectives of government for the education system and society are achieved maximally.

Introduction

More than any other time in history, the 21st century has witnessed such monumental growth in the awareness and acceptance of the necessity of an open and distance learning approach to education. Across both developed and developing countries, there seems a general consensus that the system holds the potential for the achievement of developmental and educational objectives of nations. However, the mainstreaming of open and distance education has brought with it numerous challenges such as policy development, capacity building, instructional design and development, as well as quality assurance. Chief among these challenges is the issue of quality, which, though has been generally accepted as desirable, is difficult to pin down to a given definition. Mishra (2006) described quality as a slippery and elusive concept, echoing the words of Pirsig (1974) that ‘Quality, you know what it is, yet you don’t know what it is.’ The term quality connotes a degree of excellence. It implies conformity to a given level of standards or specifications. Thus, the notion of quality is not a cut and dried entity but rather that which is dynamic and flows from specific institutional or national specifications. It is so nebulous that it also suggests that quality is not a fixed, immutable target or destination that may be attained at each point by striving sufficiently hard, but a set of strategies that are themselves also dynamic (Ekhaguere, 2000; 2005). The British Standard Institution defines quality as “the totality of features and characteristics of a product or service...”

...
that bear on its ability to satisfy stated or implied needs" (BSI, 1991). Middlehurst (1992) regarded quality as a grade of achievements, a standard against which to judge others. Quality assessment is largely an activity associated with industrial processes, to ensure, as stated by the BSI that the product/service on offer is able to satisfy the perceived and manifest needs of the clientele. With reference to higher education systems, quality is regarded as multidimensional, embracing all functions and activities of a tertiary institution including teaching, academic programmes, research and scholarship (where applicable), staff, students, buildings, facilities, equipment and services to the academic community.

Justifications for quality assurance in higher education systems

In industrial organizations, where the assembly line production format is popular, control measures are used by managers to ascertain and sustain the credibility and standard of the product being released into the market. According to Duncan (1978), there are two types of control measures for goal attainment—feedback control and preventive control. While the feedback control is based on the information from the end-users regarding the performance of the product, after they must have obtained and made use of it; preventive control relies on preventive planning to minimize variance or deviation in the production process. Quality assurance is a component of the preventive control mechanisms that involves ensuring that all intermediate products in production process conform as much as possible to specifications.

In the past, quality issues played very little role in the development of educational institutions, because the excellence of formal training processes and knowledge gained was taken for granted. At that time, educational institutions focused more on ensuring that their offerings are of certain universally predetermined standards. These standards are normally referred to as Academic Standards and are identified by features such as the depth of content and duration of a course of study; the transactional treatment received by learners in a given period of time, which is defined by classroom teaching, tutorials and the practical sessions that learners are exposed to in the course of their training; and a standard norm of evaluating learning achievements, through assignments and end-of-term examinations. These standards characterized educational systems for centuries and are regarded as a common denominator that is necessary in all educational institutions.

However, the forces of globalisation and the confluence of information and communication technologies as well as the expansion witnessed by educational institutions in terms of size and numbers, have given rise to the need for benchmarking the value of the instructional content given to (clients) or seekers of knowledge. This led to the establishment of quality assurance agencies were put in place in many countries of the world to ascertain the credibility of educational programmes on offer in all institutions of learning – conventional and distance, including online. Many of these external quality assurance mechanisms have been very effective in setting benchmarks and minimum academic standards below which all relevant institutions are not expected to fall. The implementation of quality assurance procedures in educational organizations according to Broadfoot (1994) in Afemikhe (2004), involves defining appropriate criteria, accreditation of institutions, visits of verifiers and use of assessment panels. Moderation of examination questions and scripts also forms part of the quality assurance process as it seeks to reduce sources of errors. Harlem (1994) identified two levels of moderation: these are: adjusting assessment outcomes to improve fairness, and putting in place processes and procedures in arriving at fair assessment. These factors point out the roles which are played by the external quality assurance and accreditation agencies within national and international boundaries. Acting as a safeguarder for distance higher education programmes which government carries out through a Higher Education Commission or another independence system or mechanism. However, Daniels (2006) observed that no quality assurance system should be transplanted from one institution to another across organizational, social and cultural boundaries. The development must be home grown from its context.

The evolution of open and distance learning systems which are generally designed to provide equitable access to high quality education for all who have been denied access by the rigid operations of the conventional systems of education, has led to a
greater degree of emphasis on systemic credibility the entire education system.
This underscores the importance of quality in open and distance learning in all
ramifications. The general acceptance and adoption of the open and distance
learning system has been largely influenced by increased enrolment rates, which is
a result of population explosion; the changing characteristics of learners,
which created the imperative for continuing lifelong education; as well as, the
convergence of information and communication technologies in education and
training. However, quality issues by whatever nomenclature: quality control, quality
management, total quality management, quality assurance or culture of quality has
become paramount in open and distance learning.
This is informed on the one hand, by the extant perception of distance education as a second rate or second best
educational approach (Valentine, 2002). On the other hand, all [educational]
institutions have the responsibility to ensure that high quality service is being
offered to its [clients] learners. A third rationale for the emphasis on quality issues
in open and distance learning is the industrial character of the system. As with all
industrial systems, mechanisms are always instituted for sustaining the credibility
and standard of the products issued to the customers. Thus, in order to establish a
'parity of esteem' with the face-to-face education system, and to indicate its
greater efficiency, distance education practitioners have the obligation of justifying
the ambitious claim that all fields of knowledge and all levels of education can be
taught effectively via the distance learning system.

Though, the conventional education system also faces the challenge of quality
assurance, this challenge is accentuated in distance education, because of its wider
jurisdiction, heterogeneous student profile and the fact that there are limited face-
to-face contact between instructors and learners. Challenge to establish the
relevance and efficiency of the certificates and degrees earned through the open
learning system therefore remains pervasive throughout the lifespan of the
institution and/or the recipients of the awards.

Quality Assurance in Open and Distance Education

Open and distance learning tends to have a wider public presence, because its
resources are available for all to access and assess therefore it faces the demand
for greater social accountability than the conventional system. Within the
framework of their stated aims and objectives, ODL institutions have had to
confront the all important issue of quality assurance in all aspects of its educational
programmes. However, programme implementation may not meet its catalogued
description and this may lead to the failure of the programmes to achieve the goals
for which they were designed, no matter how laudable. Since goal attainment is
paramount to any organization, the internal quality assurance mechanisms put in
place would be a way of ensuring goal attainment. As stated earlier, distance
education faces a stigma of inferiority, therefore quality should be a self-serving
imperative for distance education institutions. Open and distance learning
institutions have to assure the integrity of the qualifications in order to gain the
confidence of policy makers, employers of labour as well as prospective learners.
This is only possible if the institutions are able to deploy very effective and
sustainable internal quality assurance mechanisms establishing the excellence of
its services and products.

Quality assurance conceptualized in this paper involves everybody. Its attainment is
consequent upon the community of students, teachers, support staff and managers
with each contributing to and striving for continual improvement. Quality
Assurance practices are designed to ensure that procedures and services are of
appropriate quality. Though, it has been indicated that elements of quality
assurance is noticeable in distance learning programs, there is still a lot to be
done, because the extant quality assurance processes are still dominated by external
quality control and accrediting agencies. This leads to an over-reliance on external quality criteria for defining the value of the offerings being made to the customers (learners) of the institution. As the improvement in the quality of goods and services is the goal of industrial and corporate organizations, it must also be the goal of open and distance learning institutions to continuously improve on the quality of instruction, research and community service. Therefore, internal quality assurance mechanisms defined by the total quality management approach, which involves the integration of all functions and processes within an organization in order to achieve continuous improvement, must come to the forefront in the planning and administration of open and distance learning institutions. The implications of this is that the inputs, processes, and outputs must all be well coordinated, and subjected to quality performance measures, to ensure that the overall goals and objectives of the institution are achieved.

Internal Quality Assurance Mechanisms in Open and Distance Learning

The foregoing has serious implications for quality assurance processes in open and distance learning institutions, because they are expected to pursue knowledge for its own sake, rather their mandate is to provide qualified manpower and produce functional knowledge useful and applicable in all facets of life in the 21st Century corporate environment. Recruitment and selection of both academic and support staff must be based on sound criteria, not limited to mere certification which indicates that the holders have satisfied a prescribed set of requirements, which qualifies them to occupy the designated position, rather it must also establish the practical competence of the individual against a predetermined benchmark that is institution and/or position-specific. It must be noted that the process of quality assurance in open and distance learning commences with the academics who should not only be qualified, but must also have passion and commitment to distance education as a mode of learning, empathy with learners and skills to participate in a learning mode that demands just as much in terms of creativity and professional expertise from the academic as it does from the student.

The design and development of curriculum and instructional design must be based on pretest criteria, rather than on externally imposed standards of development. The quality of educational transactions should be reflected in product, processes and the outcomes (levels of learners’ achievement, competence, satisfaction, employability of graduates vis-à-vis the perceptions of employers and the long-term socio-educational impact) of the system. Therefore, instructional materials issued to the learners must not only reflect the state-of-the-art in knowledge available, but should also take into consideration the changing social context of knowledge in the current milieu. Additionally, learning materials must truly cater to the requirements of different learning styles and just cater to the needs of broad classifications of popular learning styles. Thus, developing distance learning materials (print, electronic or on-line), care must be taken to ensure that different groups are able to access these resources in a form in which it will be most useful to them. A system of developmental (i.e., pilot) testing, to ascertain the effectiveness of the course materials, is proposed before they are issued to the wider population of its learners (Olakulehin, In Press).

The challenge of quality assurance for distance learning institutions also requires that the learning transaction that takes place is sufficient to establish a mastery of the subject matter by the learners. Interactivity is the crux of transactional treatment received by learners in the course of their learning experiences, thus the materials and the processes must be structured to provide the learners with the preferred level of interaction in the learning process. While the issues of tutorial facilitation in many ODL institutions seem to be topical, counselling services should not be regarded as optional. Learners should be prompted to seek
counselling at various stages of their learning. This may be done by sending e-mails, post cards at specified phases of the course to encourage and motivate the learners to study hard and persevere in their studies; this would also serve to remind the student that while s/he is studying alone, s/he is not alone. Though, there is a little or no emphasis on entry behaviours in Open Learning and Distance Education, there is a great deal of emphasis on the behaviour of learners, but the in-course behaviour of the learners is rarely taken into consideration. Apart from the formative evaluation which seems to focus on the cognitive achievements of the learners, there is no consideration given to the social or psychological experiences of distance learners. Counseling activities in open and distance learning must go beyond the traditional approach which waits for the learners to initiate the interaction, rather it must become pro-active and literally ‘intervene’ in the learning processes of the learners to ensure that they are benefiting optimally from their studies.

Furthermore, criteria to assess the quality of work of teams which carry out research in ODL institutions must differ from those of the traditional institutions which focus essentially on disciplinary subject matter. A voluntary system of peer review as it obtains in the traditional institutions may be adopted, however, emphasis must not solely be on peer review, carried out by those adjudged to have contributed in terms of published research to the discipline, but also focus on the context of application, which should incorporate a diverse range of intellectual interests as well as other social, economic and political ones. This would inevitably lead to an academic fraternity, in which the actors in the ODL academia would move out of a traditional garb and develop multiple competencies which would enable them to accept multiple responsibilities after having undergone training and retraining as new technologies evolve to aid academic interaction between learners and their instructors.

The ascendancy of information and communication technology (ICT) in education and training has created greater potentials for reaching wider audiences at much faster speed than before. On the downside, this has created the possibilities of spreading half-baked and incomplete knowledge or instructional content. El-Khawas (1998) stated that the use of technology has expanded and has spawned new ways of teaching and learning that were only imagined... but has also brought with it new challenges and concerns for quality control. The fallacy of the printed word, which indicates the tendency for readers to accept anything that is provided in a printed literature may extend to materials that are accessed either on-line synchronously, or are accessed asynchronously through devices like CD-ROMs, listservs etc. Therefore, the quality of instructional activities that are ICT enabled must also be subject to quality assurance. The material must meet certain prescribed criteria, such as the following examples identified in the Consumer Based Quality Guidelines for Learning Technologies and Distance Education which may serve as a useful guide for policy makers and providers of technology-assisted learning on the essential components of a quality course or programme (Hope, 1999):

- Clearly defined and achievable learning objectives;
- Relevant, scholarly and up-to-date curriculum content;
- Well-designed teaching and learning materials;
- Well-supported total learning package;
- Appropriate use of learning technologies;
- Sound technical design;
- Appropriate and necessary personnel support;
- Provision of additional learning resources;
- Planned resource provision; and
- Outline review and evaluation cycle.
Further, the characteristics of software as intangible products are more consistent with higher education. The quality criteria applied for software in engineering adapted for higher education systems by Owlia & Aspinwall (1996) in Table 1 is applicable to ODL systems when selecting software to be used in their processes.

Table 1 Software quality dimensions in higher education

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Definitions in Higher Education</th>
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<tbody>
<tr>
<td>Correctness</td>
<td>The extent to which a programme/course complies with the specified requirements</td>
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<tr>
<td>Reliability</td>
<td>The degree to which knowledge/skills learned is correct, accurate and up to date</td>
</tr>
<tr>
<td>Efficiency</td>
<td>The extent to which knowledge/skills learned is applicable to the future career of graduates</td>
</tr>
<tr>
<td>Integrity</td>
<td>The extent to which personal information is secure from unauthorized access</td>
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<tr>
<td>Usability</td>
<td>The ease of learning and the degree of communicativeness in the classroom</td>
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<tr>
<td>Maintainability</td>
<td>How well an institution handles customers’ complaints</td>
</tr>
<tr>
<td>Testability</td>
<td>How fair examinations represent subject study?</td>
</tr>
<tr>
<td>Expandability</td>
<td>Flexibility</td>
</tr>
<tr>
<td>Portability, reusability and interoperability</td>
<td>The extent to which knowledge/skills learned is applicable to other fields</td>
</tr>
</tbody>
</table>

Source: Owlia & Aspinwall (1996)- A framework for the dimensions of quality in higher education

Lastly, assessment and evaluation of learning achievement at various stages of the learning process must be regarded as an important internal quality assurance measures in open and distance learning. Basic learner evaluation in open and distance learning involves the self-assessment exercises for introspective evaluation, continuous assessment which is known as the ‘Tutor-Marked Assignments’ (TMAs), as well as Term-end-examinations. The self examination or self-check questions and the tutor marked assignments samples of formative evaluation, expected to record the progress of learners in the course of studying the materials, while the term-end-examination summative system of evaluation at the end of the course, used to determine overall learning achievement of the learners. The integrity of open and distance learning can be directly linked to the integrity of learning evaluation. A myriad of challenges exists in evaluating distance learners because of the vastly heterogeneous population. Therefore open and distance learning institutions must place emphasis on the quality of assessment process including issues like moderation of examination questions to establish the horizontal and vertical standards of the items; maintenance of a standard question bank to draw questions from as and when needed; as operational security concerns. Recent developments in assessment include the introduction of the on-demand examination system whereby learners apply for and sit for their examinations at anytime within the semester. This makes the administration of the examination process convenient for the institution since it would only have to cater for limited clusters of learners at a time. However, the integrity of assessment processes and learner evaluation must not be compromised in the bid to enhance administrative convenience. Conventional institutions over time have perfected formalized procedures for enhancing the integrity of their examinations, distance learning institutions must also take all necessary steps to ensure that their examinations meet up to acceptable standards of quality.
Conclusion

For any course or programme, irrespective of the mode of delivery, an institution must be able to demonstrate that: Learning outcomes have been set at the appropriate level and clearly communicated to learners; content and design of the curriculum and instructional methods employed are effective in enabling the learners to achieve the outcomes in terms of both acquisition of knowledge and the development of the related practical skills and abilities, and Assessment is appropriately designed and rigorously administered to measure the achievement of the outcomes. In open and distance learning systems, these standards are taken further because the massification of access has created a rather suspicious view of the system and its advocates, even among academic cycles. Consequently, internal quality assurance mechanisms must be entrenched into all activities that take place within the system such that it translates from a system of quality maintenance into a system characterized by the culture of quality. The activities of ODL institutions such as staff recruitment and selection, curriculum design, course preparation, design and development of self-learning materials, information and knowledge management systems, assignments handling and turnaround-time, course delivery to learners, counselling support, copyright and intellectual property, finance and budgeting, project implementation etc, must all be brought within the purview of a systemic internal quality assurance mechanism which, institution specific, i.e. homegrown, such that the hybrid product that evolves from such an institution will be regarded as the mark of quality and excellence in the open and distance learning system. Distance learning institutions must be willing to formulate and operationalize their own individual notions of quality they must also be ready to mobilize and sensitize their various constituencies on the imperative of quality management by formulating strategic plans for quality management that will serve as a road map for building a culture of quality in all aspects of institutional functions and activities.

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Kanwar, A. (2006). Quality Assurance in Distance Education presented at the Quality Assurance Workshop for Academics and Senior Management Staff of the National Open University of Nigeria, May 11.


Abstract

The objective of the Criminal Justice Process is to prevent crimes by facilitating the reformation and re-integration of offenders into the society and preventing their relapse into crime. This rehabilitative objective has too often been elusive and the criminal justice process continues to engender negative responses to the socialising stimuli. This paper attempts to look at the prison population, the very measures taken to reform and rehabilitate the offender and to control crimes and the defects. It also x-rays the reformative and rehabilitative possibilities so as to incorporate them into the sustainable development programmes through Distance Education. For this purpose, 520 prison inmates in Lagos State, Nigeria were studied, through a survey, not only to identify the needs of prison inmates in Nigeria but also to proffer creative and regenerative programmes based on the findings.

Key words: Criminal Justice Process, rehabilitative objective, socialising stimuli.

Résumé

L'objectif du Criminal Justice Process est de prévenir la criminalité en facilitant la réinsertion et la réintégration des détenus dans la société et en les empêchant de récidiver. Cet objectif de réinsertion a été trop souvent difficile à atteindre et le processus de justice pénale continue de susciter des réactions négatives au stimuli de socialisation. Cet exposé se penche sur la population carcériale, les mesures prises pour réformer et réinsérer les détenus et prévenir la criminalité et les défauts que comporte. Il se penche sur les possibilités de réinsertion afin de les inclure dans les programmes de développement durable par le biais de l'Enseignement à Distance. A ces fins, nous avons étudié 520 détenus dans l'Etat de Lagos au Nigeria, à l'aide d'une enquête, non seulement pour identifier les besoins des détenus au Nigeria mais aussi pour proférer des programmes créatifs et régénérateurs à partir de ces conclusions.

Mots clés: processus de justice pénale, objectif de réinsertion, régénérateur, stimuli de socialisation.
The Policy of the National Open University of Nigeria

The National Open University Act, 1983 established the National Open University of Nigeria. Among the objectives of the University:

1. To encourage the advancement of learning and to hold out to all persons without discrimination, the opportunity of acquiring a higher and liberal education. This is by means of tuition carried out by correspondence, supplemented by lectures, broadcasts by radio, and television as well as additional seminars and counselling services organised through a network of local study centres.

2. To provide courses of instruction and other facilities for the pursuit of learning, especially to those who may not, by nature of their circumstances, enroll for residential full time university education.

3. To relate the activities to the social, cultural and economic needs of the citizenry.

Hence, its mission as a foremost University is to provide a highly accessible and enhanced quality education anchored by social justice, equality and national cohesion through a comprehensive reach that transcends all barriers to instructional delivery through the open and distance learning mode and provides functional and effective, flexible learning in different fields of education, independent of time, location and space and directs focus away from group to the individual (NOUN, 2006). It also provides opportunities for technical and vocational skills acquisition and a network of support for learners in areas of academics and administration, guidance, learning facilities, resources, brand presence and general information outlet. Consistent with its motto, “Work and Learn” and its uniqueness is openness, access to and flexibility of instructions epitomised in distance learning coupled with its ability to offer its diverse learners what they want, where and when they want it. As it is learner-centred, it concedes the right of learners to choose their individual mode of instruction. The mode of instruction or learning includes print, audio-cassette, video cassette, telephone, radio, television, CD-Rom, VCD, DVD, Computer-driven network or other media outlets and multimedia facilities. For instance, the National Open University of Nigeria has begun to produce Course Materials in Braille to serve the needs of the visually impaired. In the same way, it can be inspired to design and develop flexible, creative and regenerative or modern correctional programmes to serve the needs of persons in prisons and other institutional establishments and their officials without any disruption in the institutional arrangement or individual normal life.

The role of education in crime control

Education is the most important instrument of changing any society and it has potential for the strongest and most enduring impact. In particular, fundamental change in the intellectual and social outlook of the society has to be preceded by an educational revolution. Education provides skilled manpower, reduces urban migration, provides healthy discontent, reinforces traditional values, provides an understanding of national objectives and prepares man for a changing world (Clinnard and Abbott, 1973). It may be added that education provides greater knowledge of persons, things, places, situations and opportunities and modern life’s demands and requirements. It develops in the individual the right type of attitudes and values; it improves awareness, enhances employment opportunities, encourages independence and ensures less inclination to crimes. Moreover, it promotes national consciousness and patriotism. Hence education as a powerful instrument for crime control can contribute towards crime prevention through reduction in the level of unemployment and increased participation in the ownership and management of productive ventures. It can also bring about increases in real income per capita, resulting in an improved standard of living for the people. Explanatory and inter-sectoral planning for crime prevention, coordination of major socio-economic policies towards building a sense of nation and effective improvement of the well-being of the people on an egalitarian basis.

The Right to Education has also been encapsulated in several components of Human Rights Bills ranging from the Universal Declaration on Human Rights, the International Covenant on Economic, Social and Cultural Rights, (Article 13) Delhi Declaration, 1959 and the Lagos Law,
1961. The African Charter, 1981 affirmed that civil and political rights cannot be dissociated from social, economic and cultural rights, both in conception and universality and that the satisfaction of economic, social and cultural rights is a guarantee for the enjoyment of civil and political rights. The Charter expressly recognized the individual right to education (Article 17) and right to development (Article 22). The Vienna Declaration arising from the World Conference on Human Rights, 1993 is to the effect that human rights are not only universal, and indivisible, but also must be treated in a fair and equal manner, on the same footing and with the same emphasis.

Specifically, Nigeria’s Constitution declares that the guiding principles of government shall be ideals of democracy and social justice; its primary purpose and responsibility shall be the people’s security and welfare and the basis of social order shall be the ideals of freedom, equality and justice. The Constitution further enjoins the government to be humane in its actions, harness national resources and provide for the citizens’ necessities of life including as far as practicable, free, equal, and adequate primary, secondary and tertiary education (FGN, 1999).

The Constitutional provision has built, in the quality of the people, a high expectation of a fair, just and equitable society as well as access to and adequate educational opportunities at all levels. It has equally ‘positioned’ education as requisite to gainful employment and success. But the percentage of children of school age who are in school is 25. Incidentally, less than 5 percent find placement in the universities. Even for these groups, education is quite unrelated to the political, social, economic and cultural aspirations and circumstances of the people and country. The cumulative effect is frustration and this forces young and adventurous adolescents into situational adjustment, innovation and retreatism manifesting in crimes and criminality.

Judicial attitude towards the right to education and development has been one of extreme caution. The African Charter on Human and Peoples’ Rights (Ratification and Enforcement) Act, 1990 expressly provides that “the provisions of the African Charter on Human and Peoples Rights...shall have the force of law in Nigeria and shall be given full recognition and effect and be applied by all authorities and persons exercising legislative, executive or judicial powers in Nigeria.” A contrary view was expressed at the Colloquium “The Domestic Application of Human Rights” organised by the Commonwealth at Abuja in 1994, to the effect that the African Charter is not yet part of the national laws of Nigeria. In Ogugu v The State and Gani Fawehimi v Abachá the Supreme Court held that although the African Charter on Human and Peoples’ Rights (Ratification and Enforcement) Act has not made a special provision for the enforcement of its human and peoples’ rights within a domestic jurisdiction, there is no lacuna in our laws for the enforcement of its provisions which, like other laws, fall within the judicial powers as provided by the Constitution and all other related laws. It is now a rebuttable presumption that a state’s domestic law will be consistent with international obligations. To all intents and purposes therefore, the individual right to education and development have become an integral part and parcel of the right to life and actionable per se. As a component of the right to life, the right to education is inalienable in the context of the social contract theory.

Crime and crime control

There are two facets of crime control: Prevention and Preservation of life and property. Statistics have shown that the raw crimes known to the Police were 106,165 at independence (1960), 130,000 immediately before the military seizure of power, 137,021 at the end of the civil war and 372,592 in less than two decades later. Thus in less than two and half decades from independence, crime had increased by 251.9 percent. New crimes are emerging. Examples are transnational smuggling and armed robbery. New methods of committing bank fraud, kidnapping, obtaining by false pretences, capital flight, thefts and environmental destructions have also emerged. Whether or not crime situation would have been worse without

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3 (1994) 9 NWLR (Pt.366) 1
4 (1996) 9 NWLR (Pt.475) 710
5 Attorney General v British Corporation (1981) AC 33 at 354
those measures is arguable. But the growth in the dimensions of crime and criminality signifies a deficiency in or failure of strategies for crime control and treatment of offenders and this may not be peculiar to Nigeria.

Generally, people have looked up to the government to control crimes because it is responsible for the conditions that generate crimes. Indeed, the purpose of government is to maintain law and order and protect life and property; a government that cannot prevent crimes and protect lives and property therefore has no right to govern. Public expectation of government and their loyalty to the State as well as the attachment to the society are measurable by the extent to which they feel secure and their lives and property protected. This probably what Emil Durkheim meant when he said that to become attached to the society and to apply loyal to the State, a person must feel in it something that is real and powerful, which dominates the person and to which he owes the best part of himself. This was amply demonstrated in the peoples’ resistance of military hegemony that violated their natural rights and consequence forfeited the right to rule.

The application in Nigeria of alien prescriptions for crime control has not also succeeded at bringing crimes down to any tolerable level. The experiences, hopes and fears on which those prescriptions are built differ from those prevailing in erstwhile dependent nation-states in space and time. In arriving at those prescriptions, data and experiences are inevitably included while other considerations of human experiences of enormous range, at the same time, excluded. The facts and data, which give rise to the prescriptions, are severely limited by their geographical specificity. There is also an unproven underlying assumption that the accrued knowledge and concepts contain certain truths, which is encompassing of cross-cultural differences and therefore of universal applicability. The nature and character of the criminals (actual or potential) are also different. For example, Lord Justice Lawton has argued that a prime cause of crime is wickedness, not bad social conditions and what is wrong with the British penal policy is that “the State had made the carrots more and more appetizing and the stick little used.” In Nigeria, for example, the reverse is the case. The prime cause of crime is frustration arising from poor social and economic conditions and state violence often yielding the big stick with no consideration for carrots. Furthermore, the European imagery of the typical offender, according to Mary Carpenter, is one of a ‘stranger living outside the society,’ a ‘moral sewage’ or “savage” to be physically cut off from the society and civilised world, and sent to some spot, where their fiend-like passions should be vested upon each other on peaceful and harmless members of society. It mattered little that the criminal was transported to the colony or the New World or hauled into involuntary “penal servitude.” The typical offender in Nigeria is a ‘brother’—a sick brother in the African concept of brotherhood, whose healing, not punishment. To this end, the common verdict of the traditional judicial organ is restoration and restitution and its objective is to sustain group solidarity, cohesion and social equilibrium.

Incidentally, at least in theory, the modern aim of sentencing is to rehabilitate offenders and change their dispositions and attitudes to life. The aim of the prison is to offer support and hence send the prisoner out better men and women, physically and morally than when they came in. The UN Standard Minimum Rules for Trial and Sentencing as well as the Standard Minimum Rules for the Treatment of Prisoners have provided in deciding a sentence, the judicial authority is to consider the rehabilitative needs of the offender, the protection of the society and the interests of the victims, utilising all remedial, educational, medical and spiritual forms of assistance to treat the prisoner’s needs and facilitate his or her return to the society as a law

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10 The Times 5 June, 1975.
abiding member. Also that un-convicted prisoners are presumed innocent and shall be treated as such.\(^\text{15}\) Nigeria, like most members of the United Nations adopted these resolutions and her prison service has constantly declared that rehabilitation is its major aim. Furthermore, the Prisons Act stipulates that the Prisons “shall identify the reasons for the anti-social behaviour of offenders, teach and train them to become useful citizens in a free society.”

Offenders and reformative and rehabilitative possibilities

In the traditional Criminal Justice System, prison existed only in some large chiefly Moslem Emirates and the Yoruba and the Bini kingdoms. These were reserved for persons found guilty of irredeemable offence, and adjudged dangerous to the safety of others and pending execution or exile. William McCoskry, Vice Consul 1861 set up prison because he had “no Police, no jails, nor other efficient modes of punishment of offenders” and it led to apprehension and confusion especially in the chiefless parts, Eastern Nigeria. The subject people did not see the need for it and were not prepared for the change. Lord Lugard's instruction to his courts was that it was not sufficient to order restoration and restitution alone; they should impose imprisonment in addition. The result was that imprisonment quickly became the mostly used option of sentencing and Nigeria increasingly became custodial. Meanwhile, the world trend is de-institutionalisation and non-custodial, which were the practices in pre-colonial times.\(^\text{16}\)

It is instructive that in both regimes, there is skepticism about the strategies and tactics for prevention of crimes and treatment of offenders. Criminologically, there are really no developed or developing nations. Developing countries are adding the crimes and criminals of the industrialized world to their own traditional ones. One, harsh penalty excites the crimes it seeks to prevent. In the other, it is misplaced leniency. Both are faced with the same problem of crimes and crimes control but of unequal magnitude. In both regimes therefore, there is an urgent need to reconsider existing strategies and probably, dig new grounds.

Reformation and rehabilitation of the offender has always been an attractive penological aim and it is faced with a dichotomy between what is desired and reality, theory and practice, expectation and performance. For example, crime defined in terms of punishment as an act or omission which renders the person doing the act liable to punishment under a written law.\(^\text{17}\) The common nature of crimes is that they are prohibited by the State and those who commit them are punished. The duty of the Criminal Law, according to Lord Goddard, LCJ is to punish. Reformation, he said, is not the court's business. With due respect, the purpose of the Criminal Law is not just to punish but also to prevent crimes and this end is served if the offender is assisted to turn from criminal ways to honest living. Lord Denning also said that the sentence of Court should be demonstrative and adequately reflect the revulsion felt by the majority of citizens for them. The philosophical basis of punishment from the perspectives of statutory provision as well as the judicial and prison practices has been retribution and deterrence.

The features of pre-trial remand have been “painful suspense” and a mixture of boredom, education, psycho-therapy, brainwashing, and restraint. Besides, there is that settled assumption that imprisonment shall be with ‘hard labour’ and ‘hard bed’. The obsession for ‘safe custody’ of inmates creates the impression that prisons are places of segregating suspects or convicts or hiding human beings like human dirt under the carpets. The socio-economic profile is more precarious upon discharge. Their families reject them by reason only of the prison bogey. The public have begun to avoid them and label them, ‘dangerous’ and ‘source of fear and panic’. The result is a waning belief in the efficacy of reformation and rehabilitation as a treatment method and erosion of confidence in the institution.

\(^\text{14}\) United Nations General Assembly Resolution, 45/110
\(^\text{15}\) UN. Gen. Assembly. Resolution, 663 CI (XXIV)
\(^\text{17}\) Section 2, Criminal Code, Laws of the Federation 1990.
\(^\text{18}\) Proprietary Articles Trade Association V. AG of Canada (1931) AC 147 per Lord Atkins
Much of the official attitude (legislative, executive or judicial) has been one of a simple belief that when the Police and the Military cannot prevent the increase in crimes, and when certain elements in the community are willing to explore the confused socio-economic and political situation, the threat of punishment must be increased. Another is to build more and more prisons. Gledhill has expressed the view that the available knowledge of the techniques regarding improvement of the human character is too limited to make it an attainable objective in the case of adult convicts at present, especially as, in most countries, the system involved is more than can be incurred. He argued that there is a higher possibility of achieving the reform of juvenile delinquents in reformatories and approved schools than in reforming adults in jail. He probably forgot, with due respect, that juvenile institutionalization is effective because it is humane, and first delinquents are hardly detained but are discharged conditionally, unconditionally, bound over, repatriated, sent to an educational setting, or placed in the care of their parents or other fit and proper person under the supervision of the Police or a probation officer. Furthermore, the overriding consideration in Juvenile Justice Administration is the paramount interest and well being of the juvenile. They receive education according to their age and development; the education they receive is, at least, the equivalent of that which they would receive in their own special circumstance, were they attending school in the usual way of education. There is no evidence to disprove that if the same considerations are extended to adults in jail, the same or better degree of success will not be achieved if appropriate arrangements are made. This is the crux of the matter.

Prison Inmates, 1996 - 2005

The categories of prison inmates are either convicted or repeated offenders), who are serving their terms or suspected persons on remand or charged and awaiting trial. The prison statistics of the total prisons admissions is as follows:

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Admission</td>
<td>245329</td>
<td>236964</td>
<td>217200</td>
<td>195264</td>
<td>180572</td>
<td>158148</td>
<td>156738</td>
<td>137952</td>
<td>149140</td>
<td>149422</td>
<td>182673</td>
</tr>
<tr>
<td>Remand &amp; Awaiting Trial</td>
<td>-</td>
<td>-3.4</td>
<td>-8.3</td>
<td>-10.1</td>
<td>-7.5</td>
<td>-12.4</td>
<td>-0.9</td>
<td>-</td>
<td>12.0</td>
<td>8.1</td>
<td>0.2</td>
</tr>
<tr>
<td>Convicts</td>
<td>49.0</td>
<td>57.7</td>
<td>57.6</td>
<td>56.8</td>
<td>58.6</td>
<td>52.9</td>
<td>52.2</td>
<td>51.5</td>
<td>52.5</td>
<td>56.3</td>
<td>5 4.5</td>
</tr>
<tr>
<td>Detainees</td>
<td>29.8</td>
<td>25.3</td>
<td>26.0</td>
<td>25.1</td>
<td>29.6</td>
<td>36.0</td>
<td>38.5</td>
<td>37.7</td>
<td>38</td>
<td>35.7</td>
<td>32.3</td>
</tr>
<tr>
<td>Others</td>
<td>16.3</td>
<td>11.3</td>
<td>12.0</td>
<td>12.5</td>
<td>9.0</td>
<td>4.9</td>
<td>3.8</td>
<td>4.2</td>
<td>6.0</td>
<td>4.0</td>
<td>8.4</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>


This Table shows that the average yearly prison admission in 1996-2005 is 182,672. There has been a steady decrease of 4.6 per cent per annum except in the terminal years which recorded increases per cent of 8.1 (2004) and 0.2 (2005). It also shows the breakdown of the yearly admissions. The average per cent per annum of convicts in relation to total prison admissions is 32.3.

Walker, Hammond and Steer in their study of Scottish and London samples have found that with each successive conviction for violence, the probability of a further such conviction

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19 Gledhill, Penal Codes of Northern Nigeria and Sudan, 1963, P75
20 Tables 1- are calculated from the raw figures in Abstract of Statistics, 2006
increases sharply. This in part explains the high recidivism rates in violence and violent crimes, all of which are worrisome omen. Percentage of repeated offenders in relation to prison admissions ranges from 48.9 (1996), 52.0 (2000), 44.7 (2001), 42.5 (2002), to 43.6 (2003), 49.0 (2004) and 37.6 (2005), showing an average of 43.0 per cent per annum.

Alan Milner rightly observed that there is at present no systematically collected and evaluated information about the success of particular penal measures either in general or in respect of specific categories of offenders or about the process of identifying offenders' characteristics. Consequently, there is no treatment method universally accepted as effective measure in dealing with them. The absence of categorization of prisons for typological treatment of inmates does not make evaluation possible, if at all. And how does one talk of categorization of prisoners in a situation where the maximum capacity is 36379 (federation) and 2795 (Lagos state) whereas the prison maximum capacity is 36379 (federation) and 2795 (Lagos state) and 32.3 – 35.0 per cent of prison admissions?

Even countries, which have separate prisons for different treatments are still faced with problems of recidivism; signifying that the treatment, which is ideal for offenders is still elusive. Indeed, Report on Prison Services in England and Wales debunked the belief that prison treatment based on diagnosis of cause of crime and subsequent prescription of a prescribed treatment can directly cure criminality.

Crimes are human phenomena and they cut across gender, and age barriers. Among the criminals are some government functionaries, citizens, financiers, academia and students, law enforcement agents (legitimate or pseudo) and multinationals. But Shaw, McKay and Tappan have found that those who, commonly get remanded or convicted, rightly or wrongly or sent to the prisons belong to the lowest socio-economic category. This also finds support in the spatial distribution of crimes in Lagos State which shows that Ajegunle, a relatively poor and high density area had the highest crime density of 4.2 compared with the high class and sparsely populated area of Victoria Island, which recorded 0.87. This collaborates Isiemedu's findings that 52.7 per cent of prisoners had payment of rent problems, 33.0 per cent had defaulted in payment of children's school fees and 41.0 percent had no job.

The criminal process, as a selective instrument in the administration of criminal justice according to law, concerned only that the game should be played according to the rules. Kennedy and Adeyemi have faulted it on the ground that verdicts are often reached haphazardly, for the wrong reasons and it is likely to result in wrong selection of wrong persons or wrong choice of disposition methods even for the rights. ‘The tragedy of our courts therefore is that means have come to count more than ends, more than content, appearance more than reality.’ No wonder Stephen Ward committed suicide rather than face such due process. The position has not changed.

Nigeria is an emerging nation where education is recognized as a vehicle to success, and a passport to self reliance and sustainable socio-economic advancement and every citizen wants to succeed. It is partly for this reason that the Prisons should not be allowed to shut out inmates from participation in the on going revolution in the educational system and growth in the economic, technological, intellectual and cultural life outside. As Wells, H. G. has reminded us, human history has become more and more of a race between education and catastrophe. Plato exhibited an abiding faith in a system of education the production of philosopher king, obedient population and maximization of self actualisation. Sir Alex Paterson, Prison Commissioner, was vehement that emphasis should be trained to make him more.

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fit to live a law abiding life upon release. And as Sir Thomas Moore has said “If you do not remedy the conditions which produced thieves, rigorous execution of justice in punishing them will be in vain”

Open university system and rehabilitation possibilities

A study carried out in January, 2008 showed that Nigeria, Lagos State has the highest concentration of prisons and prison inmates with prisons housing altogether about 3,880 male and 120 female convicts: With such a high female to male ratio of 1:33, it became necessary to survey all the females and only 400 males. Of the sample, 390 males and 114 females responded meaning a total return rate of 96.9%. The aims of the study include:

1. Identifying the needs and interests of prison inmates.
2. Examining how these needs have been addressed through prison reformation and rehabilitation scheme.
3. Establishing how far the schemes have achieved their desired objectives of reforming and rehabilitating the inmates on discharge.
4. Fostering new approaches for dealing with crimes and criminals through programmes of education of prison inmates and delivering assistance towards improved Good Prison Practice.

The whole essence is to match inmate’s desires with the available ODE programmes and explore how the inmates can be involved in their career programmes. At the same time, the study has created awareness of the uniqueness of the Open University device of academic and vocational programmes, which offer new and wider scope of career from which inmates can freely choose. This affords inmates the opportunity to fully undertake programmes or careers of their primary interests. The study is also significant to the Open University System as it helps in prioritising its development programmes to reflect what the prison inmates want, their needs, interests and aspirations, considering that the uniqueness of the system lies in the ability to provide high quality cost effective lifelong education that transcends all barriers including the barricaded high prison walls. The study design is the survey using the questionnaire and simple statistical tools. The analysis of some of the pertinent questions and responses are shown below:

<table>
<thead>
<tr>
<th>Factor</th>
<th>Educational/Vocational Programme</th>
<th>Respondents</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Percent</td>
<td>No</td>
</tr>
<tr>
<td>Areas in which inmates are receiving training in Prison</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Tailoring</td>
<td>25</td>
<td>6.4</td>
<td>29</td>
</tr>
<tr>
<td>2. Liberal Education</td>
<td>176</td>
<td>45.1</td>
<td>22</td>
</tr>
<tr>
<td>3. Hair Weaving/Barbing</td>
<td>6</td>
<td>1.5</td>
<td>13</td>
</tr>
<tr>
<td>4. Carpentry</td>
<td>28</td>
<td>7.2</td>
<td>-</td>
</tr>
<tr>
<td>5. Welding</td>
<td>12</td>
<td>3.1</td>
<td>-</td>
</tr>
<tr>
<td>6. Miscellaneous (5 or less number each)</td>
<td>59</td>
<td>15.1</td>
<td>22</td>
</tr>
<tr>
<td>7. Did not answer</td>
<td>24</td>
<td>6.2</td>
<td>3</td>
</tr>
<tr>
<td>8. Nothing Particularly</td>
<td>60</td>
<td>15.4</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>390</td>
<td>100.0</td>
<td>114</td>
</tr>
</tbody>
</table>

What inmates like most if opportunities were there

<table>
<thead>
<tr>
<th>Factor</th>
<th>Educational/Vocational Programme</th>
<th>Respondents</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Percent</td>
<td>No</td>
</tr>
<tr>
<td>1. Entrepreneurship/small scale business management</td>
<td>62</td>
<td>15.9</td>
<td>38</td>
</tr>
<tr>
<td>2. Computer Literacy</td>
<td>108</td>
<td>27.7</td>
<td>17</td>
</tr>
<tr>
<td>3. Seed Science &amp; Agro-based Food Technology</td>
<td>14</td>
<td>3.6</td>
<td>14</td>
</tr>
<tr>
<td>4. Beauty care &amp; modelling</td>
<td>17</td>
<td>4.4</td>
<td>10</td>
</tr>
<tr>
<td>5. Marketing</td>
<td>20</td>
<td>5.1</td>
<td>5</td>
</tr>
<tr>
<td>6. Cell Phone Repairs</td>
<td>34</td>
<td>8.7</td>
<td>5</td>
</tr>
</tbody>
</table>

The result findings and proposals based on them as follows:

**Literacy programmes**

The achievement in the education and vocational training and retraining of prison inmates is the acid test of any commitment to the ideals of reform and reintegration of offenders. The available Prison Service Reports on this does not show the desired improvement or level of reformation of offenders. The best result was in 1980. That year, 4,105 inmates were involved in the Literary programme, 1045 (or 25.5%) passed the Primary School Leaving Certificate Examination, 21 (or 0.5%) passed the West African School Certificate Examination or its equivalent while five (or 0.1%) passed the General Certificate Examination (Advanced Level). As at date only two undergraduates have been recorded, one of them is in the Open University. This, in my considered opinion, is the nearest claim to the reformative and rehabilitative ideals.

From the study, the prison inmates who profess to be receiving some form of education are 198 or 38.1% of the sample studied or 39.3% of respondents. The inmates do not have enough time devoted to academic pursuits and the older inmates as teachers giving validity to the adage that in the country of the blind, one eyed man is the king. While part of the curriculum being used require improvements; other aspects need a complete change. The availability and attractiveness of the Open University literacy programmes serve bringing beneficiaries, who may be desirous and able to learn and keep learning, in contact with the possibility of a career. Its Certificate, Diploma, Undergraduate and Postgraduate Programmes offer new options to learners or opportunity to resume and continue the courses they had abandoned abruptly. Inmates who succeed in one level and are also able to obtain the requisite basic qualification for a higher level of study are assisted to proceed to subsequent programmes they wish to pursue.

**Proficiency certificate programmes.**

The Prison offers vocational training in carpentry, ironmongery, welding, painting, hair weaving and tailoring. The reaction of the inmates to these is borne out in a sample study. As the Institution cannot give what it does not have, the inmates' option to make a choice of their desired programme, if at all, is severely limited by what is available. The programmes have remained as they were laid down in the nineteenth century when the Prison was set up and was not even well articulated. If they have a choice of programmes, which appeal most to prison inmates (both male and female) in order of preference are: Computer Literacy (24.6 per cent) and entrepreneurship/small scale business management (21.8 per cent) both accounting for 45.4 percent of sample studied. The third choice by male and female inmates respectively were Cell phone repairs and maintenance (8.7) and Science/Agric based Food Technology (12.3 per cent).

The study reveals that the inmates are conscious and also desire to have access to contemporary programmes and proven and powerful technologies for modern challenges in the global trends. This confirms that the tempo of the society is reflected in the attitudes of prison inmates. Furthermore, the study shows that the inmates would accept the types of training they receive if they have a choice; the trade they are offered is crude, unscientific, out of tune with modernity and of little utility, if at all, upon discharge. The decision as to the nature and contents of programmes needed.

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8. Miscellaneous
9. Did not answer
10. Nothing Particular

<table>
<thead>
<tr>
<th></th>
<th>28</th>
<th>7.2</th>
<th>23</th>
<th>20.2</th>
<th>51</th>
<th>10.1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7</td>
<td>1.8</td>
<td>1</td>
<td>0.9</td>
<td>8</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>2.1</td>
<td>2</td>
<td>1.8</td>
<td>10</td>
<td>2.0</td>
</tr>
<tr>
<td>Total</td>
<td>390</td>
<td>100.0</td>
<td>114</td>
<td>100.0</td>
<td>504</td>
<td>100.0</td>
</tr>
</tbody>
</table>

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27 Lagos State accounts for 18.90 per cent of national crimes, a crime rate of 1017 per 100,000 of population and a yearly growth of 5.43 per cent. It has five prisons and therefore the highest concentration of offenders and prisons. See, Oyakhriomen, I: Crime Trends and Trends of Crimes in Lagos, 1967-1996, P.hD Thesis (Unpublished), Unilag.
educational or vocational training has not actually reflected the needs and expectations of the primary target groups but official convenience.

A number of organisational problems are responsible for the performance deficiency. They include dwindling resources, weak support systems, or complete absence of immediate and long term objective or strategy, deficient monitoring and evaluation processes. Others are the pervading risks of security, inhibitive funding, time lines, standards, and technological challenges. System impediments are present coupled with the existence between the reason for and the causes of deviation from corrective system and effort. On the other hand, there is the absence of an overall penal and crime prevention policy as well as real coordination with the rest of the Criminal Justice administrative subsystems. Resistance to change is evident in the inclination of the Criminal Justice subsystems to do the old job the old way with an expectation of different results. The misconceptions about adult education and socio-economic problems facing the individual and the Establishment are also critical. These debilitating problems, which the Open University system seeks to ameliorate, help to explain the System’s uniqueness.

Considering that the proficiency certificate programmes of the Open University system are directed towards the acquisition of skills and new technologies of choice, the enactment of the National Open University Act is itself a legislative activism and genuine commitment to sustainable development, social justice and welfare of the people. Critical to this sustainability is empowerment of the citizenry especially the disadvantaged, marginalized, underrepresented and underprivileged groups by inculcating technical and entrepreneurial capabilities. It is in consonance with the objective of the Open University system and my firm belief that it can be extended to and achieved in respect of prison inmates.

The ‘Good Prison Practice (GPP)’ programme

This is a short-term programme of mutual benefit. It may be new to the Prisons as an Institution but there is a similar programme in the Medical field elsewhere. The target group comprises the prison inmates, the prison officials, the other law enforcement agents, the Criminal Justice administrators and other stakeholders and interested parties. The objectives of the ‘Good Prison Practice (GPP)’ programme include:

1. Sensitising consumers to human relationship features in treatment of offenders and prison community, thus creating awareness of the respective rights and obligations of prison inmates and officials.
2. Informing and developing participants.
3. Getting parties appreciate prison programmes and be involved in policy implementation.
4. Making participants see the prison as correctional and a place where persons in trouble are reformed to become meaningful members of the community.
5. Evolving participatory treatment and dispositional methods, new orientation and change.
6. Creating awareness of expectations and the need to train and retrain as well as the right to develop, whatever the circumstance.
7. Extolling the virtues of information flow, of obeying rules without prompting, respect for officials as well as officers’ awareness of the citizens’ rights.
8. Emphasising the need for access to empowerment and life wide capacity development.
9. Bridging the gap between incarceration and discharge facilitating preparations of products for return to the real world.
10. Preparing the discharged products for the society.

The Good Prison Practice (GPP) serves to reinforce other programmes put in place. It lays a solid foundation for the development and growth of discipline, self reliance, self respect, mutual respect and patriotism. It creates an atmosphere of consciousness of a civic duty, thus avoiding situations in which lives and property are no longer safe.
Conclusion

The National Open University of Nigeria has the potential of offering prison inmates their preferred choice and by so doing fulfill its mandate of providing access to a highly enhanced education and training predicated on social justice, equality and national cohesion. Unlike the non-ODL universities, its programmes are dynamic and much more elastic for adaptation to the needs of individual learners and can, by deliberate programming, be creative, correctional, regenerative, rehabilitative and beneficial to the prison population. This is more so when the modus operandi of the system defies artificial barriers and is able to meet individual learner at his or her level of academic qualifications and is aimed at redeeming and restoring the offenders to their rightful places as good, happy and productive citizens in the community therefore, is by through ODL through a well articulated Literacy Programme, Proficiency Certificate Programme and the Good Prison Practice (GPP) Programme.

Certainly, Programmes such as are being proposed require enormous funds and assistance to research into, design, develop, execute, monitor, evaluate, and effect adjustment as and when necessary to meet contemporary and future demands as sustainance. It must also be acknowledged that the prison inmates are largely indigent and so require subsidy. The financial burden is meant to be shared between the rich and poor nations bearing in mind the international dimensionality of crimes and criminality, rapid innovations and growth in technologies and cost implications. Hence, States Parties to the International Covenant Economic Social and Cultural Rights (ICESCR) are required to take steps individually and through international assistance and cooperation, especially economic and technical, to the maximum of its available resources, with a view to achieving progressively the full realization of the rights recognised in the present Covenant by all appropriate means.

The unique learner-centred, functional cost-effective instructional delivery mode epitomized in the Open and Distance learning system is unique and must break through the barriers of the prison walls, train the inmates to do what they choose to do, empower and return them to the world of industry as: good, happy and productive citizens. As Winston Churchill has reminded us, the mood and temper of the public with regard to the treatment of crime and criminals is one of the most unfailing tests of civilization of any country.

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OPEN DISTANCE LEARNING (ODL) AS STRATEGY FOR EMPOWERING PRISON INMATES IN NIGERIA

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National Open University of Nigeria, Lagos

Abstract

This paper examines Open Distance Learning (ODL) as a strategy for empowering prison inmates in Nigeria. This is because the system is designed to reach all those who would not have had any opportunity to be educated.

ODL system is used in Europe and North America to deliver education to prison inmates among other deprived people. In these continents, inmate learners are taught moral courses, vocational courses and information technology through ODL programmes. In Nigeria, inmates are taught the use of highway information technologies to improve the economy of their countries and themselves.

This paper intends to recommend ODL, which is designed to reach all those who would not have had any opportunity to be educated, for prison inmates in Nigeria that are unreached and underprivileged to attend the conventional institutions. Although, the Federal Government of Nigeria had planned for prison reformation in Nigeria in 2005, educating inmates through ODL is still not properly integrated into the scheme.

The use of ODL programme in reforming prison inmates in Nigeria is urgently needed because of the economic gains it will bring to Nigeria in general and the inmates in particular. In addition, the programme could be used to reform the character of inmates.

It would also serve as a means of bringing inmates par with other learners to have been educated in Nigeria. Also in the paper, we suggest how the system of education could be used as a moral corrective measure for the inmates. The paper will further highlight the benefits inmates would derive from ODL counsellors. The paper also examines the role of the three tiers of government and non-governmental organisations play to support the learner inmates in Nigeria.

Introduction

Educating the prison inmates through ODL system is purposely to free inmates from ignorance and be empowered by knowledge. This is because it provides the opportunities for inmates to use their laptops anywhere to link their subject areas of study and learn. Today, the inmates’ population is growing rapidly in prisons while the Nigerian Prison Service Department of the Ministry of Internal Affairs that administers prison including special penal institutions and lockups is facing difficulty of population of the prisons.

For instance, it was reported that the facilities were meant to house about 2,000 inmates were used to house 58,000 as a result of inmates in prison cells, about 500 people who were detained in Ikoyi prison died in 1980. Besides, government is unable to deal with the crisis. Therefore, in order to reduce the population of inmates in Nigeria prisons, government resorted to periodical amnesties. In 1984, General Muhammad Buhari freed 2,500 prisoners within his first year in office.

In 1989, the Federal Government under General Abubakar directed State Military Governors to release old, sick, under-aged and handicapped prisoners on Independence Day. In 1990, more than 5,000 inmates who had served less than one thirteenth of their sentences, and who were jailed for minor offences with terms that did not exceed one year, or who had served at least ten years of a life sentence were also released. Today, Nigerian prisons are still reported to be overcrowded. It was reported that the prison population consisted of high percentage of pre-trial detainees rather than convicts.
Reform and rehabilitation programmes were nominal and the prisons were aptly dubbed “colleges for criminals” or “breeding grounds for crime.” Inmates awaiting trial at Ikoyi prison spent nine years in detention for minor offences; which on conviction would have carried prison terms of less than two years.

Introducing ODL programmes on a massive scale into prisons would positively affect their condition while in prison. Consequently, Nigerian prisons would no longer be used as breeding grounds for crimes; but for reforming the character of inmates on the moral and intellectual level.

Moreover, in 1989, Chief Ebenezer Babatope, while launching his memoir titled “Inside Kirikiri” alleged that prison expenditure was inadequate of the prison agricultural programme designed to produce local foodstuffs for the commercial market. Using ODL programmes of NOUN, teach inmates who enroll for Agricultural Programme, modern may learn farming or mechanization in their course materials. When learners practicalise model farming in their prison farms, it would enable them to produce enough for consumption while in prison. Not only that, it would also boost economic benefits for the government; as much food would be produced.

The effect may bring malnutrition and disease that rampant among inmates in prisons to an end. This is because the inmates themselves would be educated to produce food crops to sustain balanced diet to feed themselves. Besides, the Learner Support Unit of the NOUN would also counsel enrolled inmates to mould their characters. Through this counseling, it is hoped that the act of committing suicide in Nigeria prisons would be minimised.

Problems of Maltreatment in Nigerian Prisons:

In 1990, it was reported that the Minister of Justice had said that the prisoners’ feeding allowance, health and other problems were being tackled; yet, prisoners have not got enough food to eat. However, with the introduction of NOUN, these problems of prisons inmates would be ameliorated. Van Kregten reported that maltreatment of inmates through abuse, frequent and occasional tortures in Nigerian prisons were a common phenomenon. For instance, in May, 1987 at Benin prison, armed police killed twenty-four inmates rioting over food supplies, and in 1988, a “secret” ten-year old detention camp on Ita Oka Island off Lagos was exposed and closed down. Nearly 300 prisoners died of “natural causes” on the island. In 1984, 79 inmates committed suicide while between 1980 and 1983, Ikoyi Prison alone recorded more than 300 deaths. Furthermore, in 1989, it was reported that 42 deaths were recorded in the first three months in Ikoyi Prison. Torture by police is also routine and widespread with “confessions” extracted through that heinous means used as evidence in trials.

Civil Liberties Organisation (CLO) had in June, 1989 filed a suit on behalf of 1,000 detainees held without trial at Ikoyi Prison, charging the Federal Government with mistreatment and urging her to release them. Consequent upon this, Nigerian government pledged several times to reform prison system, according to Aster Van Kregten, Amnesty International’s Nigeria researcher; while speaking at a press conference in Abuja.

It is believed that ODL programme on a massive scale would be the best method for the Federal Government to use in reforming inmates in Nigerian prisons. This is because the inmates would acquire various skills and be better educated; aniterate prison inmate is an asset to the administrators of Nigerian prisons in their bid to computerise case files that would fast track pre-trial cases of detainees whose files the police sometimes claim to have been lost. As a result of the missing files, such detainees were reportedly been left behind bars in appalling conditions without ever being convicted of any crime.

The use of computerised data in case files would render pre-trial cases in the Nigerian courts for the detainees. The technological education of inmates in Nigerian prisons would set aside cases of many suspects awaiting trial that are presumed guilty despite the fact that there is little evidence of their involvement in the crime. Open Distance Learning programme would also enlighten those inmates who were suspected of committing crimes but not yet charged but were
imprisoned along with convicted criminals. For example, some people who were arrested in place of their family members that the police could not locate, could be educated on how to enforce their human rights as enrolled students of Law programmes in ODL programme. Such people could seek for legal assistance from Legal Aid Council or from the Amnesty International body to take their cases up with the Government in order to gain their freedom.

Benefits of ODL Programme in Nigerian Prisons

It is hoped that Nigerian Prison inmate learners may improve their education and be employed when they are eventually discharged from the prison.

Nigerian inmates would also learn from the technical systems values education that is faster, cheaper and competitive than lecturing – teaching method in education.

ODL which is technologically driven would enhance inmates used of ICT and encourage them to have human values by participating actively in learning process.

The inmates would be able to access data through internet. It would teach them how to have link with other countries’ inmates’ reform activities that would benefit them.

Their interaction with staff of the programme would psychologically reduce their feeling of neglect. Besides, since they are engaged in learning, it is believed that suicide would be minimised among the inmates of Nigerian prisons.

ODL education could also help inmates to participate in business transactions with other Nigerians. Learning inmates could also be used as reservation clerks on keyboards for businessmen in Nigeria as it is done in the United States to answer phone calls for them.

Through ODL, prison inmates could generate new economic activity for their country anywhere in the world. This system of education would enable them to adjust to the new world economics and embrace latest technology which their country could benefit from.

The Role of Government in the use of ODL system in Prison Reforms

Federal, State and Local governments in Nigeria need to establish an elaborate prison inmates’ learners programme in ODL for prison inmates. Their contributions towards the laudable programme would enable prisoners gain the knowledge of educational empowerment in the reform process. This would probably reduce crowding among others in Nigerian prisons.

The Role of Non-Governmental Organisations in Empowering Nigerian Prison Inmates

All non-governmental organisations in Nigeria should contribute their own quota in kind, finance, material and spiritual needs towards the reform of Nigerian prisons.

The non-governmental organisations should engage in seeking Amnesty for the detainees and convicts in Nigerian prison at all times. With such reforms, they would engage in meaningful and gainful business in their societies instead of their former criminal business which had led them into prisons or detainee cells.

The Church and Mosques should also engage themselves in spiritual reform of Nigerian detainees and inmates in prisons by catering for their needs under a collaborative arrangement with ODL counsellors.
Recommendations

In this paper, we recommend that enrolment at an ODL institution should be made compulsory for all prison inmates in Nigeria for reformation of prisoners and detainees.

The prison authorities should separate detainees from convicts to reduce negative influences of the latter by the former.

The Federal Government should reconstruct prisons to provide a conducive learning atmosphere.

A special tax should be paid by business concerns, churches, mosques, healthy individuals, for the Government to finance the education of detained convicts in the Open and Distance Learning (ODL) system.

Appeal to Nigerians in Diaspora to support prisoners’ ODL programme.

Inmate learners should be specially trained by NOUN for their physical and spiritual reformation.

Christian and Muslim communities in Nigeria should be better integrated in the prison reform process in Nigeria.

The Learner Support Services unit of the NOUN should be actively integrated to monitor the ODL system in prisons.

The Government of Nigeria should establish industries/model farms for inmates to work for them to practice acquired skills and contribute to socio-economic life of the country as well as to aid the reformation process.

The use of Open and Distance Learning education for reforming detainees and convicts in Nigeria prisons would also empower them to engage in the labour market while some may become self-employed after they might have gained freedom.

Conclusion

In the ODL system, facilitators, counselors and study centre managers can reach the prison inmates using ICT to deliver their needs would use laptops to educate them in prisons.

The system may also be used to enlighten inmates about human rights charter provisions which they may use them to facilitate their release from prisons.

The Open and Distance Learning education of the inmates and detainees may also help the governments of Nigeria finetune the prison reformation programmes in Nigeria. Inmates who are computer literate may be employed by the prison administrators to collect and collate data for court procedure that would quicken the judiciary process in Nigerian courts. Prisoners would also be opportuned to receive education like other Nigerians. Non-governmental organisations may also be encouraged to contribute meaningfully to the reform of prison system in Nigeria.
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Abstract

Human resource development in the context of distance education is significant because the roles of personnel in the system demand a different kind of division of labour from those found in the conventional education system. Consequently, these new roles require new skills, knowledge and attitude for effective performance. This study investigates the transitional experiences of academic staff at NOUN as they adapt new role requirements of distance learning systems. Using a structured questionnaire and interviews, opinions of academic staff regarding the personal and institutional role expectation, organizational socialization, personal and institutional performance analysis, specific job challenges, adequacy, relevance and effectiveness of the training strategies were sought. Findings indicated, among others, that academic staff:

- seem to be unsure of their role expectation from an institutional perspective;
- have a lack of confidence in career progression structures of the institution;
- perceive administrative and technical support staff as enjoying precedence over them.

The study recommended a number of measures for bridging the identified gaps and concluded with a proposal for a sustainable model of Academic Staff Continuing Professional Development for the university.

Key words: Human resource development, distance learning systems, professional development, transitional experiences
Introduction

Open and distance learning is not completely new in the practice of higher education in Nigeria. Indeed, some form of distance education or the other has been in force in Nigeria, since the colonial period. However, contemporary distance education and open learning differs considerably and in a variety of ways from the traditional version. The model of distance education institutions which have been brought into the mainstream of higher education provision draws extensively on that of the Open University of the United Kingdom (OUUK), albeit with some reasonable modification to suit contextual requirements. The evolution of Open Universities in the developing world is a result of the need to expand access and equity in educational opportunities. Open Universities have also proved to be useful in providing access to higher education to disparate groups of hitherto unreached learners such as school drop-outs seeking a second chance, women in purdah, nomadic cattle rearers, itinerant fishermen, as well as filling the unmet educational needs of the working population desirous of improving their skills and knowledge competences without leaving their work/occupations.

Obviously, in order to satisfy this heterogeneous clientele, open universities require an admixture of staff that is multi-skilled in a broad range of operations. Their operation therefore represents a managerial model different from that established for conventional and face to face institutions. Part of this model is based on the notion that academic functionaries in distance education are not solely responsible for what their learners learn; they are facilitators who guide the learners to identify the relevant learning objectives and the most effective learning style for achieving these objectives (Lentell, 1994). With the ascendency of information and communications technologies, there has been an expansion in the scope of activities of open universities and the ways they are patterned. Thus, a new division of labor, with different staff undertaking multiple and overlapping roles such as instructional design, course materials development, editing, learner support, instructional facilitation as well as reviews and evaluation, etc. As a result, there is greater demand on academic staff in distance education institutions than on their contemporaries from conventional institutions. Unlike the conventional model where teaching is concentrated in the 'head and hands' of a single lecturer, the distance education system spreads the responsibility for instructional delivery among a number of professionals who sometimes have to carry out multiple and overlapping functions.

Management of Academic Human Resources

It is a trite notion that the credibility of any academic system, open universities inclusive, is contingent on the quality of academic inputs and the teaching-learning processes put in place to create optimal learning experiences. However, open universities have traditionally been regarded as second-rate institutions in comparison with the conventional system (Hellman, 2003). This perception places a huge burden on distance education institutions to establish systems that can ensure that their academic functionaries are well prepared for the demands of the multi-tasking activities of open and distance learning.

In new distance education institutions, two broad categories of academic staff are identifiable: first, the fresh entrant into the academic profession who had just completed a Ph.D or any other terminal degree; and, the seasoned academic with several scars of academic experience, indicating years of teaching, research and ancillary activities at the conventional university system. These two categories of academic staff are usually required to undertake induction and orientation experience in order to ‘convert’ them to adherents of the principles that guide the practice of open and distance learning. It is an inescapable fact that when staff join a new organization, they pass through a number of translational experiences and their effective performance ultimately depends on the transition period. This is a function of role expectations as well as occupational requirements which these new entrees are facing in the system. These facts are as true of new entrants into the academic profession as to experienced faculty members who are joining the distance learning system for the first time.
Nicholson (1984) had argued that occupational transitions may be the source of profound personal change as new environments are encountered and new territories are established. Concomitant with adopting the new is abandoning the old, which may result in stress as events require adjustments to established behavioural repertoires (Hopson and Adams, 1976). As the individual blends into a new role mode, he or she changes role and outside life conflicts to achieve a level of satisfaction, job involvement and internalized motivation (Porter, Lawler & Hackman, 1975) which remains more or less constant until occupational or life changes occur. Such changes initiate a recycling through some or all the stages (Nicholson, 1984). This conceptual framework is particularly suited to this study because there is considerable evidence that the entry and encounter experiences of organisational newcomers are crucial to the formation of attitudes toward an understanding of occupational roles (Louis and Feldman, 1976).

This study therefore seeks to investigate, among other things, the translational experiences of academic staff at NOUN as they adapt to new requirements of distance learning systems. It examines the nature and processes of recruitment; induction and orientation; training and development; work transitions and organizational socialization, as well as, appraisal and promotion of academic functionaries within NOUN.

Research Questions

The study is guided by the following research questions:

1. What are the factors that motivate academics to distance education institutions?
2. Is there a systematic staff development program for academics in distance education institutions in Nigeria?
3. What factors are likely to demotivate academics working in distance education institutions?
4. What are the challenges experienced by senior academics who joined distance education institutions from the conventional education system?
5. What approaches are necessary for overcoming fundamental challenges experienced by academic staff in distance education institutions?
6. What policies/strategies can distance education institutions adopt for retaining quality academic staff?

Methodology

Sample

All academic functionaries at the National Open University of Nigeria, both full time and part time, formed the population for this study. Using current personnel record of the institution, at the time of study, 66 full-time academic staff from various schools, institute and centre were randomly selected as sample.

Instrumentation and Procedure of Administration

The instrument consisted of looking at the previous attempts at recruitment exercise in the university, and a five-page semi-structured questionnaire divided into five sections. Section 1 related to biographical details while sections 2, 3 and 5 sought opinions on factors that motivate, encourage and or discourage academic staff functioning effectively in the institution. Sections 2, 3, & 5 sought responses to 33 items contained in the sections on a five-point Likert type scales of 'Strongly agreed, agreed, undecided, disagree and strongly disagree' scored as 5, 4, 3, 2, and 1 respectively. Section 5 contains 15 short-answer open-ended items. The research instrument was validated by a competent panel of experts following a pilot study consisting of 10 percent of the sample population. The questionnaire was administered personally to the respondents by a research assistant employed for this purpose. The Test-retest reliability of the questionnaire was calculated to be .81
Results and Findings

The National Open University of Nigeria began its academic operations in 2003 with the appointment of deans of Schools and the subsequent assumption of duty of the academic faculty members of the Schools.

The first set of academic staff (including the deans) employed by the NOUN were through employment advertisements for the various academic positions in the national dailies. Through interactive audience with the applicants at the different geographic sites of the federation, 13 programme leaders out of 16 (Senior lecturer status and above) were recommended for appointment through its stringent employment criteria but only 10 of them assumed employment at the University. At the lower level of academic statuses, i.e., lecturer one and below, 14 of the 25 course coordinators recommended assumed duty at the University. 34 applicants had been interviewed at that entry level.

The results give clear indication of low response to the advertorials. In addition, the response rate from the senior academics was remarkably lower than at the junior level. Reasons for this low response may be due to lack of awareness at the time of advertorials or as a result of ambivalent reactions due to uncertainty to the existence and commencement of academic activities in the University at its second coming. It could also perhaps due to the perception of the work environment of an Open University.

The higher response rate at the lower academic level could be seen as an indication of the presence of a wider pool of personnel willing to try their hands or trust their fate to a ‘new experience’. Senior academics especially at the professorial level tend to be satisfied with their status at their place of work unless some ‘tsunamis’ policies move them away from their comfort zone.

On analysis of the response rate based on professional areas, it was found that of the 13 senior academics that reported, 8 (62%) of them were for the School of Education; 3 (22%) were for the School of Science and Technology; and 2 (16%) were for the School of Business and Human Resource Management. No senior academic was interviewed for the School of Arts and Social Sciences, thus none reported. It is thus clear that different professional areas hold different perceptions of the working environment in an Open University and are differently attracted to it.

After four years of existence, the demographic professional situation has changed a little. The selection process for this subsequent entrants has been extended to include other methods such as head hunts to specific individuals.

It now has currently about 66 academic staff, 23 of whom are professors and the remaining are cadres from programme leaders downwards to assistant course coordinators. The professor cadre which represents about 35% of the academic strength may indicate that the University has enough senior academics to pilot it through its formative stages. However, of this 23 in number, 9 are only on tenure positions, 5 are on sabbaticals; 9 are on contract appointments and 12 are adjunct professors. The category of adjunct professors was created when the policy of using very senior academic staff to man the study centres was made. This category of professors therefore has widened the available expertise to practice the multi tasking approach of the University personnel in administration.

Clearly, the University has not been able to attract a sufficient number, highly experienced tenure academic staff. It is a considered opinion that part reason for this could be attributable to the perception of what an Open University represents and how they will fit into its operations. It could perhaps have meant that the recruitment advertorials did not provide enough information about the job content and job schedules of academics. The University management may clearly need to look into modifying the advertorials to reflect the nature of the job at the Open University.
In this study, not all these staff responded to the questionnaire. Only 43 staff representing 66% of the total academic staff responded to the questionnaire. Of the total respondents about 65% are men. The rest are of course females showing that the appointment procedure was not gender biased. There was no significant difference in the response from the different academic faculties in the survey. Of the 43 staff, 7% were professors. The majority of the respondents (58%) are from the course coordinator category. About 65% of them have had previous teaching experience at the University whilst 27% of them have had up to 10 years of tertiary teaching experience. About 50% of the respondents have been in the service of the NOUN for the last three years.

What then are the factors that motivate academics to join distance education institutions?

In the questionnaire, the respondents were asked to state their agreement to certain enumerated motivating factors that could have influenced the academics to take up appointment at the University. These factors are: increased personal income, flexible working environment; the need for gainful employment, the need to gain distance education teaching experience; opportunity to use technology; the probability of upward career progression; the perceived intellectual challenges involved at teaching at a distance education institution; opportunity to share knowledge with others; and encouragement of colleagues. The survey shows that the opportunity to use technology ranked highest (96%) amongst the factors that motivated people to seek employment at the University followed by the opportunity to share knowledge (91%). Respondents from all cadres of academic staff thus recognize the potential opportunity to use technology as the greatest motivating factor that informed employment seekers to the NOUN and a belief of team (group) work approach to their tasks. Closely linked to these is the need to gain distance education teaching experience which accounted for 78% of the respondents.

Once they had been employed, the questions turned to what was maintaining the motivation impetus on the job. In this category, the ability to share knowledge with other academic staff (96%) formed the most motivating factor to stay on the job. This was followed by the challenge to intellectual development (89%). Encouragement of colleagues (56%) and flexible working conditions (40%) were factors presumed to have maintained interest on the job which the respondents disagreed to.

Discouraging factors

As a corollary to asking the academics what motivates their continued stay with the University is the question regarding the factors that discourage academics from continuing to work at the Open University.

In order to draw empirical correlation with the motivating factors, the respondents were requested to respond to a list of discouraging factors to their continued stay on the employment of the University. These factors included lack of proper training; lack of institutional support; lack of sufficient financial compensation in comparison to workload; lack of personal connection with the University; the fact that development of course materials does not contribute towards tenure and promotion; lack of professional prestige; concern about workload; concerns about quality of students; isolation from other faculty staff; dislike for teaching in distance education environment; lack of adequate time to research in subject area; personal research effort; and activity schedules in distance education prevents personal research efforts.

A number of factors were identified as discouraging the continuation of a job in the NOUN. Lack of sufficient financial compensation in comparison to workload (77%) scored the highest followed by concerns about time commitment to research (subject or systemic) (71%) and lack of flexibility in working hours (61%) they had expected, were major discouraging factors. The respondents also indicated that activity schedules in distance education preventing personal research efforts and concerns about work (60%) were discouraging.
The respondents thus identified that longer working hours which is non commensurate with pay and flexible working hours are factors that discourage the academics from mostly discharging their responsibilities effectively and efficiently. In the professional aspect, the fact that they have little time to devote to subject research and in addition to the fact that the main stay of academic work which is the development of course materials and maintenance, are not contributory to promotion is considered strong enough to be a discouraging factor for their continued stay in the University and are issues that will force them out of the Open University. So far, no empirical studies have been done to look at academic staff turnover rate but it is clear that there have been academic staff movements out of the University base these factors. Interestingly, lack of professional prestige as staff of the NOUN (42%) was not seen as strong enough to be a discouraging factor.

In order to reinforce the responses relating to time commitment to research, the respondents were further asked to comment on it as an encouraging factor. The 56% response from the respondents strongly suggested it is considered as a major demotivating work variable in their schedule in the Office. By far the greatest encouraging factors considered by the respondents are; additional opportunities to interact with academics from other distance education institutions (81%); the continuous training provided by the University (84%) and increased institutional support (78%). This view was supported in the open-ended question that sought to know if there is a systematic staff development programmes for academics in distance education institutions in Nigeria. By asking whether the respondents have received any formal training on how to develop course materials to which the response was a clear yes with 78% of the respondents. Although 58% of them reported that the training was not adequate. Apart from development of course materials, the study also reveal the respondents view to whether they have received formal training on how to respond to tutor-marked assignments and although 53% of them said yes, 63% of the yes respondents said the training was not adequate. Almost 40% of the respondents reported that the present work load in the academic unit allows for optimal performance. On hindsight, about 57% of the staff would still pick NOUN as first choice for employment.

In terms of the challenges experienced by senior academics who joined distance education institutions from the conventional education systems, the greatest challenges they raised were lack of institutional support in clerical and technical matters (50%); the fact that writing of course materials does not count towards promotion to higher levels nor emoluments; lack of time for research in staff’s subject area; and work load relative to their pay advices.

What approaches are necessary for overcoming the fundamental challenges experienced by academic staff in distance education institutions?

Analysis of responses to the items designed to elicit answers to this research question indicates that academics are desirous of improved work conditions including parity of remuneration with work schedules; opportunities for professional development through participation in trainings, seminars and conferences; provision of infrastructure and resources for conducting research in both systemic and individual special areas; and recognition of course development as part of career progression criteria. Currently most academics in NOUN do not see themselves as being on the same scale as their counterparts from other universities in the country. This is not to say that they perceive themselves as better, rather they see that at the fact that open and distance learning is a novel addition to higher education practice in Nigeria puts them at a disadvantage compared with their counterparts in other institutions. This situation is certainly not made better by the working environment and conditions which they perceived as heavily regimented since it draws extensively on the industrial model of operation. Thus it is imperative for administrators of distance education institutions to make the institutional system of education more humane, and help the teacher adapt him/herself to the learner benefit most from this new educational situation (Peters, 1993). Another way of doing this is to encourage academics at the middle and lower cadres to enrol for higher degrees (which benefit themselves as well as the institution) with full fee compensation and with necessary duty leave.
What policies/strategies can distance education institutions adopt for retaining quality academic staff?

A multi-stage process of continuing professional development (CPD) of academic staff is proposed as part of the university policy on capacity building. The CPD process draws on the existing system where orientation into the basic building block and philosophical underpinnings of open and distance education are enunciated; this is usually followed by short training in specific aspects of operations such as course licensing and copyright issues, technology application etc. Then training is organised in critical areas as work schedules change in response to needs analysis and programme evaluation done by the institution. Regular appraisals and schemes for updating the knowledge of the participants should be carried out. It has also been observed that incentives, rewards, promotion, welfare and other benefits have to be viewed as a package. This is because the changing context of open and distance education practice demands policies that support the development of multi-skilled capacities among academics. In such changing institutional priorities and policies, the issue of promotion and tenure, activities to be rewarded, and the degree of support (monetary compensation, release time, training, instructional, technical and administrative resources) are regarded as part of the compliment of factors which lead to improved staff development and by extension lead to improved productivity among academic staff. This modified version of CPD model by Panda (2004) is proposed as functional and relevant to Distance Education Institutions in developing countries:

- Induction (at the time of joining the institution);
- Orientation (during the first year of service);
- Refresher (subsequently, in discipline areas and areas of distance education teaching/learning, before the next promotion, followed by orientation to the next job role);
- Thematic/focused (relating to particular operational areas such as new models of course development, new assessment mechanisms, new format of learning material, media mix and media integration, online teaching/learning);
- Specialised training (especially for professional fields);
- Training in the utilization of relevant information and communication technology tools and applications;
- All full-time academics must have a short stint in face-to-face contact with their learners and submit a report to their deans on how the knowledge gained will be used to improve course development activities;
- Junior academics must serve periods of mentoring under senior academics before they rise to senior policy making positions.

Conclusion

This study has shown that the National Open University of Nigeria has, in two main attempts at recruitment, not recruited enough of the academics it requires perhaps as a result of the perception attached to the nature of work in the university and an argument in favour of providing more details about the work nature of an ODL institution, has been advocated. On a contextual basis, this unattractiveness can therefore be seen as the prospective employee believing in his/her prospects both academically and in terms of welfare. The Open Universities can therefore be said NOT to be the first choice of the prospective academic. Nevertheless, the study demonstrated the attractiveness of working in an open university. Part of this was the belief that working at the open university afforded them the opportunity to use technology, work in group, meet with other practitioners in the field and have opportunity for induction training on many aspects of ODL operations such as content development, instructional design and multimedia development. Although the respondents agreed to the efforts of the Open University, there is a general perception that they were inadequate. The study indicated their frustration at working in the Open University partly due to non commensurate package with hours of work, lack of compensation in terms of course material development and inadequate time to subject research for systemic research in ODL. It was also insinuated that the university is greatly in need of a...
systematic programme of continuous professional development of academics if the momentum that is being created is to be sustained in the years to come. If the foregoing challenges exacerbate and lead to fatigue and frustration in the current corps of academics, there will be a situation where productivity will completely plummet and the university will still not be attractive to formidable academics who will contribute to revitalising the system.

References


TRAINING NEEDS OF TUTORIAL / INSTRUCTIONAL FACILITATORS OF MASTERS IN BUSINESS ADMINISTRATION PROGRAMMES OF NATIONAL OPEN UNIVERSITY OF NIGERIA

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Abstract

The needs for graduate management education in developing countries like Nigeria have long been identified. This is a result of the twin forces of globalisation and democratic governance which the country subscribed to at the beginning of the 21st century. The Master of Business Administration (MBA) programme has been designed to equip participants with knowledge, skills and attitude for managing corporate concerns in the challenging environment of contemporary times. The programme which has also been designed to equip participants with skills for identifying and operationalising investment and entrepreneurial opportunities is provided with specialisation in both traditional areas like Corporate Governance; Banking & Finance; Human Resources Management; Marketing; and in non-traditional areas like e-Banking; e-Library; e-Business.

This study critically examined the various training needs of instructional/tutorial facilitators of MBA learners of NOUN. MBA programme is a post-graduate programme domiciled in the School of Business & Human Resources Management of NOUN.

The major source of information for this study was from the administration of questionnaires to incumbent and prospective facilitators and interviewing all the stakeholders in the School of Business and Human Resources Management.

Finally, it was concluded that training of facilitators for this category of learners (MBA) and those of other programmes of the institution is essential and of great importance for effective and efficient learning in an open and distance learning institution like NOUN.

Key words: Democratic governance, operationalising investment, globalisation.
Introduction

Training as related to human resources development can be described as educational “maintenance”. This means the preservation and continuous refinement and updating of human capacity and skills to work in a given process of production. The process can be contrasted with effective deployment and utilisation, which is the matching of their skills and potentials with a given job (Bukhala, 1970).

Hamza (2003) quoting Cole (1979:341-343) had stated that human resources are the most dynamic of all the organisation’s resources. They need considerable attention from the organisation’s management if they are to realise their full potential in their work. Thus, motivation, leadership, communication, work restructuring, payment systems and training/development may all be included in the issues which have to be faced by management today.

NOUN, as the only single mode ODL institution in Nigeria was established in October, 2002 through the National Open University Act of 1983 which was earlier suspended in 1984. The benefit of NOUN to the education sector is its ability to provide educational services to as many people as have the ability, and are willing to benefit from the quality education provided by this institution. The institution operates through Schools and a Centre, namely:

1. School of Arts and Social Sciences (SASS)
2. School of Business and Human Resources Management (SBHRM)
3. School of Education (SED)
4. School of Law (SOL)
5. School of Science and Technology (SST), and
6. Centre for Continuing Education and Workplace Training (CCE&WT)

The National Open University of Nigeria (NOUN) dedicates itself to preparing professionals in various disciplines including instructional facilitators through the distance learning mode. It allows for stand-alone, self-development courses through flexible delivery, so that learners can have the convenience to choose the time, place and what to study, (Jegede, 2007).

The School of Business & Human Resources Management offers the Masters of Business Administration (MBA) programmes. Specialty areas of MBA programmes currently available are:

- Banking and Financial Services
- Corporate Governance
- e-Banking
- e-Library
- e-Business
- Human Resources Management
- Information Technology
- Marketing

This paper is centred on the training needs of instructional facilitators for the above mentioned MBA programmes.
Identifying Training Needs

Training need is any shortfall in terms of employee knowledge, understanding, skills and attitudes against what is required by the job, or the demands of organisational change. In diagrammatic form, this can be represented as shown below:

Figure 1  Training Needs

Level of knowledge, understanding, skills and attitudes required by the job

Role of Instructional Facilitators in ODL

Facilitators in ODL are expected to have reasonable subject / discipline expertise, like the job, willing to contribute their time and effort in helping the learners and be meticulous with learners' records.

They must be versatile both academically and administratively. They should understand the workings of the institution (NOUN).

Facilitators are expected to attend to learners' difficulties, complex concepts, learners' doubts and proper interpretation of course materials.

They are encouraged to give assignments to learners as instruments for promoting interaction and evaluating learners' performance. Significant comments on Tutor-Marked Assignment (TMA) sheets of learners should be encouraging because such comments help learners improve on their learning strategies. Non-teaching comments that are harmful and misleading should not be used by facilitators.

Response to TMAs should be within the shortest possible time.

How Do We Determine Training Needs of Facilitators?

Because the provision of education through open and distance learning mode is a new, dynamic and radical innovation in Nigeria, there is the need to devise an equally radical approach to training the instructional facilitators of this institution. The reason for this approach is not far-fetched. Most of the tutorial/instructional facilitators employed by the National Open University of Nigeria, are drawn from the existing conventional (face to face) universities, polytechnics and colleges of education where personal interaction between the lecturers and students are paramount.

In an open and distance learning environment, interaction between tutors and learners is less. In most of the time, learners are provided with course materials in hard published materials, CDs, DVDs, and on the internet for downloading, the only time when interaction takes place between learners and instructional facilitators is during the face to face tutorial sessions at the university's study centres. Qualified tutors/instructors who are part time staff of the university and who are experts in the various fields of study are used to conduct the facilitation.
There is therefore the need to prepare the facilitators to understand the operations and workings of a distance learning education or pedagogical mode. To determine the training needs of these facilitators for the school’s MBA programmes, the School of Business & Human Resources Management distributes questionnaires to existing and prospective facilitators seeking such information as: length of time of involvement in tutorial facilitation, how they have been coping, and what areas of their work require training, etc. On the basis of responses received from the facilitators that the training needs are determined.

Once these needs have been conceptualised, it is easy to organise a workshop, symposium or induction where experts in the field of open and distance learning are brought in to train. After training, participants brainstorm to come up with communiqué or working paper that would guide their future activities within the National Open University of Nigeria.

Systematic Training

A term frequently used to describe well-organised training (and development) is ‘systematic training’. This can be illustrated diagrammatically as a cycle of events, which is initiated by the institution’s policy, and sustained by its training unit, as shown in the diagram below:

![Systematic Training Diagram](image)

Figure 2  Systematic Training: The Basic Cycle

Benefits of Systematic Training

These include:

- Provision of a pool of skilled manpower for the institution
- Improvement of existing skills.
- Increase in the knowledge and experience of employees.
- Improvements in job performance with resulting improvement in overall productivity.
- Improved service to learners.
- Greater commitment of facilitators (i.e. motivation).
- Increased value of individual employee’s knowledge, skills, and
- Personal growth opportunities for employees (Onwari, 1974).

Why is Training Needed?

Training of both new and existing facilitators in open and distance learning programme is essential to the development of the competencies of practising facilitators. It is important that NOUN sees training as an investment rather than a cost and give it high priority in institutional plans and funding allocations. It is also important for NOUN to ensure that when training is
provided, the institution is ready to utilise the new learning so that opportunities for capacity building are not lost.

NOUN appears conscious of this fact when virtually its workforce (in batches) were sent on three days' training at National Institute for Educational Planning and Administration (NIEPA) in Ondo town, Ondo State between July, 2007 and January, 2008.

National Institute for Educational Planning and Administration (NIEPA) has, as its mandate, to develop the workforce of educational institutions through capacity-building, continuous training, consulting, research, information dissemination and resource centre services.

The role of NOUN at NIEPA was, therefore, a collaborative management strategy aimed at empowering its academic and non-academic staff with specialised and relevant skills in planning, administration and management of educational services.

When is Training Needed?

The practice of open and distance learning generates a variety of roles and needs. Existing and prospective facilitators often require to learn new work practices and skills. Individuals and groups have to:

- take on new roles, especially if open and distance learning is unfamiliar as is the case for NOUN facilitators who are drawn from conventional tertiary institutions;
- adapt to new ways of teaching and communicating;
- use of new technologies such as A-Tutor software package, which alter familiar processes of teaching and communication;
- manage dispersed and decentralised institutions and complex processes;
- be responsible for supporting learners at a distance;
- develop better skills in teamwork, coordination and management of schedules and records, and
- take on unaccustomed roles as trainers.

Steps in Implementing Training Programme for Facilitators

Weimin and Dhanarajan (2005) had stated that “whatever policy and strategy for training facilitators are adopted, the same steps are involved in implementing the plan”. According to them, these steps are:

- define and agree within the institution the general and particular needs for training, based on a systematic needs analysis;
- review possible ways of meeting needs and the availability of financial resources;
- establish priorities;
- select appropriate training events and interventions;
- construct a coherent training plan in the light of available resources;
- communicate to all facilitators and build a supportive climate for training;
- prepare an evaluation approach and plan;
- provide the training and evaluate its efficiency and effectiveness, and
- use the evaluation data to assess its impact, improve training provision and to inform future plans.

Effects of Training on Facilitators’ Performance

Transfer of skills acquired during training to the actual job to be performed is not automatic (Weimin & Dhanarajan, 2005). A number of factors affect the effectiveness of this transfer. They are:

- the nature of the skills learned; for example, personal skills transfer less well than psychomotor skills;
- the time lag between learning something and using it in a ‘real work’ context; new skills need to be used in practice before they deteriorate
- the number of elements common to the training and the job situation; that is, the greater the number, the stronger the transfer;
- perceptions of relevance and quality of the training by participants; and
- attitudes of colleagues, schools and the institution as a whole towards the training.

The Distance Learner as a Facilitator

It must be emphasised that the facilitators, and also a number of the distance tutors, receive further training every time they meet the learners when seminars are held. These talks with distance learners do not merely provide information on the training sessions and guidance offered by the institute. They give to the teaching staff great insight into the problems of the learners, information on their private and professional lives, how learners handle the teaching material, how they actually study and what learning difficulties they have. The expectations learners have of the ODL institution and of the distance tutor in particular are expressed quite clearly, meaning that the distance tutors and counsellors are given the opportunity to review their own work and discuss this with learners. This form of training not directly organised by the institute and it cannot be stressed enough how important this ‘type of training’ is (Delling, 1988).

Attributes of Tutorials in an ODL

Tutorials are very important because they bridge the distance between the learners and facilitators.

Tutorials must be problem-specific. Facilitators are not expected to teach but to help learners solve problems resulting from the tutor-marked assignments and self-assessment questions in the course materials.

Tutorials schedule should be a mutual agreement between facilitators and learners.

Review of Responses from Questionnaires and Interviews

Two hundred questionnaires were administered on learners and facilitators at 100 a piece. Out of the number that was administered on learners, 90 (90%) responses were received while 50 (50%) came from the facilitators. A review of the responses shows that all learner and facilitator respondents consider open and distance learning to be an unfamiliar mode of learning. Similarly, 30 (33%) of respondents that represent younger learners prefer the face to face teaching as opposed to distance learning mode; while 67% (60) respondents that cover mature learners are more comfortable with the facilitation system.

Out of the 50 responses received from the administered questionnaires on facilitators, 40 (80%) who represent existing facilitators claimed that they are not familiar with the facilitation system, but are however not averse to a change which they feel should be gradual and not instantly. They consider changes from face-to-face teaching to facilitation to be a great challenge, but needed time to adjust to the new mode.

Conclusion

An attempt had been made in this paper to examine the role of training of facilitators for MBA programme in an open and distance learning environment.

The study critically examined the various training needs of instructional/tutorial facilitators of MBA learners of NOUN.
For the facilitators to discharge their responsibilities effectively and efficiently, it is recommended that they must be properly trained to imbibe the work culture of open and distance learning system.

References


SUB THEME IV

Quality Assurance in Open and Distance Learning
A PROPOSED OPEN DISTANCE LEARNING MODULE FOR PROMOTING VOCATIONAL SKILLS ACQUISITION

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Abstract

It is proposed to explore the use of open distance learning modules in promoting skills acquisition in two vocational areas – motor vehicle repairs and building maintenance by artisans-in-training at the vocational enterprise institutions (VEIs) being set up by the Federal Ministry of Education and university undergraduates to be apprenticed to master artisans. The strategic objectives of the project are to develop and place on the project website ODL modules for promoting the acquisition of vocational skills, enhancing the theoretical knowledge of artisans in motor vehicle repairs and building maintenance through the provision of ODL instructions via video conferencing by university lecturers to vocational enterprise institutions in Osun and Oyo States and improving the practical skills of university undergraduates in mechanical and civil engineering departments through apprenticeships to master artisans located in Osun and Oyo States with constant monitoring and interaction between the master artisans, undergraduates and university departments. Project activities will include university-supervised apprenticeships of undergraduate engineers and builders with selected master artisans; lectures, tutorials and technical discussions and seminars presented through one-way and interactive learning systems between university lecturers and the artisans-in-training at vocational enterprise institutions; maintenance of all instructional materials on a project website at all times; and contests of skill between the two groups of trainees.

Expected Tangible Products are: developed technical skills acquisition ODL course modules for artisans in two vocations - motor vehicle repairs and building maintenance; developed practical skills acquisition ODL course modules; Mechanical engineering and building, and online multimedia training support materials for theoretical and practical skills acquisition for artisans-in-training and university undergraduates.

Key words: Open and distance learning modules, skill acquisition, Artisans, Apprentice.

SUGGESTION DE MODULES D'APPRETISSAGE À DISTANCE POUR LA PROMOTION DE L'ACQUISITION DE COMPÉTENCES PROFESSIONNELLES

Résumé

On se propose d'explorer l'utilisation de modules d'enseignement à distance pour la promotion d'acquisition de compétences dans deux domaines professionnelles – réparation de véhicules automobiles et entretien de bâtiments par des artisans en formation dans les institutions professionnelles (VEIs) qu'ils sont en place le ministère fédéral de l'éducation.

Les objectifs stratégiques du projet consistent à développer et à mettre sur le site web du projet des modules d'enseignement à distance pour la promotion de l'acquisition de compétences professionnelles, l'amélioration des connaissances théoriques des artisans en réparation de véhicules automobiles et entretien de bâtiments à l'aide de vidéos-conférences dans les institutions professionnelles dans les États d'Osun d'Oyo, l'amélioration des compétences pratiques des licenciés en génie mécanique, en génie civil et apprentissage auprès de maîtres artisans installés dans les États d'Osun et d'Oyo. Le suivi est assuré par des vidéos-conférences fréquentes entre maîtres artisans, licenciés en formation et départements universitaires.

Les activités comprendront des apprentissages supervisés par l'université pour des ingénieurs diplômés et des entrepreneurs en bâtiment auprès de maîtres artisans sélectionnés; des cours, des stages, des travaux dirigés et des débats et séminaires présentés par vidéos-conférences entre professeurs d'universités et les artisans en formation dans les institutions professionnelles; l'entretien de tous matériaux pédagogiques sur un site web du projet à tout moment; et des concours entre les deux groupes d'apprentis.

Comme produits tangibles attendus, on peut citer ce qui suit: développement de modules d'acquisition de compétences techniques en enseignement à distance pour les artisans dans deux professions – réparation de véhicules automobiles et entretien de bâtiments; développement de modules d'acquisition de compétences techniques en enseignement à distance pour les étudiants diplômés en génie civil et mécanique et matériaux multimédia en ligne de soutien à la formation pour l'acquisition de compétences théoriques et pratiques à l'intention d'artisans en formation et de diplômés d'universités.

Mots clés: enseignement à distance, module, acquisition de compétences, domaines professionnels Artisans, Apprentissage.
Project Goal

The goal of the project is to explore the use of open distance electronic learning modules in promoting skills acquisition in two vocational areas – motor vehicle repairs and building maintenance by artisans-in-training [at the vocational enterprise institutions (VEIs) being set up by the Federal Ministry of Education] and university undergraduates [apprenticed to master artisans].

Strategic Objectives

The strategic objectives of the project are to:

i. Develop and place on the project website open distance electronic learning (ODeL) modules for promoting the acquisition of vocational skills.
ii. Enhance the theoretical knowledge of artisans in motor vehicle repairs and building maintenance through the provision of ODeL instruction by university lecturers to vocational enterprise institutions in Osun and Oyo States.
iii. Improve the practical skills of university undergraduates in mechanical, electrical, and civil engineering and building through apprenticeships to master artisans located in Osun and Oyo States which are monitored and also by constant interaction between the master artisans, artisans-in-training, undergraduates, and university departments.

Proposed Activities

- University-supervised apprenticeships of undergraduate engineers and builders with selected master artisans.
- Lectures, tutorials and technical discussions by university faculty and the artisans-in-training at vocational enterprise institutions.
- Maintenance of all instructional materials on a project website at all times.
- Contests of skills between the two groups of trainees.

Expected Tangible Products

- Developed technical skills acquisition ODeL course modules for artisans in two vocations: motor vehicle repairs and building maintenance.
- Developed practical skills acquisition ODeL course modules for university undergraduates of civil, electrical, and mechanical engineering.
- Online multimedia training support materials for theoretical and practical skills acquisition for artisans-in-training and university undergraduates.

Key Staff

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Dr. A.Y. Adeyemi Department of Building

Proposal

Background, rationale and context

In most African countries, the vocations of motor vehicle repairs (mechanic, panel beater, electrician, etc), and of building maintenance (plumber, painting, bricklaying, electrician) are the exclusive preserve of artisans who practice by the roadside (motor vehicle repairs) or as itinerant entrepreneurs (for building and building maintenance). Their services are considered by the majority of individual private customers as much more convenient and
cheaper than using the few professionally run automoblie repair garages and building contractors. However, the lack of a sound theoretical background for these artisans limits their operations to “trial and error”; the total cost of “errors” is borne by their customers. Such costs sometimes include human lives especially in case of collapsed buildings and ghastly motor accidents.

Where the work force is made up of illiterate, primary and secondary school leaving artisans/craftsmen, the production process is characterised by crude tools and the use of brute force resulting in very low quality of production and productivity. For rapid development, there is a need for a work force with both advanced theoretical and practical skills (Ogbimi, 2003).

In Nigeria, public vocational education and training has two elements - technical education and vocational education. Technical education is referred to as middle-level technical manpower. It is mostly provided by polytechnics. Vocational education, on the other hand, is a learning and training experience for skilled craftsmen and artisans. It is provided by technical colleges and vocational centres.

The Federal Ministry of Education has approved the establishment of 74 Vocational Enterprise Institutions (VEI) and Industrial Enterprise Institutions (IEI) across the country to meet the skills demand, widen access to technical vocational education and satisfy the needs of industries as well as self empowerment. 266 curriculum and three generic courses have already been designed for the VEI and IEI.

There are three objectives of most Nigerian vocational education and training. First, they aim to provide general and holistic education beyond primary and secondary school level. Second, they offer training in certain job and their work conditions, requirements, and opportunities. Lastly, they help and guide students in skill development including abilities and attitude in maintaining and securing an occupation.

Most of the programmes of the schools are focused on crafts, engineering, agriculture, business, trade and home economics. Business includes shorthand, bookkeeping, typing, etc. However in technical schools, the courses are concentrated in electronics, technical drawing, wood work, metal work, auto mechanics and masonry. At the end of each course, every student is expected to take the National Business and Technical Board Examinations (NABTEB).

The primary distinction between vocational education and education itself is the scope of the study. Education is broader and concentrated on conceptual and abstract knowledge. The focus of vocational education and training is more on application of knowledge and is more of an apprenticeship system.

In many countries, there are public schools dedicated to vocational education and training. Such learning institutions have established standard curricula and guidance programmes for such education. In such countries, colleges and universities extend their programmes to cover vocational education and training for industries like tourism, information technology, retail, and customer service.

Community-based vocational training has already acknowledged in providing high school students transitional phase (from school to adulthood). Some colleges and universities have also expanded their current programmes to accommodate the current employment needs.

In some countries, like the United States, these community-based schools also aim to guide high school students. Many of the students are undecided on their future careers. Also,
students who cannot afford college education can make vocational training an option for a good job.

The formal education system up to the university imparts training in theoretical skills while the informal system of apprenticeship produces artisans with only practical skills. We may ask: Can the university graduate learn from the artisan and can the training of artisans accommodate theoretical skills acquisition? We propose to develop a series of open distance electronic learning (ODeL) modules to test this possibility, as a pilot, in two vocations: Motor Vehicle Repairs and Building Maintenance.

Problem Statement

As asserted by the Nigerian President at the 58th Foundation Day ceremony of the University of Ibadan: “[The Nigerian] tertiary education system lacks adequate deployment of technology. The under employment and unemployment statistics of graduates of Nigerian universities reflects the poor relevance of the curriculum to the demands of the market-place. The Nigerian government will take full advantage of ICT through the deployment of elearning at all levels of the education system. It will include online training for lecturers in pedagogical skills and entrepreneurship education.” (Obasanjo, 2006).

The university system needs to impart practical skills to university undergraduates and theoretical skills to the artisans who make up majority of professionals in the motor vehicle repairs and building maintenance fields. The ability to do this has been due to the shortage of practical opportunities within the universities and the lack of appropriate modules developed by the universities with which to reach the artisans who have high practical skills. The proposed ODeL modules will provide a platform for ICT deployment in the formal and informal systems of education and for the acquisition of relevant production skills in two vital areas of the economy.

Project’s Relevance to the University Mission and the Goals of Government

The mission of the university is to create a teaching and learning community for imparting appropriate skills and attitudes that are relevant to national and global development. The mission of the OAU Centre for Distance Learning is to develop and provide, through emerging technologies, responsive and quality distance learning opportunities that meet diverse local, national and global needs. One of the objectives of the OAU Centre for Distance Learning is to provide increased educational opportunities to those disadvantaged by limited time, distance, gender discrimination, age or physical disability.

The Federal Ministry of Education has launched an initiative to “… provide the kind of education that will once more build the critical pool of professionals in vocational fields that all growing economies must possess. [The] aim is to create a knowledgeable work force with practical technical skills … [and to] also give guarantees and provide opportunities to the millions of Nigerians who do not have access to the current institutions of learning.” (The Punch, Feb. 15, 2007). The Federal Ministry of Education has called for expressions of interest to set up vocational enterprise institutions (VEIs) in all vocational skills including Motor Vehicle Repairs (mechanic, panel beater, electrician, etc), and Building Maintenance (plumbing, painting, bricklaying, electrician). In these VEIs that we propose to partner with in the promotion of vocational theoretical skills acquisition by artisans-in-training and practical skills acquisition by university undergraduates.

Project Design and Activities

The project is designed to enhance the theoretical knowledge and skills of artisans-in-training in the selected vocations of motor vehicle repairs and building maintenance through the provision of ODeL instruction to the vocational enterprise institutions (VEIs) in which they are being trained. The project is also designed to prove the practical skills of university
undergraduates in relevant fields (mechanical, electrical and civil engineering; and building) through university-faculty-supervised apprenticeships with selected master artisans located in the VEIs. Lectures, tutorials and technical discussions and seminars will be provided through modules pre-recorded on CD and DVD or in real time video conferencing between university faculty and the undergraduates and artisans-in-training located at the VEIs.

The project will have a control. This will be made up of artisan-trainees in other VEIs who will not receive ODeL modules developed by the project and undergraduates of the relevant departments who will not be involved with the VEIs. After nine months of instruction and training, there will be a contest in theoretical and practical skills between the two treatment groups who received ODeL instruction and the two control groups who did not. This contest will be judged by master artisans (for practical skills) and university professors for theoretical skills.

Project activities will include:

- Sensitisation and mobilisation of the project stakeholders – artisans and graduate groups; Federal Ministry of Education and its VEIs and instructors in the three relevant university departments.
- Development of project milestones, scope and requirements.
- Development of theoretical and practical curricula.
- Training of all stakeholders in ODeL methods.
- Development and production of online course materials and project website.
- Re-training of all stakeholders in ODeL methods.
- Delivery of instructions, workshops and seminars.
- Quarterly evaluations, report preparation and discussions.
- Theoretical and Practical Contests between ODeL instructed and controlled artisans and undergraduates.

Timeline

Table 1 Schedule of activities for the first project year

<table>
<thead>
<tr>
<th>S/N</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Sensitisation and mobilisation of stakeholders</td>
</tr>
<tr>
<td>2.</td>
<td>Development of project milestones</td>
</tr>
<tr>
<td>3.</td>
<td>Development of skills curricula</td>
</tr>
<tr>
<td>4.</td>
<td>Training of all stakeholders in ODeL methods</td>
</tr>
<tr>
<td>5.</td>
<td>Development and production of course materials</td>
</tr>
<tr>
<td>6.</td>
<td>Quarterly evaluation report</td>
</tr>
<tr>
<td>7.</td>
<td>Delivery of instructions</td>
</tr>
<tr>
<td>8.</td>
<td>Re-training of all stakeholders in ODeL methods</td>
</tr>
<tr>
<td>9.</td>
<td>Monitoring and Evaluation</td>
</tr>
<tr>
<td>10.</td>
<td>Theoretical and Practical Contests</td>
</tr>
</tbody>
</table>
Table 2 Notional Budget

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries</td>
<td>0.0</td>
</tr>
<tr>
<td>Fringe Benefits</td>
<td>$5,000</td>
</tr>
<tr>
<td>Equipment purchase</td>
<td>$17,000</td>
</tr>
<tr>
<td>Training</td>
<td>$8,000</td>
</tr>
<tr>
<td>Workshops/Meetings</td>
<td>$6,000</td>
</tr>
<tr>
<td>ODeL materials development</td>
<td>$7,000</td>
</tr>
<tr>
<td>Website and office expenses</td>
<td>$4,000</td>
</tr>
<tr>
<td>Travel</td>
<td>$2,000</td>
</tr>
<tr>
<td>TOTAL DIRECT COSTS</td>
<td>$49,000</td>
</tr>
<tr>
<td>INDIRECT COSTS</td>
<td>$1,000</td>
</tr>
<tr>
<td>GRAND TOTAL</td>
<td>$50,000</td>
</tr>
</tbody>
</table>

Budget Notes

i. Fringe Benefits cover token amount to motivate project participants
ii. Equipment purchase covers cost of video conferencing equipment
iii. Training and re-training of instructors and trainees in the use of ODeL system
iv. Workshops/Meetings costs are for planning and logistics of four such events
v. ODeL course material development cost to be paid to course developers
vi. Website expenses are $300 per month; the balance for office supplies
vii. Travel costs are for monitoring activities of master artisans

References


Abstract

For a sustainable learning outcome in open and distance learning, there must be quality course materials for the students, which is one of the criteria considered in setting up a new programme; it is also used by the public to determine the quality of education the students are expected to receive. The National Open University of Nigeria (NOUN) is not an exception in this regard. Therefore, the researcher is interested in assessing the difficulty index of NOUN course materials; which is a criterion for determining quality. The assessment of course materials is not a new phenomenon. Researchers and educationists have over the time recognised this. To find out the level of text difficulty of NOUN course materials, three research questions were raised – Are the required course materials available? Do the available course materials meet the standard specified for ODL? What should be the criteria for reviewing the course materials published in 2004? To answer these questions the survey method was used to generate responses. All registered students in the Lagos Study Centre formed the population, Through judgment/purposive sampling method 100 students were selected for the sample; while systematic sampling technique was used in selecting 10% out of the total number of printed course materials that were available as at the time of research. Following this, the Gunnings’s Fog Index, Flesch Reading Ease, Cloze text and Rowntree’s Complexity Quotient were used to assess the difficulty index of selected course materials; while questionnaires were designed to elicit data from the learners to get their perception on the content, format and language of the course materials including any other opinion they may want to share. The results showed a shortfall of course materials, fairly adequate age matching of text, a need for course material review, and fairly adequate difficulty level of text.

Key words: Shortfall of course materials
Difficulty index, Cloze text, complexity quotient,
Introduction

Course materials are vital tools which determine the progress of academic sessions in Open and Distance Learning (ODL). The need for availability and quality course materials cannot be overemphasized especially for new institutions like the National Open University of Nigeria (NOUN) where people want to know the quality of knowledge that would be received by the learners; which is a determinant of the quality of products. It therefore means that to attain a sustainable learning outcome in Open and Distance learning, there must be quality course materials.

At present, NOUN is faced with the challenge of course materials production, more so that the course materials need to be reviewed in every five years. One major challenge faced during course material production is ‘Editing’, which includes content, language and format, where the shafts are sieved from the wheat; because it is during the editing stage you determine the quality. It therefore means that the editors need to know the areas of concentration that would be used to determine quality. To find solution to the challenge, the following research questions were raised – Are the required course materials available? Do the available course materials meet the standard specified for ODL? What should be the criteria for reviewing the course materials published in 2004? To answer these questions, the researcher assessed the difficulty index of available course materials.

Literature review

Text difficulty is determined by looking at the ease which the learner would comprehend a text and the interest he would derive. To be able to match students with appropriate texts, you need to assess the difficulty of the texts you are using, as well as the likelihood that the students will be motivated to read them (Hiebert, 2005). Hiebert identified the following as factors influencing text difficulty: vocabulary, sentence structure, length, elaboration, coherence and unity, text structure, familiarity of content, background knowledge required, audience appropriateness, quality and verve of the writing, interestingness.

Vocabulary – is one of the major identifiable characteristics suggesting text difficulty. It should be noted that a mere replacement of difficult words with simple ones does not make the difficulty level simple. Sometimes this type of replacement may lead to confusion because there are words that cannot be replaced if the meaning has to be retained (Anderson and Freebody, 1981). It should however, be noted that a few difficult words may cause serious barrier to comprehension as shown by Freebody and Anderson (1983), that it takes a substantial proportion of difficult words to affect students’ comprehension.

Sentence Structure – is one of the text characteristics that is easy to assess, very long and very complex sentences make text very difficult to read. Sentence structure strength on text difficulty is not as strong as that of vocabulary (Coleman, 1971). Also, it is recommended that the sentence in a text need to be complex enough to clearly convey the meaning of the text (Pearson, 1974 – 1975).

Length – for learners who cannot read fluently, length could form a formidable obstacle. It is also applicable to those learners who have a short attention span.

Elaboration – “Texts can be written so that the essential concepts without much explanation, or so that they present concepts along with a good deal of explanatory material – examples, analogies, and linkages of various sorts” (Hiebert and Fisher, 2005).

Coherence and Unity – Anderson and Armbruster, (1989), see coherence as the integration of material to how a topic and subtopic is defined and the
relationship that exists between the parts. Unity is the oneness of purpose. Good texts are directed to a particular topic, objectives, concepts and particular points.

Text Structure – is the organisation of text. Drum, 1984 identifies narratives or expository as the two categories students texts normally fall into.

Quality and Verve of the Writing – it is also important to consider the quality of the writing, the flair of the writing, the particular blend of topoiorganisation and style that make one piece of writing intriguing and memorable and another mundane (Hiebert and Fisher, 2005).

Interestingness – is the most subjective factor because the factor used in determining interest is dependent on the reader. What may be interesting to one may not be interesting to another. In writing, the main theme must not suffer even while sustaining interest.

In addition to these factors, the aims, goals and objectives of each programme or course would be other elements to consider when matching texts and students.

Methodology

The descriptive method of research was used. Descriptive research involves “collection of data in order to test hypotheses or to answer questions concerning the current status of the subject of the study” (Gay, 1992). The survey method was used to collect data. “A survey is an attempt to collect data from members of a population in order to determine the current status of that population with respect to one or more variables” (Gay, 1992).

All registered NOUN students and all available printed course materials formed the population of the study. For the purpose of this research, the students’ population was restricted to the Lagos Study Centre because of the difficulty of reaching registered students in NOUN, but from statistics, the Lagos Study Centre has the highest number of registered students among other Study Centres, which formed a good representation of the entire students.

Judgment/purposive sampling method was used in selecting the respondents while systematic sampling technique was used in the selection of the number of course materials used for the research.

Using the judgmental sampling method, 100 students comprising 40 postgraduate and 60 undergraduate students were sampled. 10% of the printed course materials were used (Table I).

Table 1  Available Printed Course Materials as at April 30th, 2008

<table>
<thead>
<tr>
<th>S/N</th>
<th>School</th>
<th>Available Printed Materials</th>
<th>No of Printed Materials Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>School of Arts &amp; Social Sciences (SASS)</td>
<td>116</td>
<td>11</td>
</tr>
<tr>
<td>2</td>
<td>School of Business &amp; Human Resources Management (SBHRM)</td>
<td>47</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>School of Education (SED)</td>
<td>67</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>School of Law (LAW)</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>School of Science &amp; Technology (SST)</td>
<td>72</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>318</td>
<td>32</td>
</tr>
</tbody>
</table>

A questionnaire was designed to elicit information from the respondents. The questionnaire had three main sections – content, format and language. Items were drawn to get the learners’ (users) feeling about the three main areas which determine the quality of course materials. In addition to the main sections, a section was set aside for free comments. The items designed required ‘yes’ or ‘No’ answer. The validity and reliability of the instrument were tested using
content and construct validity; and split-half reliability after which a pre-test of the questionnaire was carried out before it was finally administered to the selected respondents. 100 questionnaires were personally distributed by the researcher and 80 were successfully filled and returned; which reflected 80% response.

The researcher also used Gunning’s Fog Index, Flesch Reading Ease, Cloze text and Rowntree’s Complexity Quotient to assess the course materials recommended by Staff Training and Research Institute of Distance Education (STRIDE) in 1993. STRIDE is an autonomous institution under the control of the Board of Management of Indira Gandhi National Open University (IGNOU). Gunning’s Fog Index or Modified Gunning Fog Index was used in measuring the level of reading difficulty of the course materials. Though it has received criticism, it is still a good instrument in knowing the tone and style of writing a particular text. The modified Fog Index helps in measuring the ‘reading age’ of a particular text. It is also important to know that the use of technical terms or jargon can increase Fog Index scores. The modified Fog Index can be calculated as:

1. Count exactly 100 words from a paragraph of your text.
2. Underline those words that have 3 or more syllables (a, e, i, o, u).
3. Count the underlined words (A).
4. Count the number of sentences.
5. Workout the average words per sentence. Round off the nearest (B).
6. Add A and B (C).
8. Divide D by 10 (E).
9. Add 5 to E and you will get fog Index.

Before the modification of Fog Index, it was said that The Fog Index does not determine if the writing is too basic or too advanced for a particular audience rather; it helps to decide whether a document could benefit from editing or using plain language techniques. (Klariti, 2000)

Flesch Reading Ease is another formula for calculating reading age and the formula is:

\[
RE = 206.535 - 0.846w - 1.015s
\]

Where:
- \( w \) = average number of syllables per 100 words;
- \( s \) = average number of words per sentence.

The higher the RE, the easier the text. Harley (1989 in Wikieducator, 2008).

Microsoft Word could also be used in calculating Flesch Reading Ease. This can be assessed through ‘Spelling and Grammar’ from ‘Tools’ on the menu bar.

Cloze Test is also used for testing readability. In the cloze test, every 5th or 7th word of a sample text is omitted, and the text is given to the target group to read by filling the missing words. Readability is calculated on the basis of predicting the correct words, and a 60% score is considered satisfactory for comprehension, while 40% indicates partial comprehension, and less than 40% indicates inadequate comprehension (Wikieducator, 2008).

Rowntree’s (1996) Complexity Quotient is another way of testing the readability of a text. The writer further suggests the calculation of complexity quotient viz:

1. Count the number of complete sentences you have (A).
2. Count the number of “long” words (three or more syllables) (B).
3. Divide B by A to get complexity quotient.

The prose is regarded as difficult when the complexity quotient score is 3 or more as compared to most novelists.
Presentation of data

Table 2 Percentage of learners’ response on the quality of course materials content

<table>
<thead>
<tr>
<th>S/N</th>
<th>Details</th>
<th>YES</th>
<th>NO</th>
<th>NR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Is the introduction of modules adequate?</td>
<td>91</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Does the Introduction of a unit/module relate the present unit/module to the previous unit/module and the next, to ascertain continuity?</td>
<td>94</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Does the Introduction reflect the reason for studying the content in that unit/module?</td>
<td>91</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Does the Introduction serve as a good motivator for the learners?</td>
<td>94</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>Are there clearly stated behavioural objectives in the course materials?</td>
<td>85</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>Do the objectives cover the entire unit content?</td>
<td>70</td>
<td>27</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>Would the objectives help you assess your own learning?</td>
<td>97</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>Do the objectives set achievable tasks before you?</td>
<td>91</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>Is the study material planned to meet the theme of the unit?</td>
<td>85</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>Is the content logically sequenced?</td>
<td>85</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>Is the level of content appropriate for your level?</td>
<td>94</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>Is the content lucid and learner friendly?</td>
<td>82</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>13</td>
<td>Are explanations in the course materials adequate?</td>
<td>67</td>
<td>33</td>
<td>0</td>
</tr>
<tr>
<td>14</td>
<td>Is the content designed to sustain your interest by using examples, illustrations, humour, anecdotes etc?</td>
<td>67</td>
<td>21</td>
<td>12</td>
</tr>
<tr>
<td>15</td>
<td>Are there adequate self-practice activities for you?</td>
<td>91</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>16</td>
<td>Are ideas and arguments sequential?</td>
<td>70</td>
<td>21</td>
<td>9</td>
</tr>
<tr>
<td>17</td>
<td>Are relevant information supplied in the content?</td>
<td>73</td>
<td>21</td>
<td>6</td>
</tr>
<tr>
<td>18</td>
<td>Is the given information up-to-date and accurate?</td>
<td>64</td>
<td>36</td>
<td>0</td>
</tr>
<tr>
<td>19</td>
<td>Are the conclusions in the course materials adequate?</td>
<td>64</td>
<td>30</td>
<td>6</td>
</tr>
<tr>
<td>20</td>
<td>Does the summary review the main points for your recapitulation and reinforcement?</td>
<td>85</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>21</td>
<td>Does the summary contain statements of major points?</td>
<td>91</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>22</td>
<td>Are the T.M.As well structured to cover what was learnt in a unit?</td>
<td>88</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>23</td>
<td>Did you notice any plagiarism in the text</td>
<td>24</td>
<td>55</td>
<td>21</td>
</tr>
</tbody>
</table>

Total 1843 367 90

Average Percentage 81 16 3

Note: NR means No Response

Table 3 Percentage of learners’ response on the quality of course materials format

<table>
<thead>
<tr>
<th>S/N</th>
<th>Details</th>
<th>%</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Does the arrangement of the content make you reading easy?</td>
<td>85</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Are you comfortable with the font size?</td>
<td>82</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Are you comfortable with the font type?</td>
<td>88</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Are you comfortable with the appearance of the text</td>
<td>88</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>Does the spacing enhance your reading ability?</td>
<td>91</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>Does the Course Material meet the house style?</td>
<td>94</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>Is the title page well presented?</td>
<td>88</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>Is the Table of Content well presented?</td>
<td>82</td>
<td>12</td>
<td>6</td>
</tr>
</tbody>
</table>

Total 698 66 36

Average Percentage 87 8 5
Table 4  Percentage of learners' response on the quality of language used in the course materials

<table>
<thead>
<tr>
<th>S/N</th>
<th>Details</th>
<th>% YES</th>
<th>% NO</th>
<th>% NR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Is the language learner-friendly?</td>
<td>94</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Is the style of writing personalised?</td>
<td>48</td>
<td>48</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Is the text written in simple and short sentences</td>
<td>76</td>
<td>18</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Is the communication effective and readable?</td>
<td>88</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Is the paragraphing adequate?</td>
<td>97</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>Are the sentences free of grammatical errors?</td>
<td>3664</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Are all words spelt correctly?</td>
<td>39</td>
<td>58</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>Are all the spellings in UK English format?</td>
<td>55</td>
<td>33</td>
<td>12</td>
</tr>
<tr>
<td>9</td>
<td>Are active voice used correctly?</td>
<td>55</td>
<td>24</td>
<td>21</td>
</tr>
<tr>
<td>10</td>
<td>Is the usage of idioms adequate?</td>
<td>61</td>
<td>21</td>
<td>18</td>
</tr>
<tr>
<td>11</td>
<td>Is the text in conversational format?</td>
<td>67</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td>12</td>
<td>Is the language in the course material gender sensitive?</td>
<td>30</td>
<td>58</td>
<td>12</td>
</tr>
<tr>
<td>13</td>
<td>Does the writing style make the learner feel the course writer is being talked to? By using the words “You”, “I”, “We”</td>
<td>79</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>14</td>
<td>Did the level of the language match the level of the content?</td>
<td>73</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>15</td>
<td>Are the vocabulary and technical terms used adequately?</td>
<td>85</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>16</td>
<td>Is the language used simple and clear?</td>
<td>76</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>17</td>
<td>Did the language used meet the linguistic ability of the learners?</td>
<td>76</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>18</td>
<td>Is the complexity quotient adequate?</td>
<td>61</td>
<td>24</td>
<td>15</td>
</tr>
<tr>
<td>19</td>
<td>Is the fog index adequate?</td>
<td>52</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>20</td>
<td>Is the cloze test adequate?</td>
<td>49</td>
<td>24</td>
<td>27</td>
</tr>
<tr>
<td>21</td>
<td>Are there inconsistent spellings?</td>
<td>52</td>
<td>36</td>
<td>12</td>
</tr>
<tr>
<td>22</td>
<td>Are the quotations used very essential to theme?</td>
<td>79</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>23</td>
<td>Are there superfluous words or phrases?</td>
<td>36</td>
<td>46</td>
<td>18</td>
</tr>
<tr>
<td>24</td>
<td>Are there clichés and worn out phrases?</td>
<td>36</td>
<td>40</td>
<td>24</td>
</tr>
<tr>
<td>25</td>
<td>Are the tenses inconsistent?</td>
<td>39</td>
<td>39</td>
<td>22</td>
</tr>
<tr>
<td>26</td>
<td>Are the punctuations adequate?</td>
<td>55</td>
<td>27</td>
<td>18</td>
</tr>
<tr>
<td>27</td>
<td>Are there verbal expressions?</td>
<td>58</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>28</td>
<td>Is the use of nominal expression avoided?</td>
<td>61</td>
<td>21</td>
<td>18</td>
</tr>
<tr>
<td>29</td>
<td>Is the use of non English words in an English text expressed in bold format?</td>
<td>43</td>
<td>36</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1756</td>
<td>767</td>
<td>377</td>
</tr>
<tr>
<td></td>
<td>Average Percentage</td>
<td>61</td>
<td>26</td>
<td>13</td>
</tr>
</tbody>
</table>

Comments on Availability of Course Materials by Respondents

From the section of the questionnaire where respondents were given the opportunity to comment as desired, 90% of the total number of respondents expressed dissatisfaction with the non availability of most of their course materials.
Table 5  Presentation of difficulty index of the selected course materials at the undergraduate level

<table>
<thead>
<tr>
<th>S/N</th>
<th>Course Code</th>
<th>Modified Fog Index</th>
<th>Flesch Reading Ease</th>
<th>Reading Complexity Quotient</th>
<th>Cloze Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BIO 111</td>
<td>16</td>
<td>50.4</td>
<td>1</td>
<td>58%</td>
</tr>
<tr>
<td>2</td>
<td>BIO 191</td>
<td>16</td>
<td>54.3</td>
<td>0.5</td>
<td>55%</td>
</tr>
<tr>
<td>3</td>
<td>BIO 222</td>
<td>16</td>
<td>38.1</td>
<td>2.2</td>
<td>60%</td>
</tr>
<tr>
<td>4</td>
<td>CSS 105</td>
<td>18</td>
<td>49.3</td>
<td>2.6</td>
<td>60%</td>
</tr>
<tr>
<td>5</td>
<td>CTH 011</td>
<td>16</td>
<td>46.9</td>
<td>2.0</td>
<td>65%</td>
</tr>
<tr>
<td>6</td>
<td>CTH 025</td>
<td>17</td>
<td>47.6</td>
<td>2.1</td>
<td>58%</td>
</tr>
<tr>
<td>7</td>
<td>CTH 031</td>
<td>20</td>
<td>53.2</td>
<td>2.5</td>
<td>57%</td>
</tr>
<tr>
<td>8</td>
<td>DFR 022</td>
<td>19</td>
<td>48.7</td>
<td>2.5</td>
<td>60%</td>
</tr>
<tr>
<td>9</td>
<td>EDU 202</td>
<td>17</td>
<td>44.5</td>
<td>2.2</td>
<td>56%</td>
</tr>
<tr>
<td>10</td>
<td>EDU 204</td>
<td>22</td>
<td>43.2</td>
<td>3.5</td>
<td>63%</td>
</tr>
<tr>
<td>11</td>
<td>HCM 112</td>
<td>20</td>
<td>57.1</td>
<td>1.7</td>
<td>61%</td>
</tr>
<tr>
<td>12</td>
<td>INR 101</td>
<td>17</td>
<td>29.0</td>
<td>2.3</td>
<td>55%</td>
</tr>
<tr>
<td>13</td>
<td>LAW 102</td>
<td>19</td>
<td>41.0</td>
<td>3.0</td>
<td>66%</td>
</tr>
<tr>
<td>14</td>
<td>NSS 217</td>
<td>18</td>
<td>50.5</td>
<td>2.0</td>
<td>58%</td>
</tr>
<tr>
<td>15</td>
<td>NSS 301</td>
<td>19</td>
<td>47.4</td>
<td>1.5</td>
<td>57%</td>
</tr>
<tr>
<td>16</td>
<td>PHY 204</td>
<td>16</td>
<td>39.7</td>
<td>2.2</td>
<td>50%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>286</td>
<td>740.9</td>
<td>33.8</td>
<td>939%</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>18</td>
<td>46.3</td>
<td>2.1</td>
<td>59%</td>
</tr>
</tbody>
</table>

Table 6  Presentation of difficulty index of the selected course materials at the post graduate level

<table>
<thead>
<tr>
<th>S/N</th>
<th>Course Code</th>
<th>Modified Fog Index</th>
<th>Flesch Reading Ease</th>
<th>Reading Complexity Quotient</th>
<th>Cloze Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BHM 667</td>
<td>23</td>
<td>26.5</td>
<td>3.7</td>
<td>60%</td>
</tr>
<tr>
<td>2</td>
<td>CTH 603</td>
<td>22</td>
<td>40.5</td>
<td>2.5</td>
<td>54%</td>
</tr>
<tr>
<td>3</td>
<td>EDA 710</td>
<td>21</td>
<td>33.3</td>
<td>3.0</td>
<td>62%</td>
</tr>
<tr>
<td>4</td>
<td>EDU 634</td>
<td>20</td>
<td>40.2</td>
<td>3</td>
<td>62%</td>
</tr>
<tr>
<td>5</td>
<td>EDU 702</td>
<td>16</td>
<td>34.7</td>
<td>1.7</td>
<td>61%</td>
</tr>
<tr>
<td>6</td>
<td>HEM 603</td>
<td>16</td>
<td>47.6</td>
<td>1.5</td>
<td>62%</td>
</tr>
<tr>
<td>7</td>
<td>JLS 602</td>
<td>19</td>
<td>47.8</td>
<td>2.0</td>
<td>61%</td>
</tr>
<tr>
<td>8</td>
<td>JLS 608</td>
<td>20</td>
<td>37.6</td>
<td>1.8</td>
<td>53%</td>
</tr>
<tr>
<td>9</td>
<td>LED 605</td>
<td>20</td>
<td>39.0</td>
<td>2.5</td>
<td>60%</td>
</tr>
<tr>
<td>10</td>
<td>MBA 701</td>
<td>20</td>
<td>34.5</td>
<td>2.5</td>
<td>66%</td>
</tr>
<tr>
<td>11</td>
<td>MED 708</td>
<td>22</td>
<td>39.2</td>
<td>3.3</td>
<td>60%</td>
</tr>
<tr>
<td>12</td>
<td>MPA 704</td>
<td>19</td>
<td>30.9</td>
<td>2.5</td>
<td>60%</td>
</tr>
<tr>
<td>13</td>
<td>MPA 706</td>
<td>23</td>
<td>38.4</td>
<td>2.0</td>
<td>65%</td>
</tr>
<tr>
<td>14</td>
<td>PCR 601</td>
<td>27</td>
<td>48.6</td>
<td>2.6</td>
<td>56%</td>
</tr>
<tr>
<td>15</td>
<td>PCR 702</td>
<td>18</td>
<td>50.6</td>
<td>2</td>
<td>61%</td>
</tr>
<tr>
<td>16</td>
<td>SED 713</td>
<td>21</td>
<td>41.9</td>
<td>3.8</td>
<td>58%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>327</td>
<td>631.3</td>
<td>40.4</td>
<td>961%</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>20</td>
<td>39</td>
<td>2.5</td>
<td>60%</td>
</tr>
</tbody>
</table>
Discussion

Research Question 1

Are the required course materials available?

From the data presented in Table 1, there were 318 printed course materials in NOUN as at April 30th, 2008. Considering the total number of courses offered in the various schools; the total number of course materials required would be about 1000. This, therefore means that there is a short fall in the production of course materials which implied that students might have problem completing their programmes as and when due. This was further confirmed by the respondents’ free comments in the questionnaire.

It was discovered that the management of the university was also disturbed about the non-availability of course materials; which was expressed by the vice chancellor at the Senate, for which the management is presently doing every possible to salvage the situation.

Research Question 2

Do the available course materials meet the standard specified for ODL?

In testing the standard specified for ODL, the researcher calculated the index difficulty of the course materials using Fog Index, Flesch Reading Ease, Cloze Test and Rowntree’s Complexity Quotient. The Fog Index and the Flesch Reading Ease help to calculate the reading age, which will help determine the matching of the course materials with the age of learners. From the results presented in Tables 5 and 6 above, the average reading age for the course materials prepared for the undergraduate level is 18 and that for the postgraduate is 20 years. Considering the recommended minimum school age for university education in Nigeria, which is 16 and the practical age at which students complete the university education these days, it could be said that the course materials fairly suit the students age. Fairly, because using the government regulations, the minimum age for postgraduate would have been 21 age attained after the National Youth Service Corps (NYSC). That is to say that the level of difficulty in the course is what they could cope with. Considering the suggested table presented by Flesch Formula Readability Ease Score which states thus:

<table>
<thead>
<tr>
<th>RE Value</th>
<th>Description of Style</th>
<th>Required Reading Skill</th>
</tr>
</thead>
<tbody>
<tr>
<td>90–100</td>
<td>Very Easy</td>
<td>5th Grade</td>
</tr>
<tr>
<td>80–90</td>
<td>Easy</td>
<td>6th Grade</td>
</tr>
<tr>
<td>70–80</td>
<td>Fairly Easy</td>
<td>7th Grade</td>
</tr>
<tr>
<td>60–70</td>
<td>Standard</td>
<td>8th – 9th Grade</td>
</tr>
<tr>
<td>50–60</td>
<td>Fairly Difficult</td>
<td>10th – 12th Grade</td>
</tr>
<tr>
<td>30–50</td>
<td>Difficult</td>
<td>13th – 16th Grade</td>
</tr>
<tr>
<td>0–30</td>
<td>Very Difficult</td>
<td>College Graduation</td>
</tr>
</tbody>
</table>

and its equivalent in Nigeria as shown below:
A fair judgment could be made on the Flesch Reading Ease of the course materials. From Tables 5 and 6, the average Flesch Reading Ease record of 46.6 for undergraduate and 39 for the post graduate. Using Tables 7 and 8, it could be said that the course materials prepared for undergraduate students have their correct level of difficulty. But that of the post graduate levels need an upgrade in the level of difficulty to adequately suit the level it is meant for. This is very important at the time of review. A close look at Tables 5 and 6 revealed the need to stabilise difficulty levels for which course materials are written e.g INR 101, a 100 level course, shows a Flesch Reading Ease of 29.0 which is an indication that this course material is very difficult for this level, again the difficulty may have been a result of some or all the factors influencing text difficulty – vocabulary, sentence structure, elaboration, coherence and unity, text structure, familiarity of content and background knowledge required, audience appropriateness, quality and verve of the writing, interestingness as stated by Hiebert (2005). Also PCR 702 records a Flesch Reading Ease of 50.6 and a Modified Fog Index of 18. From the formula, 50.6 is below the level of a post graduate programme but comparing the Flesch Reading Ease of 50.6 and the Modified Fog Index that showed the reading age at 18, which the age that mostly falls under the undergraduate level, it could be said that the course material matches the age and not the level. There is a need to watch out for the appropriateness of the level of difficulty in course material production, because inappropriateness of difficulty level may bring discouragement to students in the programme.

Using Rowntree’s Complexity Quotient, any text with a score that exceeds 3 is regarded as a difficult text. From the analysis given above, the undergraduate course materials record complexity quotient average of 2.1 and post graduate 2.5. This implies that the texts are not difficult for the levels they are meant for, but considered fairly adequate.

The Cloze Test rule says that when the cloze test is 60% it means the text is satisfactory for comprehension, when it is 40 - 60% it would be considered partial for comprehension and less than 40% is taken as inadequate comprehension. From the analysis given above, the undergraduate course materials which had an average of 59% and the postgraduate average of 60% are partial for comprehension. This reflects a need for improvement on the content and language of the course materials, though some of the course materials are satisfactory for comprehension.

Research Question 3

What should be the criteria in reviewing course materials published in 2004?

From the results gathered in the field, the review of the course materials published in 2004 should be on:

- adequate upgrade of course materials level of difficulty,
- adequate review of content and language of course materials,

Table 8

<table>
<thead>
<tr>
<th>RE Value</th>
<th>Description of Style</th>
<th>Required Reading Skill</th>
<th>Nigerian Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 – 100</td>
<td>Very Easy</td>
<td>5th Grade</td>
<td>Primary 5</td>
</tr>
<tr>
<td>80 – 90</td>
<td>Easy</td>
<td>6th Grade</td>
<td>Primary 6</td>
</tr>
<tr>
<td>70 – 80</td>
<td>Fairly Easy</td>
<td>7th Grade</td>
<td>JSS 1</td>
</tr>
<tr>
<td>60 – 70</td>
<td>Standard</td>
<td>8th - 9th Grade</td>
<td>JSS 2 &amp; 3</td>
</tr>
<tr>
<td>50 – 60</td>
<td>Fairly Difficult</td>
<td>10th - 12th Grade</td>
<td>SSS 1 – 3</td>
</tr>
<tr>
<td>30 – 50</td>
<td>Difficult</td>
<td>13th - 16th Grade</td>
<td>Under Graduate Levels</td>
</tr>
<tr>
<td>0 – 30</td>
<td>Very Difficult</td>
<td>College Graduation</td>
<td>Post Graduate Levels</td>
</tr>
</tbody>
</table>
Findings

The following were the findings from the research:

1. Students expressed great dissatisfaction with the non availability of course materials. Also some of the postgraduate students did not stop with the non availability but extended it to the inadequacy in content in some of the course materials.
2. The course materials written in 2004 are due for review.
3. From the analysis of data in this research it was revealed that the editing part of the course material production need to be given more attention especially in getting the difficulty level index. In doing this, the content and the language of the text must be properly edited so as to get the right difficulty level.
4. That NOUN course materials need some improvement to adequately meet with the specification of ODL course writing.

Recommendations

From the findings, the following recommendations are made:

1. In starting an Open and Distance Learning, the institution should ensure the availability of all 1st and 2nd year course materials before taking off. This might be through development but adaptation and better still adoption where possible. While the 1st and 2nd sessions are running, the courses of other levels would be undergoing development. Through this process, there would be a minimal shortage and stagnation of sessions.
2. The university should procure software for calculating Text Difficulty Index to be used in calculating the Difficulty Index of course materials in the university. The use of the software will enhance adequacy in the quality of course materials.
3. There should be a re-training for course material reviewers.
4. Difficulty Index of the text should be considered at whatever method the course materials are produced – development, adaptation and adoption.

References


Abstract

The integration of ICT in open and distance learning is changing the way education is delivered and accessed. While attention has been directed towards teaching and access by learners, the attendant issues of quality assurance have not been adequately addressed. This paper highlights what these issues are and how they pose major challenges to open and distance learning in developing countries. It is argued that forces within the institution, the teachers, the learners themselves, the ICT infrastructure, curriculum and content development processes and factors within the environment pose challenges to quality assurance in the use of ICT in open and distance learning programmes in developing countries. Suggested ways of overcoming them would include: systematic approach to adoption of ICT; creating awareness of importance of ICT; providing technical and administrative support through training and policy statements; enhancing collaboration with other institutions to access open source software and policy makers to involve stakeholders so as to create ownership of ICT programmes.

Key words: Open and Distance Learning, Information and Communication Technology, Quality Assurance, Developing Countries

Résumé

L’intégration des TIC dans l’apprentissage à distance est en train de modifier la manière dont l’enseignement est dispensé et mis à la portée des gens. Pendant que l’on met l’accent sur l’enseignement et l’accès par les apprenants, les questions connexes d’assurance qualité ne sont pas examinées adéquatement. Ce papier met l’accent sur ces questions et la manière dont elles posent de grands défis à l’apprentissage à distance dans les pays en développement. On soutient que des forces à l’intérieur de l’institution, les enseignants, les apprenants eux-mêmes, l’infrastructure de TIC, les processus de développement de programmes et de contenus et des facteurs dans le milieu posent des défis d’assurance qualité en matière d’utilisation de TIC dans les programmes d’enseignement à distance dans les pays en développement. Pour surmonter ces difficultés, on suggère, entre autres, l’approche systématique à l’adoption des TIC, la sensibilisation à l’importance des TIC, un soutien technique et administratif par le biais de la formation et de la définition de politiques, l’amélioration de la collaboration avec d’autres institutions en vue de l’accès aux logiciels de source ouverte et l’inclusion des partenaires dans les décideurs afin de créer la propriété des programmes de TIC.

Mots clés: Enseignement à Distance, Technologie de l’Information et de la Communication, Assurance Qualité, Pays en développement.
Introduction

Quality assurance in the use of ICT in open and distance learning is difficult to pin down because it can mean different things to different stakeholders. Learners, curriculum developers, courseware writers, reviewers, editors, tutors, policymakers, and potential employers may all have different concerns. Quality is about perceptions as well as measured outcomes. The indicators of quality are many and varied.

Quality in the use of ICT is often viewed in terms of access, user friendliness of the technology and content. This is understandable for three reasons. Firstly, the course materials are tangible and publicly visible products. They are open to scrutiny all. They can be judged in terms of their consistency of quality, soundness of content and effectiveness of their instructional design for learners. Much of the credibility of open and distance education depends on the quality of the materials and delivery because only this can instill confidence in the student, prevent dropouts and establish the status and reputation of ODL institutions. Secondly, course materials are important instruction tools for learners in ODL before, while teaching materials are key to any education system, they assume a central place in open and distance learning. Lastly, it is easier to see the quality or lack of it in a product such as a resource unit, video or online material than the less tangible aspects such as processes involved in the construction of the learning materials or management of support services.

This paper seeks to highlight and discuss the various challenges of quality assurance in the use of ICT in open and distance learning. The paper hinges on the premise that while the use of ICT in open and distance learning is gaining credence among educational providers, issues of quality assurance should be considered at every stage if ICT is to have credibility as a viable and effective tool of teaching and learning. Past studies, both theoretical and empirical will be used to advance this argument.

The argument revolves around three objectives namely, identify the quality assurance issues in the use of ICT as an instruction tool in ODL; test the challenges associated with achieving quality assurance in the use of ICT in ODL program and to suggest ways of overcoming these challenges. This paper is expected to expose quality assurance issues in the use of ICT in open and distance learning especially because there is need to have credibility as a viable and effective tool of teaching and learning. Past studies, both theoretical and empirical will be used to advance this argument.

The discussion is expected to contribute to the ongoing debate in the areas of quality assurance and ICT in open and distance learning.

Statement of the problem

The use of ICT in ODL has gained momentum in the last ten years due to major advances in technology, foremost being the World Wide Web (WWW) and Internet. This enhanced the development of online programmes that can be moved around with ease without any geographical hindrances. While much attention has been directed towards access to hardware, software and content development, less attention has been paid to the attendant problems of quality assurance in the use of ICT in open and distance learning, an area where content delivery via different technologies has been the tradition. The main question of concern, therefore, is how we address issues of access: to what extent are issues of quality assurance addressed in terms of content development, delivery and certification?

Quality assurance and ICT in open and distance learning

Quality assurance is a process that covers all stages of an activity. In the case of open and distance learning, this would include: the quality of the product for example, courses, study
materials (printed texts, video, audio, e-learning online), number of graduates, examination pass rates or achievement of intended skills, equivalent results in public examinations or conventional system; the quality of the process involving learning and teaching processes such as tutoring, assessing written work and providing feedback, monitoring tutors, record keeping and coordinating subjects and tutors work and quality of the production or delivery systems: course and print production, warehousing and stock control and material distribution to students (Mcllroy and Walker, 1996).

Quality, therefore, can be seen as a general philosophy pervading a system as reflected in its policy statements, attitudes of staff, management and training of staff, (having a motto or slogan e.g. nothing but the best), images and messages presented to the public such as leaflets, brochures, posters and web pages. Quality is located in different aspects of an organization’s activity. Achieving quality in ODL means achieving agreed or identified standards in each of the aspects outlined above. Ways of judging quality will differ according to which aspect you are examining. It is easy to find indicators for some than others. It is easier to measure survival rates than quality of face to face teaching. These sets of activities do not function in isolation but are essential parts of one operation and are dependent on one another. They all affect the quality of the learning experience for the learner (UNESCO, 2002). The interdependence of the activities in practice mean, for example, that if materials are of excellent quality but do not reach the learner when needed, then the whole programme fails to be effective. Secondly, if the e-learning material is of high quality and imaginatively produced, they would be irrelevant to the learner if they were inaccessible due to lack of internet connectivity as is often the case in developing countries. Quality is a product of planning, monitoring, control and coordination; hence it needs to be built into an ICT programme at the time of design and not at the end.

The challenges of quality assurance in the use of ICT in open and distance learning include the problem of resistance to change. The attitude of learners and teachers towards ICT, work ethics, competence and training in ICT, present challenges to the adoption of ICT. There is also competition for resources especially in dual modality institutions where priority is given to in-campus fulltime students. Even where ODL programmes generate its own income, it goes to a common pool from which it is not easy to get equipment or money for capital development in ICT infrastructure (Sife et al, 2007). In addition, students themselves compromise quality by not being serious in meeting quality expectations as those in ODL programmes tend to be working adults who have limited time for studies (Moy and Walker, 1996).

Conclusions

Quality assurance in the use of ICT in ODL has many challenges as noted above. These can be overcome by systematic approach to adoption of ICT, creating awareness of the importance of ICT in accessing and delivering education conveniently, providing technical and administrative support through training and policy statements, seeking collaboration with other institutions to access open source software and involving stakeholders as to create ownership of ICT usage.

References


UNESCO (2002). Open and Distance Learning: Trends, Policy and Strategic considerations,

COLLABORATION WITH THE PEOPLES-UNI FOR ONLINE EDUCATION IN PUBLIC HEALTH

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Abstract

One of the major barriers to health in Africa is the capacity of the public health workforce. The need for capacity building to increase local human resources in health has recently been highlighted by the Global Health Workforce Alliance and the Kampala Declaration. Traditional public-health education programmes are often oversubscribed and the costs of attending programmes from universities in the ‘north’ (even distance education programmes) can be prohibitive. However, an expanding body of high quality, online Open Education Resources (OERs) is becoming available through the Internet, although they do not usually include either instruction or accreditation. The Peoples-uni (http://peoples-uni.org) was established recently to develop educational context around these resources to build public-health capacity in low- to middle-income countries.

Key words: Global Health Workforce Alliance, Kampala declaration, Open education resources (OERs) Capacity of public workforce.
Introduction

In order to create an educational context to the OE R, we have developed a common format as detailed below:

- Identify a health problem.
- Identify the educational needs (though our aim has always been to provide Masters level education initially – in a 'train the trainers' approach).
- Identify the competences required and map against lists of public health competences.
- Identify the online resources relevant to the competences, and provide links to them.
- Develop a set of focused discussion topics for tutors/facilitators to lead online groups, using a learning management system (currently Moodle).
- Assess and accredit learned competences.
- Repeat this process for a range of relevant problems in order to cover a complete set of competences to guide the public health course development.

In order to create this, we have utilised the open source educational software platform module. In late 2007, a fully online pilot course module in maternal mortality was offered, 38 students enrolled for the module, after limited publicity. Their backgrounds ranged from clinicians, whose aim was to further improve their public health knowledge, skills, and management. They were all experienced practitioners, and came from eight different countries. The module was delivered over ten weeks and divided into five two-week blocks focusing on different topics, driven by appropriate competences. Delivery was through problem-based learning, and participants were required to read the provided materials and discuss questions raised to meet competences. Three assessments (one formative) and discussions were facilitated by two content-expert facilitators who ‘visited’ at periods of their focus and two general facilitators whose role was to keep conversations moving when participants grew quiet. This was all hosted by Moodle, and the draft course module can be seen on http://moodle.ca/wd.net/course/view.php?id=2.

One person left before commencement due to work commitments, and seven did not enter the course to enrol at all (although they received automatic e-mails of the discussion postings). 22 posted at least once to a discussion forum, an additional five posted to the Introduction (but not to the Discussions). 13 submitted at least one assignment. 19 students had completed the pilot's brief evaluation questionnaires by the end of January 2008, and the overall response was very positive. This evaluation was not in-depth. Its intention was to encourage participants to share their views on gaps in the course, make suggestions as to how Peoples-uni.org should make improvements and advise on developmental direction.

A summary of key results are shown in the Table in the Appendix

Encouraged by the response to the pilot, and learning the lessons from it, the Peoples-uni has embarked on the development of 11 course modules covering public health problems as well as the foundation sciences of public health. We have assembled an international volunteer faculty of more than 70 people, who come from 24 countries. They have been identified by responses to a paper published in the Bulletin of the WHO [http://www.who.int/bulletin/volumes/85/12/07-044388.pdf] and various other ‘advertisement’ through internal discussion forums and personal contact. We are putting the course modules collaboratively online, again using Moodle, and adding Google Documents (to allow changes and previous material to be readily viewed by the development team members). The UK Royal Society of Health will offer awards to the certificate and diploma level.

In order to make the education relevant to the setting, to be able to obtain help with delivery, to add value rather than compete with local organisations, and to explore the possibility of joint
degrees, we feel it essential to develop partnerships with universities and other organisations in the 'south'. We welcome all suggestions, advice and assistance in identifying the factors that will encourage the development of such collaboration and partnership arrangements with the Peoples-uni.

Appendix

Selected questions and responses from evaluation of delivery of maternal mortality course module (19 responses in total)

Question 1. How important were these potential reasons for you to enrol in this course module?

<table>
<thead>
<tr>
<th>Reason</th>
<th>Very important</th>
<th>A little</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>To get academic credit</td>
<td>10</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>To gain public health knowledge</td>
<td>16</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>To gain public health skills</td>
<td>15</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>To look at the resources</td>
<td>12</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>To join in a discussion with others</td>
<td>13</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>To get experience in e-learning</td>
<td>12</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

Question 2. Technical aspects: how did you find the following?

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Good</th>
<th>Mostly OK</th>
<th>Bad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet access</td>
<td>8</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Access to course module and Moodle (apart from problem at end of November)</td>
<td>11</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Information on how to use the course materials and take part in discussions</td>
<td>10</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Access to materials on module</td>
<td>9</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Response to problems from course support team</td>
<td>16</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Question 3. Course benefits: What was

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Excellent</th>
<th>Good</th>
<th>Useful</th>
<th>Not of use</th>
</tr>
</thead>
<tbody>
<tr>
<td>The general interest of the course</td>
<td>8</td>
<td>9</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>The academic value from the course</td>
<td>11</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>The practical value from the course</td>
<td>6</td>
<td>3</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>The input to the discussions from other 'students'</td>
<td>5</td>
<td>12</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>The input to the discussions from facilitators</td>
<td>11</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

Question 4. The future:

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes definitely</th>
<th>Yes probably</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would you enrol in more course modules?</td>
<td>12</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Would you be interested in continuing to a Diploma or Master's degree?</td>
<td>13</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Was this relevant to your job or career?</td>
<td>13</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Would you recommend this to others?</td>
<td>12</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

Question 5. Changes for the future

<table>
<thead>
<tr>
<th>Change</th>
<th>Yes definitely</th>
<th>Possibly</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the content need to be changed for local situations?</td>
<td>4</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Would you be prepared to help make changes?</td>
<td>9</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Would you be prepared to join in as a tutor or other role in the future?</td>
<td>10</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>
Abstract

The whole world is now referred to as a global village because of the technological revolution that is taking place especially in the area of information and communication. In this write up, the author started the discussion with definition of communication, highlighted means of communication, and purposes of communication, counselling as a form of communication, conceptual frame work for communication in ODL, component of good communication, media selection and combination for effective counselling process in NOUN. The writer in his recommendations, advocated that for a counsellor to be effective in discharging his responsibilities, he or she must attain a certain level of competency in communication skills, select appropriate media and must be efficient in the use of communication devices especially computer. Also, the media of counselling must be readily available to both the counsellor and counsellees.

Key words: Technological revolution, global village, counselling.

Résumé

Le monde entier est devenu ce qu'on appelle, aujourd'hui, un village planétaire à cause de la révolution technologique en cours, surtout dans le domaine de l'information et la communication. Cet exposé définit la communication, met l'accent sur les moyens de communication, le cadre de communication en enseignement à distance, les composants d'une bonne communication, la sélection et la combinaison des médias pour la réussite du processus d'orientation à NOUN. L'enquéteur, dans ses recommendations, soutient qu'un conseillier, pour être efficace dans l'exercice de son métier, doit atteindre à un certain niveau de compétence en aptitudes de communication, sélection de supports appropriés et doit savoir utiliser les gadgets de communication, surtout l'ordinateur. En outre, il convient de mettre les équipements techniques de l'orientation à la disposition du conseiller et du conseillé.

Mots clés: révolution technologique, village planétaire, le conseillé, supports d'orientation.
Introduction

The whole world is now referred to as a global village because of the technological revolution that is taking place especially in the area of information and communication. Communication as defined by Encarta dictionaries (2007) is an exchange of information between people for example, by means of speaking, writing or using a common system of signs or behaviour. From the above definition, communication could be viewed from three components – the source, the channel and the receiver. In the case of the source/ receiver, communication could be the counsellor or the student. From the channel point of view, communication is a medium, a carrier of information from the source to the receiver and vice versa (COL, 2003).

On one hand there are various tools and media as means of communication among human beings, starting from sign which is regarded as the primitive means to super computer-based communication. The prominent means of communication are: signs and sound, language, postal system, telephone, mass media, satellite and computer (IGNOU, 2001).

On the other hand, communication media distributes messages in text, still and moving images and sound. Knowledge-generating messages may be communicated to large numbers of learners, either synchronously or asynchronously pushed by broadcasting or access on demand through audio/visual players or internet. As these devices change, so the quality and nature of the message will change (COL, 2003).

Purposes of Communication

Communication serves two purposes:

- the distribution or delivery of information in form of pre-packaged materials and transmission of synchronous or broadcast programmes and
- role of communication as a crucial component of education which is the interaction between teachers and learners and where possible, between learners also (IGNOU, 2001).

Four Levels of Communication

Communication can be classified into four main levels: interpersonal communication, group communication, organisational communication and mass communication (IGNOU, 2001). Counselling is more concerned with interpersonal communication than with the other two levels of communication. This is mainly because interpersonal communication includes conversation between two persons, who share feelings, emotions, thoughts and ideas in cases of individual counselling etc while in group communication, the members of a group interact with one another on common interests in cases of group counselling. Group communication is used to take a collective decision on problems, an issue of common concern. Both individual and group counselling are fashioned along this line.

Place of Information and Communication Technologies in Open and Distance Education

The process of counselling in all forms (individual and group) is based on communication between counsellor and counsellees. The two-way interaction between the students and counsellor or others longing for the support service in open and distance education is what Holmberg (1981) referred to as didactic conversation. According to him, the two-way kind of interaction between the students and teachers should occur either through writing or spoken words. This discussion would therefore by guided by Holmberg theory of guided didactic conversation and good communication which is a key supporting open and distance education learners.
In Open and Distance Education, the new information and communication devices make it possible for people to share a common learning experience in real life or to enable an individual learner have a unique personal interaction with a teacher/counsellor or with another learner, no matter where, or at anytime. The new information society has created new challenges and opportunities for the design and delivery of counselling services, for individuals or in group, no matter where and at any time (UNESCO, 2004).

The fact that has emerged from the discussion is that open and distance learning is one of the most rapidly growing field of education and potential impact on all educational delivery systems has been greatly enhanced through the use of communication and information technologies (UNESCO, 2004). The design teams have developed learning materials that aim to promote ‘active learning’ to replicate in sense a dialogue that is essential to the learning process (Laurillard, 1993).

Communication and Interaction as Counselling Strategies in Supporting Learners in Open and Distance Education

The main focus of this paper is how counsellors communicate with learners at a distance. To the learners of open and distance learning, counselling means a more learner-centred approach, enrichment, higher quality and new ways of interacting, though Ryan (1998) argued that at present, much of what is provided in the form of learner support is system-driven rather than student-centred.

Counselling as an integral part of learner support in ODE, is based on interpersonal or group communication, and interaction between the counsellor and counsellee. Interaction is the key to all main theories of learners support, because it is the only way of addressing the needs of learners in the terms in which those learners wish to express themselves (Thorpe, 2002). The components of good communication include listening, responding, maintaining contact and effective use of communication media are all imbedded in the process of counselling (COL, 2003). Detailed discussion of the components of good communication is beyond the scope of this paper. Essentially, any contact with you will build confidence and motivation and it will regularly act as a sort of routine check whereby they could reassure themselves that they are heading in the right direction (Rickwood and Godwin, 1997).

Counsellors are expected to be consistently empathetic, accepting and respectful generally. They should be able to develop a more open and trusting relationship with students and facilitate the opportunity for students to develop more open and trusting relationship with one another which usually results in a climate of collaboration and mutual exchange in the learning process (Poonwassle, 2001). This helping relationship could only be established through effective and efficient communication.

Counselling in the National Open University of Nigeria (NOUN) is undertaken by professional counsellors and aimed at helping the individual to clarify real needs, reconciling the conflicting demands of home and work, and coming to terms with isolation and problems resulting from previous experiences. Counsellors in some Open and Distance institutions are responsible for both tutoring and counselling but in NOUN, the student counsellors provide regular guidance and counselling to the students with respect to several aspects of their studies including enrolment, choice of programmes and when and how to study, and when to seek for special clinics for academic guidance. Counsellors have the responsibility of keeping in constant touch with distance learners and probing early warning signals regarding difficulty with studies in order to provide prompt remedial actions. For counsellors to interact effectively with the learners at a distance, they must be aware of barriers to effective communication in counselling, media of counselling and challenges. The National Open
University of Nigeria recruited and posted to thirty-six Study Centres forty-five professional counsellors across Nigeria to counsel her students from pre-entry stage through graduation and beyond.

**Media of Counselling and Challenges in National Open University of Nigeria**

Communication media are essential facilitating tools in the counselling process in Open and Distance Education. Their effective use requires counsellors to understand the effects of distance and technology so that one can choose the right method for the message, and design messages to make the best use of the technology (UNESCO 2004). For example, it is much better to convey detailed information in print rather than over the phone, so that the learner can refer to the printed message later on (COL, 2003). The writer would at this juncture highlight the most commonly used media of counselling in NOUN. These include face-to-face individual/group counselling, telephone (one to one)/teleconferencing (one to many), counselling by letters, by handbook, through email and computer conferencing.

Face to face counselling in many ways remains the important medium for counselling at all the study centres of the University. However, it is extremely expensive in terms of staff, time and travel and sometimes, could also be inaccessible to distance learners. One way of at least reducing the problems of individual face to face counselling is through group counselling. Although a group loses the one to one relationship of counsellor and learner, it provides the opportunity for learners to share their concerns with one another.

**Telephone counselling (on to one, teleconferencing over phones)**

One-to-one telephone counselling involves the counsellor staying in a different location from the learner and didactically communicates through a fixed-line telephone with the learner. This counselling process is used for counselling distance learners living far away from the university study centres. This process can be initiated either by the counsellor or the learner. Counselling through telephone is quite different from face to face counselling and the main difference is the absence of facial clues but the counselling skills used are the same. Toll call phones are provided at every study centre and personal cellular phones of the counsellors are being used for informing, advising and counselling students of NOUN. But very expensive because of the high tariffs charged by Global Mobile Service providers and the problem of poor services.

Teleconferencing is another counselling process used in NOUN to counsel distance learners and it involves linking a number of people at different locations to the same telephone line with the counsellor at one end while others are at different locations. Teleconferencing can be in form of two-way-audio and one-way-video conferencing. A well-equipped e-learning unit has been established at the NOUN Headquarters. The University is currently working with NASRAD through collaboration and had linked up 16 of its study centres with the Nigerian satellite for the provision of internet connectivity, conduct interactive video conferencing and tutorial facilitation, it can post, information and counselling online across these centres from just one base (Ipaye, 2007).

Counselling by internet is commonly used to counsel learners in NOUN. Use of internet for counselling demands access to computers and telecommunication equipment. Online discussion or dial-up telephone can be conducted through computer networks. The counsellor interacts with more learners simultaneously at different locations. The counsellor announces the contact time in cyberspace and distance learners log-in to discuss the issues. It is known as bulletin board system or the chat room or talk room which holds one-to-one or to many conversations respectively.

E-mail is also commonly used for counselling by internet. For example, instead of writing letters and waiting for several days to get a reply by post, counsellors can post assignments, announcements, supplemental materials, as well as feedback or responses to distance learners individually or in a group. World Wide Web is another way that can be used by the counsellor for reaching out in a one-to-many way. In this way, a counsellor can reach the distance learner and the learners can reach the counsellor. Therefore, counselling is suitable for informing, advising and counselling the distance learners.
As earlier mentioned, effort is being intensified by NOUN to provide each study centre with computer laboratories equipped with between 30 to 50 computers and internet connectivity. As at now, 16 of its study centres have been linked with the Nigerian satellite for the provision of internet connectivity. The greatest challenge faced both the counsellors and students of NOUN is their low level of computer literacy. Though the University has been organising computer literacy training for all categories of staff and subsidising the purchase of laptop computers for staff, no appreciable progress has been made in counselling through internet.

Counselling by letter is commonly used at all NOUN study centres. This partly because other forms of communication can be very difficult and expensive in Nigeria. The process of counselling through letters whether as a counsellor’s initiative or a response to a letter received follows the basic principles of counselling. Active listening is conceived as an act of careful reading of the letter in order to clarify feelings and issues in the learner’s letters. It is possible to respond with warmth, acceptance, genuineness and empathy. Counselling by letter or short messages through the phone is suitable for informing and advising the distance learners.

Counselling by computer or interactive video-discs is yet to take off in NOUN to counsel the learners. Counselling by computer or video is a growing phenomenon especially with the advent of relatively cheap micro-computers. In NOUN, all study centres are expected to have computer laboratories equipped with between 30 to 50 computers each. The relatively interactive and non-threatening nature of computer counselling makes many learners appear to enjoy it and find it useful. This process is mostly used for developmental and career counselling. It is suitable for advising, informing and counselling the distance learners. However, if learners are using a computer technology for the first time, it is better to provide instructions in print so that they are not left without any means of communication back up.

Counselling through handbooks in NOUN, print materials, such as Student Handbook, Getting to Know Your University, etc have been printed and distributed to the students. They are mostly used to address information and advisory needs of students. In most cases, frequently asked questions by the students are addressed in these books.

Other media of counselling in use in open and distance education include counselling by broadcasting, radio broadcasting, etc. but these media have not been convened in NOUN. The effectiveness of these commonly used in NOUN is yet to be determined.

The Challenges of Communication in Counselling in NOUN

The main challenge of the various channels of communication used in education these days is the selection of appropriate channel of communication which can deliver clearly, accurate and quality information to the students as desired by the source (the counsellor or education institution) without any distortion. The effectiveness of each component contributes to the overall effectiveness of the communication process. There are various stages through which a message has to pass from the source. Barriers to effective communication in counselling in NOUN could be senders and receivers poor communication skills, perception of counsellors as unapproachable, inability of learners to speak or write fluently or use computer and internet facilities or by the external factors such as lack of or efficient communication facilities eg internet, constant electricity supply etc. It is important to note that the detailed discussion of these barriers is beyond the scope of this paper.

This brings us to another important issue which is media selection.

Media Selection

The process of media selection is often considered an important part of designing learner support services especially counselling. The decision regarding media selection is essentially based on media attributes or characteristics. Media of counselling should be selected only if:

a) it is capable of presenting all the intended information to the counsellor in clear and unambiguous manner
The following issues should be considered while selecting the media of counselling in open and distance education:

1) **Access**: That is how accessible is a particular technology for counselees?
2) **Flexibility**: How flexible is it for a particular target group?
3) **Cost**: What is the cost structure of each technology and the unit cost per counsellee?
4) **What kinds of counselling needs of students could that through this medium?**
5) **What is the best technology that supports a specific counselling strategy?**
6) **Interactivity and user friendliness**: What kinds of interaction does the technology enable? How easy is it to use?
7) **Organisational issues**: What are the organisational requirements and the barriers to be removed before this technology can be used successfully?
8) **Novelty**: How new is this technology?
9) **Speed**: How quickly can information be disseminated through the medium?

In NOUN, media selection is left to the discretion of the individual counsellor and availability of the media. According to Schramm (1977) these questions can make the process of media selection appropriate as well as effective.

### Media mix or combination

Another crucial issue of media facilitation is the process of determining the ideal combination of media attributes to effect optimum counselling process in a given situation. Different distance teaching institutions, combine various media of counselling according to the learners needs, target groups philosophies, resources and counselling support services. Every medium of counselling differs in terms of attributes and effectiveness for specific counselling process and specific learner groups. It is important for a counsellor to be able to determine the ideal combination of media attributes that would produce quality communication in a given counselling situation.

The two main concerns of counsellors should be:

a) which media attributes are best suited to deliver and facilitate effective counselling and associated counselling outcomes; that is behaviour changes in the learner.

b) if more than one media is to be used, how to ensure that the chosen media are integrated with each other and with chosen counselling outcomes (COL, 2003).

### Place of Service Delivery

The study centres serve as the first contact points between the students and the University and coordinate the activities of the University with the state of abode. All support services especially counselling, information and advice rendered to the students at the study centres. As at November 2007, there were 34 functional study centres in 31 States of the country including the Federal Capital Territory. New centres will be established within the next few months in some other States and before the end of 2008, all the 36 States of the Federation would have had at least one study centre. Some Local Government Areas, are already offering facilities for the establishment of study centres in their local governments (Ipaye, 2007)

There are also some special study centres. There is the Special Study Centre for the Army/Military personnel at Ilorin, a special centre for riverine areas is been planned for Finima, in the Delta area. Other special centres will soon takeoff in the Prisons, where we already have pioneering efforts in one of the prisons in Lagos. A number of Nigerian students based in China had approached the university to establish a centre in China to meet their university education needs (Ipaye, 2007).

Every NOUN study centre is involved in compiling frequently asked questions with the aim of providing necessary information, advice and possible counselling in student handbook and interactive audio and video disc.
Conclusion

In this paper, the writer has defined communication, highlighted means of communication, purposes of communication, relationship between communication and counselling, conceptual framework for communication in ODL, component of communication, media selection and combination, media of counselling in NOUN, challenges of communication in counselling, and finally places of service delivery.

Recommendations

For a counsellor to be effective in discharging responsibilities he or she must attain a certain level of competency in communication skills, selection of appropriate media and efficient use of modern communication devices especially computer and internet facilities. More research work should be carried out in media of counselling in open and distance education. Counsellors should undergo constant training in the use of modern communication and information technologies in counselling especially computer and internet devices.

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Abstract

Open and Distance Education is now widespread, not only in open universities of the world but also in all education and training sectors. It has been accepted and integrated into the mainstream of the Nigerian educational system. Open and distance learning is the process of teaching in which the learners are separated in time and space from the instructor (teacher). It utilises a variety of media and technologies to provide and enhance quality education for a large number of learners wherever they may be. Information and Communication Technology (ICT) has been identified as a factor that can promote quality in Open and Distance Learning (ODL). This paper therefore examines the concepts of quality in Open and Distance Learning and Information and Communication Technology. The areas where ICT can be used to enhance quality in open and distance learning are highlighted. The merits and demerits of open and distance education and the problems of using ICT are also discussed. The paper offers some useful suggestions on the way forward.

Key words: Quality, Open and Distance Learning and Information and Communication Technology.
Introduction

Open and distance education is not altogether new in Nigeria. It dates back to the colonial period when correspondence colleges in the United Kingdom provided opportunities for the education of a number of qualified Nigerians through correspondence courses. Teachers, Lawyers, Doctors and many commercial and secretarial staff were trained through this method of education. Later, correspondence courses extended to the preparation of students for General Certificate Examination (G.C.E) ordinary and advance levels via the opportunities offered by such institutions like the Rapid Results College, Cambridge University and the University of London. These institutions continued to serve the Nigerian populace that was yearning for education until 1976 when the Department for correspondence courses was established in the University of Lagos as a follow-up to the Ashby Report on Higher Education in 1960. In 1976, the National Teachers Institute, Kaduna was established and it operated a distance learning system. According to Onuorah (2007), this saw the gradual end of correspondence education in Nigeria and the birth of distance education. The Federal Government’s interest in open and distance learning was rekindled in 1983 when the National Open University of Nigeria was established by the Shagari’s administration and in 1984, it was suspended by the same administration. In 2002, the Obasanjo administration revived it and since then the Open University has been very active providing open and distance learning to a large proportion of the Nigerian citizens.

Open and Distance Education (ODE) is now widespread only in open universities of the world but also in all education and training sectors. It has been accepted and integrated into the mainstream of the Nigerian educational system. Distance education is one of the major pivots on which the present federal administration in Nigeria hopes to improve the quantity and quality of instruction in Nigerian schools (Yusuf, 2006). It also serves as a means of providing access to basic and tertiary education for Nigerians. Perhaps to this end that the Federal Republic of Nigeria (FRN, 2004:45) articulates the goals of open distance education to include:

- Providing access to quality education and equity education opportunities for those who otherwise would have been denied.
- Meeting special needs of employers by mounting special certificate courses for their employers at their work place.
- Encouraging internationalization especially of tertiary education curricular.
- Ameliorating the effect of internal and external brain drain in tertiary institutions by utilizing Nigerian experts as teachers regardless of their location or work place.

To achieve these laudable objectives, there is need effectively use modern technologies, especially information and communication technology (ICT) open and distance learning in Nigeria. The global development in technology has great impact on all sectors of economy including education. In recent times, educational establishments are challenged to do more with fewer resources as they try to meet the complex and changing demands of the society. The traditional method of managing distance education and transmitting knowledge and skills through print materials that were self instructional is gradually giving way to internet-based materials. We can not achieve quality in open and distance education without sound knowledge of information and communication technology. ICT is viewed as a factor that can promote quality distance education. Johnson (2007) points out that communication is a fundamental act of the education process. Hence, to enhance quality in open and distance education, proper attention must be given to information and communication technology.

This paper focuses on how to enhance quality in open distance education through information and communication technology (ICT). The concepts of open and distance learning, quality and ICT are examined. The areas where ICT can be used to enhance quality in distance learning are highlighted. The merits and demerits of ODL and the problems of using ICT are discussed. The paper suggests some ways forward.
The Concept of Open and Distance Education

Different scholars have attempted to define open and distance education. Mugridge (1991) defines open and distance education as a form of education which there is normally a separation between teacher and learner and thus, one in which other means – the printed and written words, the telephone, computer conferencing or teleconferencing are used to bridge the physical gap. This means that ODL provides educational opportunities needed to anyone, anytime and anywhere. To Kaufman, Watkins and Guerra (2001), distance education means the delivery of useful learning opportunities at convenient place and time for learners, irrespective of institution providing the learning opportunity. UNESCO (2002) views open and distance education as representing approaches that focuses on opening educational and training provision, freeing learners from the constraints of time and space, and offering flexible learning opportunities to individuals and groups of learners. Holmberg (1977) defines open education as a system of education that does not operate through traditional conventions which are essentially restrictive in terms of admission, attendance, and subject combination. Peter (1973) perceives distance education as a method of imparting knowledge, skills and attitudes which is rationalized by the application of division of labour and organisational principles. He defines distance education as a method of imparting knowledge, skills and attitudes which is rationalized by the extensive use of technical media especially for the purpose of producing high quality teaching materials which make it possible to instruct great numbers of students at the same time wherever they live. According to him, it is an industrialised form of teaching and learning.

The Federal Ministry of education (2002) defines open learning as any form of learning in which the provider enables individual learners to exercise choice over any one or more of a number of aspects of learning and distance learning as an educational process in which a significant proportion of the teaching is conducted by someone removed in space and/or in time from the learner. Alaezi (2005) refers to open and distance learning as educational patterns, approaches and strategies that permit people to learn with no barriers in respect of time and space, age and previous educational qualification – no entry qualification, no age limit, no regard to sex, race, tribe, state of origin etc.

It can be deduced from these definitions that open distance learning provides educational opportunities needed by anyone, anywhere and anytime. It provides increased educational opportunities to a larger population in different situations and needs. Although, distance education emphasises independent study as a way of liberating learners from the fetters of school routine, it does not imply self-study because of two-way communication. This suggests that the separation of the teacher from learner in time and space does not mean complete communication cut-off. Also, to view distance learning as an industrialised form of instruction means that it involves careful planning, preparation and organisation to have both technical equipment and quality teachers to work with (Osuji, 2007). Open and distance education is therefore viewed as a formalised teaching and learning system specifically designed to be carried out remotely by using a variety of media and techniques for instructional delivery. It is not constrained by geographical location and offers opportunities in situations where traditional education has difficulty operating. Both students and employees with distance problems can benefit because it is more flexible in terms of time and can be delivered anywhere. Premised on the foregoing, the features of ODL can be summarised as follows:

1. There is separation of learner and teacher in time and space.
2. There is flexibility in the use of multimedia devices and entry requirements for increased access and equity.
3. There is availability of programmes to learners at their chosen locations.
4. It is learner-centred.
5. There is openness with regards to access, duration, sex, goals and knowledge delivery technique.
6. It allows students to combine education with work.
7. It allows for a two-way communication between teacher and the learners.

Merits and Demerits of ODL

Merits of ODL

(1) It makes education open to many people irrespective of age, sex, religion, location, qualification and time; thereby providing access to education for all.
(2) It provides opportunities for employees to combine education and work.
(3) It provides affordable, cost effective and flexible educational opportunities to many.
(4) It is a veritable instrument for lifelong education.
(5) It provides opportunities for drop-outs of the formal school system who are still interested in learning to continue their education.
(6) It increases access to education for women irrespective of cultural and religious background.
(7) It reduces inequalities in educational services.
(8) It provides speedy and efficient training for target groups.
(9) It provides technology for learning and research.

Demerits of ODL

Although the advantages of ODL are numerous, it has some demerits. Ani (2005) identifies the disadvantages of ODL to include:

The probability of deceit and fake candidates taking advantage of the Nigerian system (corruption).
Poor communication network, where the internet is malfunctioning, the speed of the progress of ODL can be retarded.
Possibility of certificate racketeering in a country where deceit and corruption are the order of the day.
Prospect of transmitting error to all parts of the country and the world if the preparations of the fundamental documents are not well done.

The Concept of Quality

The concept of quality is subject to relativity, subjectivity and variability (Asim and Okon, 2005). Okebukola (2005) defines it as fitness for purpose, while Fadipe (2005) views quality as appropriateness of resources available to education. Akpan and Esirah (2005) maintain that the concept of quality varies from that of providing special services to conforming to standards or fitness for purpose. Quality is the baseline standard in education which can be measured on a scale of reference. It is an expression of standards, means by which a certain set standard in education can be achieved (Maduewusi, 2005). The concept of quality in education is multidimensional and embraces all functions and activities in the academic system. It involves quality of students, instructors/facilitators, instruction, facilities and equipment, academic programmes, curriculum and students' performance assessment. Viewed from this perspective, quality in open and distance learning involves quality of educational inputs, processes and outputs in its entirety.
Quality of inputs

This involves quality of new entrants. The minimum entry requirements should be specified. It also involves the quality of instructors/facilitators’ qualifications and professional competence. The quality of facilities and equipment, notably e-learning tools should not be taken for granted. The programmes of the ODL should compare favourably similar programmes in conventional university system based on the minimum standards stipulated by the National Universities Commission (NUC).

Quality of processes

This should take into cognizance quality of instructional delivery and the variety of media used, quality of communication to ensure tutor-learner and learner-learner interaction, quality of students assessment, grading system and specified time needed to cover course contents for a programme. These processes should compare well with the minimum standards for similar programmes in conventional educational institutions.

Quality of outputs

Quality outputs could be viewed in terms of achievement i.e. what the students learn in terms of skills, knowledge, attitude and behaviour, attainment i.e. number of students who have completed prescribed academic programmes and quality of degrees or certificates awarded; standard i.e. the official learning and what the society expects of the graduate of the ODL.

The Concept of Information and Communication Technology (ICT)

Information and Communication Technology (ICT) is made up of three terms: Information, Communication and Technology.

a) Information: This is data that have been processed, analysed, interpreted and meaningful to the receiver of a message. It is needed for problem solving and decision making. Message is an essential element in information and should therefore be “accurate, concise and of superior value” (Johnson, 2007).

b) Communication: This is the process of transferring information from one source to another or from one person to another or groups of persons (audience). Information is therefore closely related to communication.

c) Technology: It is the process of using information to have meaningful control over nature in order to survive the challenges and changes in our environment so that a civilized life of higher standard of living can be achieved.

Information and Communication Technology (ICT) which has completely revolutionised the entire world started as Information Technology (IT) which deals with the aspect of managing and processing information through the use of electronic computers and computer software to convert, store, protect, process and transmit and receive information. Onuma (2007) views Information Technology (IT) as focusing on electronic generation, storage, retrieval, utilisation and protection of information for future use. The National policy on Information Technology (2001) describes IT as computer, auxiliary equipment, software and manual way and procedures, services and related resources.

In recent years, there has been an increasing emphasis of digital technologies and information technologies gradually converged with telecommunication technologies to give us the new name, Information and Communication Technology (ICT). The ICT knowledge, skills and understanding are now more emphasized and integrated in many areas including education. Information and Communication Technology (ICT) is a process of creation, processing, storage,
retrieval and dissemination of information and data using computers and telecommunications. ICT allows electronic communication through facsimile, email, voice mail, video conferencing and have led to the widespread use of networking technologies such as internet, World Wide Web, intranet and extranets, online data-bases, integration of information systems and mobile communication. It is to this end that Obanya (2003) described ICT as the sole creation of humankind that has thrown off balance the conventional perceptions of time and space and that has destroyed geographical barriers to the transmission of knowledge, ideas and information. Knowledge of ICT has found wide application in all sectors of human endeavors and education is no exception. In education, ICT can be viewed as an application of digital equipment to all aspects of teaching and learning. It involves a combination of technologies for collecting, storing, processing, communicating and delivering of information related to teaching and learning processes (Johnson, 2007). With the emergence of this new technology, the barriers of time, space and location are removed as people have new opportunities to learn through open and distance education.

ICT Tools for Open and Distance Learning

Students of open and distance learning can learn anywhere and anytime across the globe through the use of ICT tools which include:

1) Computer: This is an electronic device that is capable of receiving, storing, manipulating and retrieving data speedily and efficiently (Asogwa, 2007). The availability of the hardwares and softwares helps the learner to choose institutional materials that meet his/her needs. The computer is an educational technology medium for individualising instruction. It therefore, renders excellent service in ODL both as a tutor and as a tool.

2) The Radio: The radio is an invention that enables human voice to be transmitted by electromagnetic waves over a long distance without the help of a wire (Matthew, 2007). Open and distance learning programmes can be transmitted through the use of radio and this helps to create access. Open and distance institutions use radio to disseminate information, counselling and to facilitate their courses at specific hours. Since radio broadcast can be received even in very remote areas, it becomes an important tool in ODL.

3) Television: Open and distance learning makes use of television as an important medium to disseminate information to learners. Television broadcast can be in the form of live broadcast where educational events are directly telecast or recorded broadcast where pre-recorded programmes are telecast per transmission scheduled for the convenience of the producer and the students.

4) Teleconferencing: The use of the teleconferencing facilities allows people to be simultaneously connected so that discussion can take place even though the participants do not meet. It is particularly useful when the teacher and the students are widely dispersed and separated because of geographical barriers.

5) Networking: This is a communication system that links together computers, storage devices, word processors, printers, the telephone system and other electronic devices. ICT networks assist the exchange of information between people and institutions. ICT-based networking that can be employed in open and distance learning is internet/world wide web.

The internet is a global network consisting of millions of computers and databases. It is a network of many computer networks. The internet has the capability to deliver multimedia materials and this quality makes it highly suitable for ODL. The educational uses of the internet include:
i) e-mail  
ii) Facsimile (Fax) 
iii) File transfer. 
iv) Browsing and dissemination of educational/academic information e.g. conferences. 
v) Newsgroups 
vi) Chat room (messaging) 
vii) Institution/ classroom home page.  
viii) Research activities. 
ix) elearning/e-evaluation of students performance

The internet/World Wide Web facilitates people in communicating and accessing remote information from global sources and therefore removes the constraints of time and distance. The World Wide Web (www) is a system of internet servers that allows access to specially arranged documents formatted in hypertext mark-up language (Lucey, 2005).

6) Interactive Video: This involves the use of video tapes or video slides designed in such a way that they respond to choices made by the ideal users. It is a very effective tool for conveying information (Asogwa, 2007).

Use of ICT to Enhance Quality in Open and Distance Learning

ICT can be used in the following areas to enhance quality in ODL.

1) Admission of students: To ensure quality of students admitted into the programme, admission of students should be done online. The Document Tracking System (DTS) can be applied. Through the DTS, candidates submit their application online, receive acknowledgement of receipt, track the progress of their application and receive results of their evaluation online. This helps to check sharp practices by prospective students. Only those who meet the admission requirements should be admitted. The use of the DTS helps the candidates to have access to efficient and cost-effective services.

2) Registration of students: Online registration allows the students to enrol for courses at their own convenience but within the prescribed registration period. Payment of fees should also be done online to help reduce the dubious activities of some account clerks.

3) Orientation of New Students: Orientation activities are required to inform students about course prerequisites, course outlines, procedures for adding and dropping courses, grading criteria, tips on where to access study materials etc. Because the students of open and distance learning live far away from the ODL institutions, it is rather difficult to gather them physically at one location for orientation. Therefore, the creative use of low cost, readily available ICT technologies (e.g. yahoo messenger) will help providers of ODL to overcome obstacles of time and space to conduct quality and viable orientation sessions for their students.

4) Students records: A student accumulates a variety of records over his/her academic lifetime. Storage of physical records of students not only take up a lot of space, it can take up a lot of time and effort and can lead to frustration trying to retrieve students’ files from the archive. Digitization of students records makes storage and retrieval of information easy and simple.

5) Instructional delivery: This is an important aspect of the open and distance learning programme. The use of multimedia internet-based technologies provides powerful options for teaching and learning at a distance. E-teaching is now seen as a sure way to quality
teaching. It is a well designed computer –based courseware that permits students to teach themselves. This method of teaching bridges the gap in course offerings, enriches the curriculum and replaces the existing face to face instruction (Johnson, 2007). Gbadamosi (2006) avers that e-teaching encourages the participation of a large number of students and resolves the problem of inadequate teaching personnel. Proper use of this ICT facility enhances quality in instructional delivery. The use of Computer Aided Instruction (CAI) is an individualized method of instruction. Its use in open and distance learning for instruction helps to increase speed, motivate and understanding of concepts taught. CAI requires the learner to interact with the computer at his/her pace and so recognises individual differences. In this way, quality of instruction is improved.

The technology used to deliver instructional content can influence the instructional design method used. Although, pedagogy has always been central consideration, the delivery characteristics of the technology used should be foremost in the minds of instructional designers charged with the designing of the distance learning materials. To ensure quality in instructional design, Pena Bandalaria (2002) advocates the “quality circle” approach in developing courses and learning materials. This approach consists of:

A course writer who is a subject matter expert.
A subject matter specialist who is another subject expert that peer reviews the soundness of the course and its contents.
An instructional designer who ensures that the “chunking of lessons” is appropriate and the course objectives, contents and assessments mesh logically with one another.
A language editor who performs copy and substantive editing.
A media specialist to recommend appropriate delivery medium.

The “quality circle” approach attempts to ensure that standard practice and best practice are used in course development and delivery of instructional content.

6) Assessment of students’ performance: With effective use of ICT and appropriate media, supervision of students’ learning activities and assessment of their performance can be done online. End of course examination assignments can be carried out and the scoring and submission of grades can also be done online. Online access of official students enrolment list are available where instructors can post students’ interim and final grades for immediate release to students. The process of e-teaching allows for e-valuation and this helps to curb examination malpractice and thus, ensures quality in students’ assessment.

Factors Militating Against Effective Use of ICT in ODL

1) Power supply: Almost all communication and technological tools require steady supply of electricity to function. Unfortunately, electricity supply in the country is epileptic and many rural dwellers are yet to have electricity. This creates serious problems in the use of ICT in the delivery of open and distance learning programmes.

2) Poverty: Many Nigerians are still living in poverty. The cost of computers and other ICT resources are far beyond their reach and so the still low level of computer literacy among the Nigerians citizenry.

3) Lack of skills in Designing Course-wares: Some tutors/facilitators for the open and distance learning lack knowledge and skills in designing and delivering their courses in electronic format because they are still not ICT-compliant. This greatly affects instructional delivery.

4) Poor funding: Generally, education is poorly funded in Nigeria which has resulted in low level provision of ICT facilities in schools and for ODL programmes in the country. Investment in ICT educational services is low because the equipment, soft
and hard-wares are costly. Success in any educational policy is contingent on the involvement of all stakeholders and sponsorship of funding agency (Yusuf, 2006).

5) Internet connectivity: Observation has shown that there is low level of internet connectivity in Nigeria. To make both students and teachers computer literate, ICT project should be made a priority by government.

6) Low teledensity: This is another major challenge to ICT utilisation in open and distance learning programme. Access to unhindered use of ICT tools such as telephone and internet has been very low (Asogwa, 2007). With the advent of the Global System of Mobile (GSM) telecommunication, the use of ICT resources for educational purposes in general and open and distance learning in particular, is still very low.

The Way Forward

To ensure quality in open and distance education in Nigeria, it is recommended that:

1) Teachers in distance learning programmes should undertake mandatory training and retraining in ICT programmes to provide them with technical and functional knowledge of the computer, internet and associated areas of ICT. This will make them ICT-compliant. The AfriHUB ICT project is a right step in the right direction.

2) Providers of open and distance education should use quality and reliable ICT hardware and software supported by highly skilled personnel armed with the knowledge and skills needed to ensure that these systems run smoothly.

3) The Nigerian government should not only allow the continuation of the open and distance learning, it must be supported with adequate funding.

4) Government should ensure that the epileptic nature of power supply in the country be greatly worked upon to improve on the supply of electricity. Rural areas without power supply should be supplied with electricity because a vast number of prospective students of the ODL are rural dwellers.

5) The quality circle approach should be adopted in designing of course contents and learning materials to ensure quality in course content delivery.

6) Online assessment of students work and end of course examination should be encouraged in open and distance learning programmes. This will check examination malpractice and hence, gives quality to the assessment of students’ performance.

Conclusion

The paper has discussed the concept of ICT as it relates to enhancing quality in open and distance learning (ODL). Three quality areas, namely, quality inputs, processes and outputs that require special attention in ODL have been highlighted. Management of ODL to ensure quality calls for the application of ICT in all aspects of its operations. Open and Distance learning now remains the possible, accessible and effective alternative way to meet the educational needs of many Nigerians. To achieve success and maintain quality in teaching and learning, ICT must be used in course content delivery, assessment of students performance, admission and registration of students. The paper calls on the government to properly fund distance education because no educational programme or policy can succeed without adequate funding. Since ICT-tools make use of electricity to function, government should ensure steady supply of electricity in the country. Quality in ODL can be enhanced if the system adapts many of its functions by making use of ICT facilities.
References


This paper contains preliminary observations in respect of using online learning tools, in particular a World Wide Web forum debate, for distance education (DE) students enrolled in Wildlife Management, an optional third-year subject in the Bachelor of Land Management, Charles Sturt University (CSU), Orange, New South Wales, Australia. The objectives for the online forum programme were to achieve a specific capability – an understanding of animal ethics in wildlife management – and to raise the level of student learning outcomes.

In this paper, therefore, I review briefly the literature on online interactivity focusing on the benefits and applications of these to distance education; describe the capability programme in the rural management courses at CSU; outline the process for achieving the improved learning and capability outcomes through the use of an online forum debate in the subject Wildlife Management; and outline strategies for improving and evaluating online teaching.

Key words: Animal ethics, rural management courses, online debate, Wildlife management.

Résumé

Les étudiants préparant des formations en gestion de zones rurales en enseignement à distance à Charles Sturt University, Orange, New South Wales (Australie) se doivent d’arriver à des résultats, non seulement en matière de maîtrise de contenus, mais également d’aptitudes et de renforcement ce capacités. La plus importante de ces aptitudes consiste à comprendre les normes éthiques et leur application en matière de gestion de zones rurales. Dans le sujet Gestion de la Faune et de la Flore, ceci signifie qu’il fallait être sensibilisé au traitement éthique de la faune et de la flore au niveau de la recherche, de l’éducation et/ou de la gestion. En outre, on encourage les étudiants à s’engager non seulement dans un apprentissage ‘fondé sur des situations’, mais également à se lancer dans l’apprentissage ‘par médiation’, qui associe aptitudes académiques et apprentissage en contexte. Pour faciliter ces résultats, on organise un débat en ligne chaque année. Le coordinateur choisit le sujet et fait la proposition. Par exemple en 2007, le sujet était ‘Permettre aux chasseurs agréés et formés de chasser des animaux introduits sur des terres publiques est une stratégie de gestion de la faune et de la flore qu’il faudrait encourager’. Les étudiants choisissent le camp qu’ils veulent, élisent un chef d’équipe, font des recherches sur le sujet et trouvent des exemples appropriés; puis tiennent le débat (qui est animé par le coordinateur). Les feedbacks des étudiants permettent de savoir que le débat présente les avantages suivants: l’interactivité et la participation individuelle améliorent considérablement l’apprentissage et la capacité à comprendre les autres sujets ayant trait à l’objet du débat. Elles contribuent à leur éventail de capacités, condition nécessaire à leur réussite aux examens. La participation des étudiants au débat fait l’objet d’une évaluation formelle, à hauteur de 25% de la note u totale d’une matière. Ce papier présente en détail le processus de l’organisation, de l’animation et de l’évaluation du débat et examine les avantages de l’activité sur le plan éducatif.

Mots clés: Renforcement ce capacités, norme éthique, gestion de zones rurales, gestion de la faune et de la flore, débat en ligne, interactivité.
Online interactivity

Interactivity can be defined as ‘the manner in which the learner dialogues with himself/herself, with materials, or people during learning’s mental activity’ (Baker-Albaugh 1993, 36). Much of the literature focuses on online interactivity between student and materials (generally computers) and there is also a large literature on self-assessment. The focus here is on student-student (and to a lesser extent teacher-learner) interactivity at a distance, using computer-mediated communication.

It has always been difficult for distance education students to interact with one another (Davie, 1988) and the social side of DE is still being neglected, putting those students at a disadvantage (Muirhead, 2000). Milheim (1996) has reviewed the literature on interactivity within a computer-based education strategy and concludes that it is the most important element in instructional design. It increases the students’ interest, improves cognitive processes; and it develops group learning skills (Baker-Albaugh, 1993). More precisely, the benefits include a better understanding of different perspectives; an ability to compare progress (and mistakes) with others and with set standards; opportunities for reflection; and a deeper engagement with the topic through interaction with other learners and teachers (Petre et al., 1998). One of the key advantages is that the student no longer feels alone, but is part of a community of students that also has problems and fears (Bates, 1986). Audio-conferences and residential schools also do this, but are not always options, particularly for those students based interstate or overseas.

One of the ways that interactivity can be improved for DE students is through online learning, particularly via Web conferencing. The benefits are claimed for many disciplines, including science (see Gilmer [1999] for an example of teaching biochemistry via the Web). The educational advantages and costs through online learning have been reviewed by Laurillard (1993); McArthur and Lewis (McArthur and Lewis, 1998); Harlamert (1998); Hughes and Hewson (1998); Petre et al., (1998); Stratford (1998); Muirhead (2000); Sims (2003) and, in respect of professionals, Maor and Vole (2007) studies include the promotion of autonomous learning and life-long learning skills; encouragement of active, constructivist learning; improvement in communication and information technology skills; a reduction in feelings of isolation; and an improvement in motivation and academic performance.

Many of these are similar to the benefits of interactivity itself and it is important to understand that it is the educational processes (e.g. the type of interactivity) that provide the benefit, not the tools themselves (Baker-Albaugh, 1993); (McArthur and Lewis, 1997). Successful online strategies require students to be comfortable with technology (Bates, 1986); be prepared to take more responsibility for discovery; and be highly motivated (Harlamert, 1998).

The arguments about improved learning outcomes through online teaching strategies have not always been validated. Many of the trials using new technologies have not used appropriate evaluation tools and there has been some confusion between student reactions and student learning (Alexander, 1999). Furthermore, many of studies have contrasted face to face with online learning (Hewson and Hughes, 1999; Petre et al., 1998) and these are unfair comparisons as DE students receive little or no face to face teaching. Actual results from research into the learning benefits of online interactivity are somewhat scarce (Sims, 2003). Distance educators want to provide a stimulating, dynamic, interactive learning experience, but are not certain whether the online experience can provide that. Although early results are generally positive both in respect of the quantity and quality of responses to interactive fora (Muirhead, 2000).

Description of programme

Capability Programme

This programme was initiated a decade ago with the aim of producing graduates that were capable in three main areas: scholarship, global citizenship and lifelong learning. This required students to extend themselves considerably beyond their formal studies, and even beyond the widely applied...
graduate attributes’. However the programme also required teachers to facilitate students achievement of some of its requirements through the subjects taught. One of the capabilities was in the area of ‘ethical, social and professional understandings’ which asked the students to understand ethical principles and propositions. Considered that a useful learning strategy for this could be through an interactive debate, using animal ethics in wildlife management as a debate topic.

In addition to facilitating the students achieving one of their capability goals, there was a desire to improve their mode of engagement from one of ‘situated learning’ (where the learning takes place in the context of a known situation) to that of ‘mediated learning’ (where students go one step further than this and use academic learning to enable them to reflect on an idea in order for them to ‘change the way they experience the world’ [Laurillard, 1993]). In fact, the ideal is for students to use both these strategies (Figure 1), so they can apply knowledge in context, but also see the wider picture that is to move from the particular to the general (Laurillard, 1993). Concomitantly, this could equate to the ‘extended abstract’, the highest step in the Structure of the Observed Learning Outcomes (SOLO) learning taxonomy (Biggs, 1999), which was seen as going hand in hand with the capability programme objectives.

The subject: Wildlife Management

The subject is a third-year, senior subject with considerable flexibility built-in as it requires students to complete a learning contract. There are usually 10-20 mature-aged students enrolled, all by DE. Most of these are already in the workforce in an area related to land management or farming, which often includes some aspect of wildlife management. Furthermore, the Bachelor of Land Management assessment approach is through individual projects set in the context of the students’ work or home, so most students are already familiar with the concept of ‘situated learning’.
Figure 1 Learning strategies and pathways: previous and current

Sources: Adapted from Laurillard (1993); Morgan & Kinross (2002)
The subject is broken into three modules: the ecology of species, populations and communities; an introduction to wildlife research techniques; and wildlife management approaches and planning (Figure 2). There is a prerequisite subject relating primarily to ecological theory and application. There is usually an optional one-day workshop that covers the statistics component of the research model, although this was not held in 2007. Students are required to achieve learning outcomes from each module, but can, within limits, provide their own assessment weightings for each. They also need to provide evidence they can meet the overall subject’s capabilities, one of which is an understanding of the ethics involved in wildlife management and research, as described above.

![Figure 2 The links between wildlife ecology, research, management and animal ethics](image)

The process

At the beginning of semester, the students receive a package of materials, which provides all their course materials as well as information in respect of the online forums in which they may choose to participate. Participation is voluntary, but almost all students elect this option unless they have problems with Internet access due to their location in remote areas. The actual process of running the debate is provided in Table 1.

The topics selected by students have to be relevant to the proposition, which is changed each time the subject is offered, and approved by the moderator to ensure no overlap. Propositions were deliberately controversial and generally related to the exploitation of wildlife such as duck-hunting, kangaroo harvesting etc. The proposition in 2007 was: ‘Allowing licensed and trained hunters to shoot introduced animals on public lands is a wildlife management strategy to be encouraged’. This was a highly contentious topic as recreational hunting prior to 2007 in New South Wales had been on private lands only.
### Table 1  Steps involved in holding an online forum debate

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
<th>Responsibility</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Selection of debate proposition</td>
<td>Moderator</td>
<td>Provided in DE course materials</td>
</tr>
<tr>
<td>2</td>
<td>Choosing of sides: positive or negative</td>
<td>Students</td>
<td>First come, first served (moderator sorts problems)</td>
</tr>
<tr>
<td>3</td>
<td>Selection of relevant research topic</td>
<td>Individual students</td>
<td>Approval by moderator needed</td>
</tr>
<tr>
<td>4</td>
<td>Research of topic</td>
<td>Individual students</td>
<td>Two-three weeks allowed</td>
</tr>
<tr>
<td>5</td>
<td>Posting of results of research</td>
<td>Individual students</td>
<td>References need to be provided</td>
</tr>
<tr>
<td>6</td>
<td>Feedback to students</td>
<td>Moderator</td>
<td>May be assessable (students elect weighting 0-25%)</td>
</tr>
<tr>
<td>7</td>
<td>Election of team leader</td>
<td>Students or moderator</td>
<td>Can be done earlier; team leaders earn extra points</td>
</tr>
<tr>
<td>8</td>
<td>Creation of private forums for each team</td>
<td>Moderator</td>
<td>Can be ‘closed’ to all eyes apart from moderator</td>
</tr>
<tr>
<td>9</td>
<td>Preparation of debate positions</td>
<td>Student teams</td>
<td>Two-three weeks allowed</td>
</tr>
<tr>
<td>10</td>
<td>Posting of position statement</td>
<td>Team leaders</td>
<td>Must be on time!</td>
</tr>
<tr>
<td>11</td>
<td>Preparation of response statements</td>
<td>Student teams</td>
<td>One-two weeks usually enough</td>
</tr>
<tr>
<td>12</td>
<td>Posting of response statements</td>
<td>Team leaders</td>
<td>Must be on time!</td>
</tr>
<tr>
<td>13</td>
<td>Feedback to teams</td>
<td>Moderator</td>
<td>Can be done throughout debate; students also contribute</td>
</tr>
<tr>
<td>14</td>
<td>Assessment</td>
<td>Moderator</td>
<td>Peer review has not been very successful</td>
</tr>
<tr>
<td>15</td>
<td>Posting of opinions and feedback</td>
<td>Individual students</td>
<td>Students air their own opinions and evaluate the debate process</td>
</tr>
</tbody>
</table>

As the subject coordinator and sole teacher, I was the moderator of the forum. As students now have considerable exposure to online fora prior to undertaking this subject, they do not usually require a lengthy introduction to the computer medium (such as the five stages of competence described by Salmon [2000a]), although when the debate was initiated, some ‘ice-breaking’ activities were included and students are always encouraged to introduce themselves online as students often move through the course at different speeds (or come from different courses) so they may never have ‘met’ before, online or otherwise. The debate has been held four times: three times (2001, 2002, 2003) in conjunction with another subject Applied Ecology as a peer mentoring scheme, and once on its own (2007) in Wildlife Management after subject coordination of Applied Ecology was changed and the debate dropped in that subject. The process in Table 1 shows the 2007 process without the peer mentoring approach, which was considered beyond the scope of this paper.
Assessment of Forum Participation

The main justification for assessing participation given by Boud et al. (1999) is that academic effort should be recognised and rewarded. This is particularly important for busy DE students who need to be given a very good reason to participate (Salmon 2000b). Based on feedback from a different subject’s Web forum evaluated in 2001 it was clear that higher participation in the forum would have eventuated if at least some credit (15%) had been provided (Kinross and Morgan 2001). Boud et al. (1999) suggest that a credit of 20% may not be taken seriously, but state, on the other hand, that assessment should not be used as a compliance device. As this appears to be something of a contradiction, it seemed sensible to allow students to elect whether their participation in the online activities was graded or not, but to insist that all forum inputs needed to be at a satisfactory level.

The assessment was based on participation: quality and quantity. It was anticipated that criteria loosely based on SOLO principles would assist the move from situated to mediated learning. It included the professionalism of their approach (timeliness, attitude, participation level); depth of research into selected topics; ability to analyse wildlife management options; and evidence of understanding of the issues, particularly animal ethics. The team leader was eligible for an additional 10 points. The actual weighting was decided by the students in their learning contract (up to 25% for each student; up to 35% for each team leader).

Student evaluation

The numbers of formal student evaluation respondents each year’s cohort have been too small to warrant quantitative evaluation. However, feedback at the end of each debate has been generally positive and provided input into the process of improving the subject course materials each year. In 2007 students were asked to provide qualitative feedback on the debate process, and from these comments some themes have emerged.

1. The most important aspect was the ‘eye-opening’ effect, i.e. seeing the other team’s point of view; and appreciating other people’s values. Example of this was: ‘My opinions on this are still not any clearer on this topic than before, if anything even more undecided, but at least my knowledge of the arguments and against is more informed than before’. Another example was a comment from a student who researched hunters’ views on a different website and said ‘I was impressed by how many of these guys are really genuinely concerned about native wildlife and very keen to have their side of the story heard by a ‘greenie’ as they quickly assumed me to be!’

2. A second theme was the ‘intellectual exercise’ being forced to defend one’s team’s position even when disagreeing with it. An example in this case was: ‘I found it a useful format for exploring different views and an intellectual exercise to defend these’.

3. The third theme was that of the actual learning through the stimulation of the research and the debate itself. Feedback included the opportunity to participate in this debate provided a new learning (and debating) experience. ‘Big thanks to all who contributed to this process of knowledge enhancement’.

4. And what did they actually learn? Learning themes included a new awareness of the difference between technical and value judgements in wildlife management; a better appreciation of animal ethics through the use of humane feral animal control techniques for example; the benefits of a multiple-strand approach to controlling pest animals; and the need to assess each situation, as well as the consequences of different options, before making a wildlife management decision. An example of the latter was: ‘The debate has enabled me to recognise that all management strategies are something of a ‘footprint’ and that there are both costs and benefits, some of which may not be fully recognised for years or decades’.

These comments indicate that the debate has had the following outcomes: it has not only enhanced students’ learning of the topic of wildlife management, but, at least in some cases, improved their understanding of animal ethics; and their ability to see the wider picture
has probably aided a small shift towards mediated learning and independent thinking by getting them to apply knowledge to an unfamiliar situation (Ramsden 1992). The feedback related mainly to the debate process as this was what was requested but did not specify that students provide their views on ethical attitudes before and after the debate nor did it ask to comment on the learning process. But at the very least it has caused students to stop and question the validity of a proposed wildlife management strategy, which should make them become better land managers.

Evaluation of current online teaching strategies

The online programme in Wildlife Management meets the criteria of typical Web discussion systems as listed by Stratfold (1998), although some are better than others i.e:

- they are of interest to a specific group of learners (yes)
- they permit frequent visits (yes)
- access is restricted to students and tutor/moderator, plus the online technical assistant (yes)
- discussions are focussed on a particular topic (yes)
- tutors are used for more formal participation (yes)
- there is reference to other material (yes, although students are expected to be reasonably self-directed in this respect)
- there is a mechanism for guiding students through e.g. discussions are closed and new ones activated (yes, although getting students through time can be tricky)
- messages can be reviewed (yes)
- there is extended interaction and collaboration with other people (yes).

Discussion and recommendations for improvement

Subject design and learning tools

More diverse activities could be planned; however, most students have said that researching the wildlife topic and conducting the debate have included a diversity of activities which required considerable time and effort. A focus on more problem-solving case-study could be attempted as an alternative activity, especially if using real life simulations (Oliver, Omari, and Stoney, 1999) and could further help students move from situated to mediated learning. This activity should be considered now that the culture of online learning is more widespread.

Other ways of extending the value of the debate as a learning activity like the following could be considered: we could encourage students to express a viewpoint about the issues explored in the public media; and we could include a portfolio of student achievement as part of overall student engagement in the subject or course; and encourage students to demonstrate how their participation in the debate supported their global capability development.

In terms of further improving the use of the online technologies within the subject, students could have more input into the design, making the forum more student-centred (Boorsook and Higginbotham-Wheat, 1991). They could set some of the marking criteria, although some would have to be non-negotiable to ensure they are congruent with the essential learning outcomes (Morgan and Kinross, 2002). Past attempts at asking students to contribute to the setting of marking criteria have met with some resistance and very time-consuming, but are still worth consideration if students were given more guidance and support.

It has been suggested that the use of threaded comments increases the cognitive load and therefore reduces learning and that one tool that could be played to overcome this is that of a ‘shoutboard’ (Albon et al 2006). This feature has scrolling columns with headings, making it much easier to post comments. I can see that this feature could be very useful to the debate process, in particular at the time when the teams are providing input into the team’s position statements and responses.
An additional tool is that of chat rooms. In fact, this has already been tried, but it was not very successful as it proved too difficult to have all students online at the same time, a problem also observed by others (Zariski and Styles, 2000). It therefore appears, therefore, that the asynchronous forum still appears to be the most suitable tool for class interaction.

Assessment strategies

At the beginning of this online forum debate program, it was very difficult to be objective in the assessment process, as it seemed so important to reward effort in tackling a new learning tool. However, as students became more familiar with the technology and as Web conference inputs are there for all to see, it became easier to evaluate the effort made, level of understanding attained and improvement achieved by each participant.

One way in which assessment could be more in line with constructivism and capability-building is to use self and peer assessment. Self assessment, informed opinion from peers’ is recommended by Boud et al., (1999) to develop autonomous learning skills. Summative peer and self assessment have been tried in this and other subjects, but were not entirely satisfactory as the most conscientious students under-rated themselves and over-rated their peers, so there was an equity issue. However, formative self assessment has been used by the author in a different subject as a means of reflective thinking and, whilst wholeheartedly supported by students, appeared to be a useful learning tool as it forced students to reflect on how their work could be improved prior to submission, and could be considered for this subject.

Moderation and feedback

Students clearly appreciated feedback throughout the research and debate process. Learners need structure and support and it is the moderator’s role to provide these in order for students to engage satisfactorily in this type of activity (Maor and Volet, 2007). More feedback could also provide students with a better idea of their progress through each milestone (Farrell, 2001). In fact the more feedback the learner receives – both synchronously from interactive self-test mechanisms and chat sessions and asynchronously from teacher email, forums, and from other students in group work – the more comfortable and confident the participant is to move forward in their learning program (Poynter, 2004). This needs to be balanced by the needs of the teacher, however, who does not have unlimited time at his or her disposal.

Evaluation

In order to evaluate the effectiveness of online interactivity, more theoretically based research is needed, and more specifically, studies that examine the educational value of computer mediated interactivity and other forms of social learning activities (Maor and Volet, 2007). Certainly, in this case, to evaluate whether the students have moved from situated to mediated learning, formal evaluation would be required. If the teaching strategy is to change to facilitate this and to improve quality of teaching and learning in other ways, then incorporation of evaluation of these changes to teaching strategy is critical (Mileham, 1996). Some ways in which this could be implemented include:

- Investigation of the correlation between the overall results in the subject and the level of participation in the debate (but this does not allow for those students who are high achievers notwithstanding teaching strategies)
- Implementation of before-and-after questionnaires to gauge whether the level of learning has been enhanced or altered
- Monitoring of the level of participation (including those who ‘lurk’ without posting) using tracking tools (these are currently under development with CSU’s new Interact (Sakai) online learning environment). Other analytical tools as described by Davie (1988) Muirhead (2000) and (Salmon 2000b) should also be investigated
- Submitting the programme to peer review by colleagues
- Allowing sufficient time at the end of the debate to provide a forum whereby the process itself can be critically reviewed by the students.
Conclusion

One of my teaching objectives in this subject was to encourage students to move to mediated learning without losing their ability to achieve situational learning. In this respect, student participation in an online forum has proved to be a useful tool. In addition, the debate has aided most students to progress in their studies which culminates in successful graduation.

When this programme started, not all students had internet access. Over the years, it has become more and more the ‘norm’ and now at Charles Sturt University, it is a requirement. For this reason, I remain optimistic and anticipate that Stratford (1998) suggests, students will use this technology when they perceive the benefits: improved learning, flexibility, contact with peers and tutors, and access to the Web resources. Now that institution-wide acceptance, there is also a stronger likelihood of stimulating dialogue and this may lead to an increase in student numbers, which will further enhance interactivity (Daniel, 1997). If adequate planning is undertaken at the design stage and sufficient attention is given to improving students learning and interaction, I am confident that the use of the internet forum to present research findings and conduct debates can bring benefits to both the institution and its teachers and students.

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PERSONNEL MANAGEMENT IN OPEN AND DISTANCE LEARNING: 
A CASE STUDY OF THE NATIONAL OPEN UNIVERSITY OF NIGERIA

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Introduction

Open and Distance Learning is fast becoming an acceptable and indispensable part of the mainstream of the educational system in both developed and developing countries. Since the past 20 years, it has become a force contributing to educational and economic development (Commonwealth of Learning (COL) and Asian Development Bank (ADB) 1999).

Open learning means that learners are given the opportunity to study and reach their educational destination no matter their credentials. While learning at a distance means that you do not necessarily have to be at a designated place and specific time to learn, as is generally the case in a conventional learning setting. In a conventional learning setting, the students are in a face to face learning situation with the lecturers while in a distance education setting, the learners do a large portion of their learning away from the institution and the tutors. In other words, they are virtually removed from the university and their tutors in time and location and have to study on their own.

It is now obvious that distance learning appeals to people who want to work and learn at the same time and so in developed nations of the world distance learning is in fashion.

In National Open University of Nigeria, a young ODL institution established only five years ago, there is a more encompassing approach to distance learning. This includes personal contacts and a combination of resources such as:

(i) Course materials in print format,
(ii) Course materials in CD-ROMS,
(iii) Audio and Video Cassettes,
(iv) Computer conferencing facilities,
(v) Networking opportunities amongst learners,
(vi) Online course materials,
(vii) Instructions through the Television
(viii) Instructions through the Radio broadcasts
(ix) Regular feedback through Tutor-Marked Assignments
(x) Periodic face to face contact sessions during tutorials.

Therefore, at NOUN, distance education is offered with so much flexibility and without compromising the quality of education and training. It also gives the learner a chance to study at the university level without giving up their jobs, pleasures, families or any other commitments.

The Management of Open and Distance Learning Programmes

The Management of Open and distance learning poses a lot more challenges than the management of a conventional system in a face to face setting due to the following:

- It is aimed at providing education that is relevant to the period, locality and also of high quality; while in the face to face system, the same curriculum followed years ago is still being followed in the present not considering its environment or locality.
- The programmes are often open, in the sense that learners can go through the Access (Foundation) courses to make-up for deficiencies that could deter them from pursuing
higher education, unlike the closed system run in conventional face to face institutions.

- They deliver their courses using mixed technologies and media, while the conventional face to face institutions depend mainly on lecture notes.
- They frequently require collaboration with other programmes and agencies to provide learning materials, course development and delivery personnel and facilities; while the face to face institutions are contented with books recommended by lecturers for students to read in addition to their lecture notes.
- They must remain flexible and innovative at all times for learners can learn in any place and at any time convenient for them; while the face to face system simply follows the conventional one way of delivering lectures to students at lecture halls.
- National Open University of Nigeria uses the minimum academic standard approved by NUC same as for all universities and in fact goes beyond this minimum of the conventional universities due to its philosophy.

Personnel Management

- The personnel requirement to implement an Open Distance Learning programme depends on the organisational model that has been chosen. Basically there are three organisational models for institutions that offer distance education. Whichever model adopted will depend on the Organisation’s mission, resources and services provided.
- In the National Open University of Nigeria (NOUN) the model adopted is the single mode. This means that the institution is founded for the purpose of offering open and distance education, just like it is done in the Open University of U.K. (UKOU), Indira Gandhi National Open University (IGNOU), and University Terbuka, Sukhothai Thamma Thirat Open University (STOU).
- ODL thrives on economy of scale. This means the good balance between staff and student population spreads the overhead and reduces overall cost of delivery.
- The number of courses offered by the university at a particular time usually determines the size of the academic staff.
- This also determines the information and communication technologies to be deployed in the delivery of instruction. Therefore, the student ratio is extremely cost effective.

Academic services staff

Various categories of personnel are involved in the provision of academic services in an open and distance learning institution like NOUN these are:-

(I) Study Centre Managers- Managers in an ODL programme are the first contact a learner or the public experiences.
- They provide management support and leadership for day to day administration of the Study Centre and Liaison Office. They maintain regular Liaison with the Headquarters through the Director of Learner Support Services and other partners of the university.
- Each Study Centre is headed by the Study Centre Manager. Often than not, he/she is a seasoned Professor in his/her discipline or an individual who had risen to an administrative position which qualifies him/her to head a tertiary Institution/ or head of a government Ministry e.g Former Commissioner or permanent secretary. Others could be former Pro-rectors of Colleges of Education or former Rectors of Polytechnics.
- The Centre Managers monitor the distribution of instructional materials to distance learners and instructional facilitators and turn around time of Tutor-Marked Assignments.
- They also liaise with course developers, examiners, assessors and advisory peer groups within the locality of the Study Centres.
The Managers co-ordinate the use, by distance learners and members of the local community, of the multimedia information and communications technology available at the study centre.

In NOUN, the Liaison Manager apart from providing management support and leadership for the day to day administration of the Liaison Office which is based in Abuja, also has the responsibility of maintaining regular liaison between the headquarters and the Federal Ministry of Education and foreign partners of NOUN, non Governmental Organisations (NGOs), National Universities Commission, other Federal Government Organisations, other Open Universities in the world and also the Presidency. The Liaison Manager is responsible for marketing the University to the general public.

(II) Academic Staff:- These can be described as subject specialists and can be grouped under two headings. These two groups of academic staff are the types you will normally not meet by those names in a conventional university. They are described as Programme leaders and Course Coordinators. They are located at the headquarters of NOUN in Lagos as full time Academic Staff. They are responsible for the planning, development and delivery of all the courses being offered at the university. They are required to provide programme and leadership in their special areas of studies.

All academic staff are also expected to undertake research activities and participate in university / professional and community service. These groups of staff are responsible to the Deans of their respective schools.

(III) Instructional and Tutorial Facilitators:- These categories of staff are part-time academic staff. The nomenclature used in NOUN for these are usually not found in the conventional university system.

The main function of the instructional and tutorial facilitators is in the conduct of regular tutorial meetings and the facilitation of instruction at the various study centres. They assist with professional workshops, course development and design. They are responsible for tutor marked assignments (TMA) and also invigilate examinations.

(IV) Learner Support Services:- The Learner Support Services is not well known or used at all in conventional universities. In ODL especially in the National Open University of Nigeria, Learner Support focuses on meeting the needs of all learners. These needs could be as diverse as the student body itself. Learner support services play a supportive role and provide supportive people.

Student Counsellors They serve as intermediary between the learner and the institution.

- The student counsellors are specialists in tutoring and counselling.
- They provide regular counselling services to learners at a distance with respect to the various aspects of their studies. This includes enrolment, choice of programmes and courses, when and how to study and seek for special academic guidance.
- They also provide an early warning signal for prompt remedial action. Therefore, Learner Support Staff spend quality time with learners and thus help learners to re-discover themselves.

(V) The Call Centre:- Staff of the Visitors Information and Call Centre (VICC) operate as Confidential Secretaries, Receptionists must have computer knowledge.

- They must be sociable and accommodating to success in the centre.
The VICC is a centralised office of the National Open University of Nigeria (NOUN) where students and the general public can phone in and seek information on any issues of interest to the caller. The centre can respond to letters, faxes, e-mails and written correspondences. It is the first point of contact between the public and the university. The VICC is a phenomenon that is unknown to the conventional university system. This feature characterises only an open university due to the OPENNESS with which it conducts its academic activities and provides information relating to these activities. In an open university, some peculiarities of students' profile exist which is foreign to conventional university systems in terms of age and socio-economic factors, the nature of the students and public. This students profile ensures that students' needs are not just varied but are multidimensional whilst being specific to the particular student set up to tackle these needs.

Specifically, the main function of the VICC is to provide information or advice on issues such as:

(i) Orientation
(ii) Registration
(iii) Matriculation
(iv) Admission requirements
(v) Choice of academic programmes
(vi) Choice of remittance courses
(vii) Collection of study materials
(viii) Study fees, examination queries
(ix) Identity of fellow students in peer group formation and all such matters that are peculiar to students.

In summary the categories of personnel involved in the provision of academic services in an ODL system like NOUN include:-

- Study Centre / Liaison Managers
- Academic staff
  i. Programme leaders
  ii. Course coordinators
- Instructional and Tutorial Facilitators
- Learner Support Services
  i. Student Counsellors
- Visitors Information and Call Centre (VICC)

Knowledge management technologists

These are experts in the electronic and computer-mediated learning environment at NOUN.

- This group of Technologists is responsible for computing, multimedia learning materials development, website development and maintenance, networking and programming activities of Open and Distance teaching and learning.
- The electronic library of the open and distance programmes is also the responsibility of this group.
- Finally the management of the National Technology Infrastructural framework falls under the schedule of the Knowledge Management Technologist.

Course material production staff

These are a whole range of staff needed for a major feature within a sub-system of the National Open University of Nigeria which is completely unknown in the conventional university system.
· They produce comprehensive, well developed course materials and resources which make up necessary component in all distance learning systems. These materials stimulate self-learning and influence the quality of the system as a whole.
· The development and production of learning materials is often considered as a subsystem in distance learning organisations.
· Therefore, in the National Open University of Nigeria this unit has been developed based on the best practices and tailored to national needs, the unit comprises a group of specialists who work together to run the different delivery channels of university programmes. These are:-

- Course Writers
- Programme Leaders
- Course Coordinators
- Typesetters
- Editors
- Printers
- Instructional Designers
- E-learning / Multi-media Specialists
- Web masters (Computer Programmers)
- Content developers

(i) Course Writers:- Course Materials are developed from the schools by the academic staff who are Programme Leaders and Course Coordinators.

(a) Programme Leaders:- Are an equivalent of Associate Professors in a conventional university. The same qualifications, experience and academic scholarly publications are also expected of them as of their contemporaries in the conventional universities.
· Full professors are also programme leaders who are expected to coordinate a group of Programme Leaders.
· External Specialists are invited to write courses in their special fields.
· Course developers are academic and content experts who face to face conventional universities. These are trained to write courses for the open system. They usually perform these tasks with a trained team of experts ranging from academics, to instructional designers, multimedia specialists and copy editors to produce materials that meet instructional objectives.
· Sometimes the Open Learning sources are used when the university adapts courses from other open universities.

(b) Course Co-ordinators- These are equivalent of Assistant Lecturers, Lecturer II and Lecturer I in the conventional university.
· They coordinate courses to be taught and ensure that course materials are up to the required standards rather than do direct teaching like in the conventional university.
· To do this, they must have relevant qualifications, experience and characteristics of the lecture’s in conventional universities.

(ii) Typesetters- These are a group of staff whose main duty is to transform the manuscripts/textual matters prepared by Academic Course writers by typesetting the scripts and using the computer to process the materials.

(iii) Editor:- In the National Open University of Nigeria, there are two kinds of Editors:
· The first kind are the Course Editors. They can also be called Content Editors. They could be academic staff who are Course Co-ordinators or Programme Leaders or Subject Specialists who are members of staff of the university. It is their responsibility to respond to queries raised by Copy Editors in the Directorate of Instructional Development (DIRD).
The second kind are the Copy Editors in the Course Material Development Unit (CMDU) and Printing and Publishing Unit (PPU) of the DIRD. They edit materials for language and house style of NOUN. They raise queries on Course Materials to schools which must be responded to before materials can be published.

The DOCUTECH sub-unit handles all the in-house printing of Course Materials.

(v) The E-learning Unit:- At NOUN e-learning unit is responsible for all non-print delivery formats. Here, the following categories of staff are found,

- Content / web master
- Content developer
- Audio Visual Specialist
- Photographers
- Graphic Designers – are responsible for the creative and detailed design of study materials booklets, pamphlets.
- Video Cameramen – capture all the image and activities with a Video Camera.
- Broadcasting Technicians:- are staff who are skilled in keeping the Radio and Television equipment used for listening and viewing of academic programmes in good condition at all times.

(vi) Instructional Designers:- These are highly experienced multimedia/instructional design professionals who provide media support.

- They are experts who devise and execute designs that relate to the specific knowledge to be imparted.
- They script, edit and commission non print delivery format.
- They are in the Directorate of Instructional Resources Development of the National Open University of Nigeria.

(i) They design audio and video instructional components of course materials to complement other formats.

(ii) They edit all recorded audio and video programmes to assure quality production.

(iii) They engage in educational broadcasting.

(iv) They train budding designers.

(v) They conduct research on learners’ needs in consultation with the schools, study centres, students, media experts and other stakeholders in instructional resources development.

Administrative staff

In the National Open University of Nigeria, the administrative staff are charged with the responsibility of providing administrative support services for the academic function of the University. The Director of Administration and General Services is headed by the Registrar. In an ODL institution most nomenclature used are different from that used in a conventional face-to-face institutions.

Administrative staff in an Open and Distance Learning Programme are categorised as follows:-

- Administrators
- Personnel Staff
- Financial Staff
- Record Clerks
- Secretaries
- Warehousing / Store Officers
- Transport Staff (Drivers)
(i) Administrators: Administrators are needed in an ODL Programme to convert a variety of resources, such as manpower, fund, facilities and plans into effective enterprises capable of achieving the systems’ mission.

(ii) Personnel Staff: These are the people responsible for the implementation of the plans developed by the ODL institutions. At NOUN, the Director of Administrative services is supported by a crop of administrative officers of different cadres and status in two different units of the department; the Academic Registry and Human Resources Unit.

(a) The Academic Registry deals with all administrative matters relating the academics of the University. At NOUN, the academic Registry provides the following types of administrative support services to student at different stages in their study:
- Sending out and responding to routine information.
- Processing admissions and registering students
- Keeping students records
- Initiating delivery of course materials
- Monitoring administrative support services at the Study Centres
- Issuing diplomas, certificates, student academic transcripts.

(b) The Director of Administration and General Services Office looks at the administration of all other staff of the university.

(iii) Financial Staff:- This category of staff looks after the administration of finances and accounting.
- The Finance and Accounts is the custodian of all funds relating to NOUN; it receives and disburses all funds as appropriate.
- It encourages judicious management of funds, hence advice are given appropriately in NOUN. This Department is headed by the Director of Finance and Accounts but in a conventional University would be called a Bursar.
- He holds and manages the properties and investments of the university, advises the university on its financial policies.
- He is responsible for the preparation of the annual budget while keeping a constant watch on the cash and expenditure of the University.

(iii) Record Clerks:- These are members of staff whose job it is to keep a written account of all that has happened at the Department in Files / Folders, which are kept so that these can be looked at and used.
(iv) Secretaries:- Officials of the University who deal with writing letters, keeping records and making arrangements for the departments they serve, they also type out letters and manuscript on computers.

(v) Warehousing Staff / Store Officer- the warehousing staff are members of staff whose responsibility is to keep the warehouse records of materials deposited and distributed to all Study Centres. These are usually at the NOUN Headquarters, and the Regional Centres while stores are located at all the Study Centres in the country. These are headed by a Store Officer who is based at the Headquarters while other store keepers take care of the store at the Study Centres.

(vi) Transport Staff (Drivers):- are responsible to see that all officers get to their primary assignment as well as the study materials get to the learners at the thirty-four (34) NOUN Study Centres in the country.

(E) Staff development

Staff development is extremely important in Personnel Management of an Open and Distance Learning Institution. This is because of the peculiarities of the system and the fact that the ODL requires skills which are unknown to the conventional face to face system of education.

- In the National Open University of Nigeria, where the ODL system is in practice, staff development is a continuous exercise.
- Its methodologies and processes are very different from those of conventional education institutions?
- In conventional system, schools, colleges and universities can recruit teachers who have already been trained in standard classroom techniques. All the other support staff can be recruited already trained.
- This means that you may need to train the staff you recruit rather than rely on finding experienced personnel.
- The National Open University on a continuous basis trains groups of staff to be trained. NOUN spends a lot of resources training its staff especially in this situation where staff are recruited from the conventional system, private enterprises and government establishments. These categories of staff have come into the ODL with various mind-sets, prejudices and ideas.
- These would need to be purged of their old conventional idea and fresh idea of the Open and Distance Learning implanted into the members of staff freshly employed, other older staff also sent to brush – up their knowledge in their special area of employment.
- The technologists in NOUN are always on this kind of training to upgrade their knowledge as technology improves or changes.
- Staff training / development in NOUN, cuts across.
- Round tables and conferences for Senior Management are organized to expose them to the methods and styles of distance education.
- Academic staff are sent to be trained as well as non-academic, and even the support staff. These are done in various ways, within and outside the country:-
  - On the job
  - Through short courses organised at NOUN
  - By sending learners on full-time or part time courses within the country. For example, several Senior Administrators were sent in batches to National Institute for Educational Planning and Administration (NIEPA) in Ondo, Nigeria to be retrained.
  - By enrolling staff in an appropriate course or workshops taught at a distance, for example, NOUN had sent different groups of staff to;
    (i) University of South Africa (UNISA);
    (ii) Open University UK (OU-UK)
    (iii) Indira Gandhi National Open University (IGNOU)
    (iv) Open University of Hong Kong
The staffing distribution found in NOUN is very typical of an ODL system, despite the fact that it is a very young institution and has not grown to its full capacity yet. The peculiarities of the ODL System shapes the nature of the categories of staff in the University. The total staff strength at the Headquarters stands at Nine Hundred and Fifty One (951), amongst this figures there is a small cohort of full - time / part time academic staff of 152 or 17% of the total, a large number of academic staff 482 about 50% of the total, and a large number of support staff 317 making 33% of the total (Fig.1).

This situation is completely different in a conventional university where the number of academic staff would be larger than the number of non-academic and very, very, little of support staff.

See the diagramme for illustration

Support Staff 33% | Academic Staff 17% | Other non academic (50%)

Support staff

The Support Staff at the National Open University of Nigeria, carry out a wide range of functions. This is due to the various courses, methodology and the technology used. It is quite obvious that ODL has a higher proportion of support staff than a conventional system (for example – NOUN has 30% of total staff as support staff) thereby, the selection, training and support of these staff is an important issue. A study of staff development needs at NOUN has shown that:

- Support staff generally do not need skill development in their specialist areas;
- Support staff do, however, need development in the orientation towards ODL; while
- Some technical staff need updating because of changes in their specialist areas.
- Therefore, it is important to note that for staff development to be successful, support staff needs to be open to change and learning.

Within the few years of existence, experience at the National Open University of Nigeria, has shown that the training needs of staff from conventional university background showed that support staff who were accustomed to conventional system must be retrained.
- Despite the fact that some of these members of staff from the conventional university background have been sent to workshops at different universities with ODL
background, they still find it difficult to reason the ODL way.’ So, constant retraining is necessary to unlearn the old conventional ideas for the new.

Monitoring and supporting staff at a distance

The National Open University of Nigeria has Study Centres located in Thirty-four State capitals in Nigeria out of a total of the existing thirty-six.

- It has its Headquarters in Lagos, with an ODL Planning Office in Abuja and a large campus in Kaduna.
- With this background, the university is faced with the task of monitoring and supporting its staff who are at a distance from Headquarters.
- These are the Managers, Counsellors, Facilitators, Academic and Support Staff at the centres, Course Material Producers.
- It is an understatement to say that in an Open Distance Learning programme, learners need continuing contact with the programme and support from Programme personnel, as they undertake the work through Studies.

Personnel Management of ODL at a distance, as with NOUN, needs the same kind of support and contact. This is so because they operate under the following conditions;

- They are part time and are mostly affiliated and committed to some other Institution.
- They are on short-term or annual contracts;
- They usually have no regular face to face contact with colleagues; and
- Their roles are usually ill-defined and diffused.

The concept of Effective Staff Relations (ESR), a panacea in ODL for distance staff, is employed by the Management of NOUN which has made ODL effective, easy and successful in Nigeria. This is achieved through the following;

- Clear role description through schedule of duties for staff;
- Frequent and effective two-way communication such as e-mails, telephone and even video conferencing, between the Headquarters and Study Centres, the Planning Office and sometimes between one Study Centre and another.
- A thorough induction programme on the university’s mission, vision and policy;
- Opportunities for face to face meetings;
- Monitoring and reviewing of performance on a frequent basis;
- Keeping of accurate and efficient record system;
- Opportunities to make input into decisions that affect staff work;
- The continuous updating on changes in policies and procedure, through memos and Newsletters.

Conclusion

(i) With the establishment of NOUN, it has become imperative that in order to operate successfully, open and distance learning requires more systems than the conventional education. Such systems are also integrated and necessitate additional planning and routine administration.

(ii) The establishment of open and distance learning system is capital intensive. The ODL system of NOUN makes use of a large number of part-time staff called Facilitators. These give the students learning tutorials at the various study centres and other locations.

(iii) Nonetheless, personnel needed to run an open distance education system are often very skilled, and specialised in many areas.
Finally, it is a truism that staff development is extremely important in Personnel Management of an ODL institution. So, also is monitoring and supporting of staff at a distance. Both are peculiar to the ODL system.

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Open and Distance Learning (ODL) is fast becoming an accepted and indispensable part of the mainstream of the educational system in almost all the countries of the world. This is because of the recognition of the fundamental rights of all people to learning. The globalization of ODL has provided us in the developing countries a lot of opportunities for the realization of our educational system-wide goals. The growing needs for continual skills upgrading and retraining of the labour force, especially in the areas of examination and assessment within ODL system is imperative. We are faced with new training demands and new competitive challenges for capacity building especially in the process and procedures of examination and assessment in ODL. This is because ODL needs to be integrated with other approaches to education and professional development. This paper takes a look at ODL in the context of the challenges, opportunities and/or prospects for capacity building in the area of examination and assessment. It also highlights the properties of assessment like validity, reliability, fairness and alignment; and the construction of assessment procedures with attention to quality.

Introduction

Examination and assessment are very vital in our educational system and therefore in Open and Distance Learning (ODL). These very important components of educational system require continual updating of skills, upgrading and retraining of the labour force. We should not therefore pay lip-service towards capacity building in these areas. Otherwise we may not reach the target of making quality education available for all by the year 2015 (Peraton et al., 2002). In many countries of the world, there is a national desire to raise the quality of education to meet the present demands on it, but also to change the societies are changing. Many countries have come to terms with new demands and/or goals. New goals create new demands. According to Peraton et al (2002), such new demands include Universal Basic Education; Inclusive Education; Education for Democracy; Peace and Social Cohesion; Multi-grade teaching; increased accountability for achieving learning gains. The development of learners who are self-managing and independent, skilled in critical thinking and problem solving, equipped with life-skills; the preparation of learners who are competent knowledge based economies, capable in the use of Information and Communication Technologies (ICTs) and are ready to face the challenges imposed by these new demands. The above require radical changes in the educational system. ODL has inbuilt mechanisms to face the new demands.

The society itself is expecting the components of educational system like examination and assessment and even the educational practitioners change the approaches as education itself is being reformed within the context of social changes. The changes in both roles and expectations are likely to affect the professional development and the processes and procedures of examination and assessment. These create new challenges for continuing
professional development, the need to find ways of using existing resources differently, of expanding access to learning opportunities at affordable cost, providing alternative pathways to teacher training, the use of technologies appropriate for enriching examination and assessment and the support practices, stimulating and supporting active learning and re-conceptualising the traditional organisation of examination and assessment and continuing professional development.

Attempts at reforming teaching, learning, assessment and examination in the school system have revealed that examination and assessment have usually been the most resistant features to reform (Morris et al., 2000). The introduction of formative assessment or continuous assessment in the educational system and Tutor Marked Assignments (TMAs) in the ODL system have challenged a traditional emphasis on fairness and objectivity as the main features of assessment process (Morris et al., 1999; Young, 2001 and Biggs, 1998). An examination-oriented culture is firmly embedded in our educational system (Pong and Chew, 2002; Morrison and Tony, 2002). It is also a fact that examinations have dominated the curriculum and there is likelihood that any moves to introduce progressive practices may be stifled unless there is a corresponding challenge in high-stakes examination (Cheng, 1999). It is noteworthy that the Nigerian educational system is witnessing on-going attempts to reform teaching, learning, assessment and examinations through the ‘learning to learn’ reform which contains aims of students attaining all round development and lifelong learning through ODL. It is hoped to promote what we call ‘assessment for learning’. We also hope that this will reduce excessive tests and examinations and provide information for both learners and teachers to improve learning and adjust teaching.

According to Tyack and Cuban (1995) Fullan (1999) experiences of change in the past have shown that reform is a complex and elusive endeavor; however, it has become a truism that change cannot be achieved without actively engaging the hearts and minds of the practitioners of assessment and examination. Capacity building in this area is central to the reforms. The rest of the paper looks at the challenges, prospects and skills needed to be changed in the reforms for capacity building.

Challenges of Examination and Assessment in ODL

A look at our educational system shows that there is:

a. disconnection in examination and assessment policies and practices;
b. a view of assessment that occurs at the end of the educational train instead of something that influences teaching and learning;
c. a range of bold reforms to improve teaching and learning without reforms in assessment and examination; and
d. a gap between philosophy and curriculum reform and the paradigm of assessment of learning.

These have become challenges of examination and assessment in an ODL situation. To this effect, we should begin to talk about the development of structural reforms in our assessment process in ODL. These include Basic Competency Assessment. This will include web-based resources to support learning and the pen and paper examinations.

Assessment can be regarded as a method, a way rather than a purpose. Its main function is to promote the development of ODL. The process by which assessees receive internal and external assessment and make self-assessment is a course of self-improvement and being perfect while education is being carried out. There is a wealth of data and information collected during examination and assessment serve as the factual basis for further improvement of teaching and learning.

Prospects of Examination and Assessment in ODL

Assessment and examination are the practices to provide evidence of students learning. They are integral part of the learning and teaching cycle rather than a separate stage at the end of teaching. They help to provide information for both students and teachers to improve teaching and learning.
learning. This is what we call ‘Assessment for Learning’ (AFL). In the ODL system, we advocate for a move away from the dominance of summative tests and examinations in favour of greater integration of assessment with teaching and learning. As we focus on learning, assessment and examination processes we should also focus on the products of the on-going process. To achieve this process-product focus, we should pay attention to the practices highlighted by C.D.C (2001.80-82) to be used to encourage AFL presented thus:

- the development of school assessment policies, including more diversified modes of assessment and a reduction in tests and examination;
- a focus on feedback to inform students of their strengths or weaknesses and how to address the weaknesses;
- opportunities to do assessment collaboratively with students or to allow students to carry out peer or self-assessment;
- sharing with students the goals of learning, so they can recognize the standards they are aiming at; and
- the use of assessment that probe higher-order thinking skills, creativity and understanding rather than rote memorisation of facts.

A closer look at this process-product principles on assessment shows that they are directed towards teaching and learning rather than the traditional concepts of assessment as measurement. The basis for these principles within current learning theories can be inferred from Shepard’s (2000) social-constructivist framework of assessment learning which warns that externally imposed testing for accountability discourages thoughtful AFL classroom practices. Black (2001) in his own view places formative assessment within approaches of learning which lay emphasis on constructivism, situated cognition and social discourse. This view can be contrasted with the theories of behaviourism. They indicate that behaviourist approaches are consistent with a neglect of thinking processes which are dominated by assessments composed of short de-contextualised questions, a strategy of teaching to test.

Traditionally, educational institutions have relied largely on paper and pencil tests and examinations for the assessment of students’ academic achievement. In the conventional system, teachers can use their interaction with the student to an opportunity for providing feedback to them, and to let them know about students’ strengths and weaknesses. But in the ODL situation opportunities for the interactions are limited. This implies that the traditional examination or test based assessment methods falls in ODL should be varied and should be used to provide as much feedback as possible to the learners.

Most of the ODL institutions make use of two main forms of assessment. These are:

i. Formative assessment which are used as a learning tool, and/or to give and gain feedback on learners’ ability and performance

ii. Summative assessment or end of semester examinations which can be used as an evaluation method for grading and making judgements about learners’ achievement in a course.

Based on the learning outcomes of a course, the skills and knowledge which are the focus of each course, and besides written output, learners in ODL be asked to show evidence of learning using different artifacts such as:

Audio or video recording of performances especially in the areas of science and technology and practice teaching in education;
Graphs, charts, diagrams or designs in printed or digital form;
Online data bases, course ware or presentations; and
Executable computer programmes.

The types of assignments that may be used in formative assessment in ODL include:
Portfolios: collection of learners work over a period of time. For instance, an action plan and outcomes at the various stages of implementation; a series of paintings on a number of different subjects or of different genre, followed by the learners self-reflection or self—evaluation; or a collection of readings accompanied by an annotated bibliography and a critique. Portfolios require self-managed skills and a large amount of learners’ autonomy. It can be used at the start of a semester when learners may be assigned projects or broad based activities which require some degree of release as well as implementation of a plan.

Reports, essays and journals may be done over time and may be based on specific areas of interest. The aim of this type of assessment is for the development of critical thinking and also making judgments about various plans, ideologies, movement or history or a discipline, specific collection readings. Reports can be used based on what learners have experienced or implemented in a series of experiments or practical work carried out by learners.

Case studies or scenarios are mainly for developing analytical skills based on specific areas of knowledge. Learners can be made to solve problems related to a work place situation or to develop a plan for improving living conditions of their community. It should be noted here that this process requires some amount of interpretations, identifications and articulation of problems and presentation of solutions.

Online conference discussions could be asynchronous and/or synchronous oral examinations. They involve assessment techniques as favour the learners who are skilled in presenting their thoughts and ideas through inter-personal interact. The technologies are useful for such courses that assess communicative ability, demonstration of knowledge and understanding of a topic as well as demonstration of aesthetic on-the-spot problem solving skills.

Highlights of Properties of Assessment Processes in ODL

A good assessment system should have some indicators which represent the critical elements. These indicators of quality and properties are validity, reliability, fairness, alignment, civility and credibility among others. These belong to the assessment process.

- Validity: This is the extent to which an assessment measures what is needed for a particular purpose and to which the results, as they are interpreted, are used, meaningfully and thoroughly represent the specific knowledge or skills very important that the procedures must assess knowledge or skill or learning goal or objective that they claim to measure. It is also important that the type of data produced must be useful for the intended purposes. The validity criteria for any assessment process in the ODL situation should include the following:

i. Content coverage focuses on comprehensiveness of assessment content and seeks to enquire whether the assessment content and the process are covered sufficiently in breadth and depth.

ii. Consequences focuses on the effects of assessment and seeks to enquire if the assessment is likely to produce results that will be used to improve instructional programmes or otherwise improve students learning.

iii. Content Quality focuses on the consistency with current content conceptualization. It seeks to enquire if the assessment is consistent with the best available and current conceptualization of the knowledge or skill assessed.

iv. Transfer and generalization focus on the assessments representative of a large domain. They seek to enquire if the assessment results be generalized to the broader domain of knowledge, skill or outcome which they intend to present.

v. Meaningfulness focuses on the relevance of the assessment in the minds of the learners. It seeks to enquire if the assessment items are meaningful for students.

vi. Cognitive complexity focuses on whether the level of knowledge assessed is appropriate. It seeks to enquire if the assessment tasks represent complexity level of knowledge and skill that are intended for assessment.
vii. Cost and efficiency: focuses on the practicality or feasibility of assessment. It seeks to enquire if the assessment is a reasonable burden on teachers, instructional time and finances. It also seeks to find out if the data resulting from the assessment are worth the required costs in terms of money, time and efforts.

viii. Fairness: focuses on the fairness to all members of all groups. It seeks to enquire if the assessment is biased against racial, ethnic or gender students with disabilities.

- Reliability: This is the consistency or stability of assessment results. It is a necessary condition of validity. A test where students respond quite differently one day than the next day can not produce trustworthy results.

- Fairness: ODL institutions should ensure that assessment procedures are fair to all students especially since the students come from varied circumstances and situations. Assessment procedures are not fair if they offend members of some groups, if the way they refer to some groups distracts students and lowers their scores, or if other qualities of the procedures reduce the ability of group members to answer questions correctly.

- Alignment: This refers to the coordination among elements of a system. It is critical to the effectiveness of cyclical processes. These are processes which involve identifying educational intents such as goals, aims and objectives; developing curricula, arranging instruction to help ensure that students reach the intents, assessing students and using data to inform subsequent planning. The cycle is repeated. Alignment which functions well should provide smooth, cyclical transitions from planning to instruction, to assessment, to remediation and then back to planning. Everything works together.

- Other important assessments processes required in an ODL system but are not covered in this discourse are civility, credibility and utility.

Ensuring Quality in Assessment

Everybody who participates in any way in the design or implementation of assessment system is responsible for helping to ensure that assessment and examinations are of very high quality. Quality must be a concern at every stage. It must be involved when designing assessment system; selecting or developing assessment procedures; administering the procedures; scoring, reporting and using the results. It should be noted that any assessment which is of poor quality is of limited utility. Data from such assessment do not represent students learning well enough to inform decision makers about the type of changes that are needed to help improve the educational system. Again, the time, resource and effort devoted to the planning and administration will have been poorly spent or wasted. Therefore, to ensure quality in the examination and assessment in the ODL system every one involved at every stage must not play down on the processes of assessment.

Conclusion

The terms Open Learning and Distance Education represent approaches that focus on opening access to education and training provision, freeing learners from the constraints of time and place, and offering flexible learning opportunities to individuals and groups of learners. ODL is one of the most rapidly growing fields of education. Its potential impact on all educational delivery systems has been greatly accentuated through the development of internet-based information technologies, and in particular the World Wide Web. This effect, we need training and retraining of the personnel involved in the ODL system especially in the areas of assessment and examination. This is to make sure that the processes and procedures of examination and assessment are handled by the right people for improved quality.

Many changes have taken place in the world economy, particularly with regards to the information-bearing technologies. These demand the attention of governments for education and for human resources development. The rapid development of ICTs and the move towards more knowledge intensive, interdependent and internationalized societies create new challenges and opportunities for the design and delivery of education. ODL has answers to these challenges. ICTs open up new horizons for progress and the exchange of creativity and intercultural dialogue. All
we need is to train our people on the use of the ICs in order to reform our educational examinations and assessment in ODL.

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Abstract

This paper reports the results of an explanatory, descriptive and analytical study undertaken to establish the relationship marketing system in the Department of Distance Education (DE), Makerere University, Uganda and develop proposals for its incorporation into the University policy. The university is currently in the policy formulation process for distance education and during the program evaluation stage, it was established that general student support and care was poor (IEC, 2005). The programs have registered attrition and one of the factors leading to this is the lack of lasting relationships and personal care provided by the university staff to the students (Nakibuuka, 2006). The increased need for distance education and minimizing drop-out rates have led the department to devising ways of effectively managing distance learners and one of the approaches is through adopting a relationship marketing approach and incorporate it into the University policy where it is currently not mentioned at all. Using a questionnaire on a purposively selected sample of tutors and administrators, and focus group discussions on purposively selected students, relationship marketing was found to be a key aspect in controlling attrition and should therefore be incorporated in University policy for Quality Assurance in Distance Education so that each staff member is obliged to implement it. The study recommended that relationship marketing be included in all aspects of student life right from the time of admissions, registration, help-desk to be put in place, and in the teaching and the learning environment.
Introduction

Distance Education is an excellent method of reaching the adult learner. Because of the competing priorities of work, home, and school, Adult learners desire a high degree of flexibility. The structure of distance learning gives adults the greatest possible control over the time, place and pace of education. However, distance learning has some problems like loss of student motivation due to lack of constant face to face contact with tutors and peers, family and work demands, cost of the course and a general lack of university or department support. Hillman, Willis and Gunawardena (1994) noted that in distance education, there is strong emphasis on the provision of learner support, which is designed to facilitate interaction and communication between students and academic staff. Support services are required to ensure a complete well-rounded education. Educational institutions providing distance education programmes must also provide quality support services to all students (Khoo & Idrus, 2004). Further to this, not many institutions have incorporated relationship marketing aspects in their student support structures and policies.

Makerere University (MAK), a dual mode institution has been running DE degree programs since 1991 (Aguti, 2000) but without a guiding policy (IEC, 2005). The programs are managed by the Department of Distance Education (DDE) in the Institute of Adult and Continuing Education (IACE) in collaboration with the academic faculties. DDE carries out student support activities to students scattered in many parts of Uganda and only report to the center for a two-week face-to-face session. The university is currently in the policy formulation process for distance education and during the program evaluation stages established that general student support and care was poor (IEC, 2005) hence affecting the quality of service delivery. The programs have registered attrition and one of the factors leading to this is the lack of lasting relationships and personal care provided by the university staff (Nakibuuka, 2006). The increased need for distance education and minimizing dropout rates of distance learners have led the department to devising ways of effectively managing distance learners. One of the approaches is through adopting a relationship marketing approach. University policies do not provide for mandatory action towards caring for the students. Formulating a policy will enable the Department of DE to mobilise resources and support which are pertinent for survival (McCarthy & Perreault, 1993).

Relationship marketing refers to all activities directed to establishing, developing and maintaining successful long term relationship with the student and other stakeholders (Shah, 2005). Gronroos (2000) stated that relationship marketing in institutions is the attitude of mind throughout the institution, when students feel that the staff is interested in addressing their concerns spontaneously in a friendly and professional manner. The emphasis is placed on building long-term relationships with students rather than individual transactions. It involves understanding the student's needs as they go through their studies. Relationship marketing emphasizes providing a range of products or services to existing students as they need them. It involves tracking and analysing of each student's preferences, activities, tastes, likes, dislikes, and complaints. Khoo & Idrus (2004) also noted that due to the wide range of technologies used by distance educators, the support must be available and consistent to all students at all times. The support services require constant interactions between instructional designers, students, student support staff, administrators, and technical staff, help support staff, and students.

Since DE students are separated physically from the providers (Venkaiah, 1995). Khoo & Idrus (2004) emphasize that Quality assurance practiced by any distance education providers should include elements of Total Quality Management (TQM) namely staff development, strategic planning, work process, team work, process and customers and performance evaluation. Other important elements in distance education are the system for sending of learning materials, system for receiving of assignments from students, management of students' records. Shah (2005) points out that education services constitute and supporting services. Teaching and learning that occur in the class are examples of service because they are critical to a successful learning experience. Supporting services ensure quality therefore include real-time information about courses, student advising, registrations, orientation, student accounts, help-desks, complaint handling, and feedback in a friendly, trustworthy and timely manner.
Students regularly come into contact with the staff associated with these services during their stay at the institution. These services create added value to the student and determine the quality of students' learning experience and the student will base their evaluation of the service quality.

The competitive advantage of an institution lies in its systems, procedures, policies and programmes. It is difficult for any distance education institution to serve the needs of its students efficiently and effectively without any quality assurance measures. Learner support is needed in order to facilitate students’ learning. These supports can be in the forms of facilities, administrative, learning materials, reading materials, references, human interaction, advice and moral support. It is important that providers have quality assurance measures to ensure that students receive the support needed to achieve their educational and personal goals (Khoo & Idrus, 2004).

Quality Assurance (QA) is broadly the preventing of quality problems through planned and systematic activities (including documentation). It will include the establishment of a good quality management system and the assessment of its adequacy, the audit of the operation of the system, and the review of the system itself (Oakland, 1993). According to Robinson (1994) QA as the set of activities that an organisation undertakes to ensure that a product or service will satisfy given requirements for quality, in other words that standards are specified and reached consistently for a product or service. Its goal is the anticipation and avoidance of faults or mistakes. Basically, it involves setting attainable standards for a process, organising work so that they are achieved, documenting the procedures and communicating them to all concerned, and monitoring and reviewing the attainment of standards. Administrative systems were pointed out as factors that determine the educational quality (Robinson, 1994).

In an academic institution services are quite different from services in the business world. The five major characteristics of services include: reliability, responsiveness, assurance, empathy and tangibility. Reliability is the ability to perform the promised service dependably and accurately. With reliability, a relationship develops very quickly between the institution and the customer. Responsiveness is the willingness to help the customer and provide prompt service. Assurance is manifested in employees’ knowledge and courtesy and their ability to inspire trust and confidence. Empathy involves caring and giving individualized attention to clients (students). Tangibility is the appearance of physical facilities, equipment, personnel, and written materials. Distance Education being a service and students the prime focus, Kotler and Armstrong (2005) also identified intangibility; perishability; separability, and heterogeneity as the four major characteristics of services. All these characteristics have to be exhibited by a firm if it is to be rated as a good service provider. Universities and nonprofit organizations, marketing has become pertinent for them as it is for businesses (McCarthy & Perreault, 1993). Khoo & Idrus (2004) point out prioritisation of customers and management of students’ records as important factors in ensuring quality in DE.

Phipps et al., (1998) noted that Quality assurance strategies for distance learning tend to be oriented toward institutional assessment activities and to affirming that the core capacities to assure quality such as faculty credentials and student support services are in place. With a yearning for more student-caring services and a need to reduce student drop-out rates caused by administrative hic-ups, it was imperative that a system of relationship marketing be established. The purpose of the study therefore was to study the current relationship marketing system at the Department of Distance Education, Makerere University, and develop recommendations to be incorporated in the University policy for Distance Education. This will be useful for creating lasting relationships between students and staff to improve service quality and reduce attrition rates. The quality policy of an institution should contain quality mission statement, resource allocation norms, quality review and control programmes through Quality Monitoring Teams (Venkaiah, 1995). The levels of skills and expertise of staff, the amount of resources available, weak or strong leadership, efficiency of
Methodology
The research design was explanatory, descriptive and analytical undertaken to establish the relationship marketing system in the Department of Distance Education (DE), Makerere University, Uganda and develop proposals for incorporation into the University policy. The survey population included distance education tutors and administrators involved in the administration of DE students and DE student. Using purposive sampling, 8 tutors, 22 administrative staff and 20 students were selected. Sources of data were both primary and secondary. Interviews were also carried out with tutors and administrators using a questionnaire and an interview guide for students through focus group discussions. Secondary data was collected through document review of minute, evaluation reports and draft strategic framework documents. The study concentrated more on staff members because they are considered to be the key relationship marketing policy implementers.

Characteristics of respondents
The staff members were of varying age and gender as shown in the table below;

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age</th>
<th>Male</th>
<th>Percent</th>
<th>Female</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20 – 29</td>
<td>3</td>
<td>21.4</td>
<td>2</td>
<td>12.5</td>
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<tr>
<td></td>
<td>30 – 39</td>
<td>7</td>
<td>50</td>
<td>11</td>
<td>68.8</td>
</tr>
<tr>
<td></td>
<td>40 – 49</td>
<td>4</td>
<td>28.6</td>
<td>3</td>
<td>18.8</td>
</tr>
<tr>
<td></td>
<td>50 and above</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>14</td>
<td>100</td>
<td>16</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Primary data
Most of the respondents fell in the age range of 30 – 39 years followed by 40 – 49 years implying that staff are of varying age. The percentage contribution of each gender to the staffing is 46.7% Male and 53.3% Female. Implying that most of the staff who interact with students regularly by virtue of their positions and office physical location are female.

The students’ gender and age was as follows;

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age</th>
<th>Male</th>
<th>Percentage</th>
<th>Female</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20 – 29</td>
<td>10</td>
<td>71.4</td>
<td>5</td>
<td>83.3</td>
</tr>
<tr>
<td></td>
<td>30 – 39</td>
<td>4</td>
<td>28.6</td>
<td>1</td>
<td>16.7</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>14</td>
<td>100</td>
<td>6</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Primary data
Most of students fell in the age range of 20 – 29 years followed by 30 – 39 years. Most of the students interviewed were male.

Positions held by staff members
Staff who participated in the study were purposely selected depending on the office occupied as shown in the table below:

<table>
<thead>
<tr>
<th>Position Held</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clerical Officer</td>
<td>6</td>
<td>20.0</td>
</tr>
<tr>
<td>Assistant Lecturer</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>Accounts Assistant</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>Teaching Assistant</td>
<td>3</td>
<td>10.0</td>
</tr>
<tr>
<td>Librarian</td>
<td>1</td>
<td>3.3</td>
</tr>
</tbody>
</table>
Records clerk 2 6.7
ICT Technician 2 6.7
Administrative Assistant 3 10.0
Secretary 2 6.7
Sen. Administrative Assistant 1 3.3
Lecturer 1 3.3
Did not State 3 10.0
Receptionist 1 3.3
Total 30 100

Source: Primary data

The above table shows the positions of the members who participated in the study. They belonged to several sections including Tutoring (33.3%), Accounts (3.3%), Information and Communications Technology (10.0%), Materials development including book bank (23.3%), Clerical (3.3%), Administration and management (20%), and Student support (3.3%). However, one (1) member of staff did not know the section to which he belonged which indicated a need for more staff orientation. Of these staff, 96.6% stated that they interacted with students daily while 3.3% said they did this occasionally. This showed that the staff members who participated in the study interacted with students regularly. Khoo and Idrus (2004) point out that staff of an institution plays an important role in quality assurance. Lecturers, besides involving in administration and management, play important roles in the academic development of the students. This explains the higher means recorded by lecturers in the dimension of Staff Development. This is so because not all lecturers are involved in the administration and management of distance education, especially in the dimension of sending materials to students, receiving of assignments from students, and maintenance of students' records. Both groups have different job description.

The State Of Relationship Marketing In The Department
Several staff members and students were interviewed to establish the state of relationship marketing which is an indicator of quality. In his blog, Mishra (2007) says quality in open and distance learning has been a matter of concern from the beginning. He considers process quality as a means of assuring quality.

Respondents were asked whether they had had training in relationship marketing and only 30% had ever got such training, the others had not. This implies that knowledge of relationship marketing is low which may lead to poor relations with students.

Knowledge of the nature of students being served is important for proper relationship marketing. Only 6.7% of the respondent said they were aware of student's preferences, 23.3% of the respondents were not sure while 70% said they were aware of students' preferences. This implies a poor state of relationship marketing because it is difficult to serve clients whose preferences are unknown. However, 96% of the respondents agreed that they always attempted to establish a student's needs during interactions, 70% or the respondents said they were aware of student's activities, 70% or the respondents said they were not aware while 23.3% were not sure if they knew or not while 6.7% said they knew. To further the lack of knowledge, 70% of the respondents said that they never knew the students' tastes and preferences, 23.3% were not sure if they knew while 13.3% said that they knew. This implies that there is no knowledge of information pertaining to the students' lives. Which reduces service, and affects the service-profit chain (Kotler & Armstrong, 2005).

Student advisory service is one of the indicators that there is care for the students. 53.3% of the respondent said that they did not keep record of students' complaints, 43.3% agreed that they did while 3.4 were not sure if they kept such records. This implies that follow-up is difficult. However, 73.4% agreed that they provide information about courses to anybody who needs it in time while 13.3% said they did not provide it. 83.3% said they advised students on all their queries as they came in while 16.7% said that did not. 73.3% of the respondents agreed that they respond to students' complaints in time while 13.3% said they were not sure while 13.4
disagreed. Those who disagreed said that by nature of their offices, they needed to consult widely before handling a student’s complaint. These findings generally imply that staff are willing and able to advise students which is a good indicator of relationship marketing.

As regards student services, which are important in service marketing (Kotler & Armstrong, 2005), staff confirmed that there is no online registration system in place. Students have to report physically to the main campus to be registered. This is an inconvenience to them. When students report, there is orientation where students are briefed on the nature of the program they are joining, meet administrators and are introduced to various courses by the tutors. They also get study materials from the book-bank which they return. However, beginning academic year 2007/2008, students on the Bachelor of Education External program are slated to be given materials to be taken for keeps. This will go a long way to improve the state of relationship marketing. Menon (2007) asserts that Quality assurance (QA) is the set of activities that an organisation undertakes to ensure that standards are specified and reached consistently for a product or service. It involves proactive measurement to avoid faults while quality control (QC) involves reactive measures taken to remove faults. Assessment of quality systems includes the monitoring, evaluation, and audit of procedures. Points out learner support and learner centeredness as one of the important factors.

In order to practice relationship marketing well, the department must have a database containing all information about each student. Students being primary customers, it is pertinent that their needs are known so that they are satisfied as McCarthy and Perreault (1993) pointed out. 56.7% of the respondents said that this did not exist, 20% were not sure while 23.3% said it existed. The data available about a student is the basic data that is captured as a student register for the first time. This data is captured in a software program called the Academic Registrar’s Information System (ARIS). The other information about students is scattered in several offices depending on what those particular offices handle. There is therefore not one centralised database. This implies that information about a student is not easily accessible. Coupled with this is the lack of a formal helpdesk which responds to all students’ queries. There is however a reception where students can ask as they visit or call in. However, this desk is not fed with appropriate information such that students have to be redirected to other offices even for questions that are seemingly easy like the venue where lectures are taking place. Information has to be gathered from several offices which may delay service provision. This is an indicator of poor relationship marketing and ultimately affects corporate image of the department and the university as a whole.

All staff members agreed that they are friendly to the students who come to them for services. However, some students pointed out that some staff members are not friendly. This is mainly when those particular staff they referred to are in the midst of lunch or signing off. At times they do not give students the attention they desire. Students said that they were however satisfied with their relationship with staff members. When staff members were asked their view on the state of the relationship between the department and students said it was satisfactory, 36.7% said they were not sure of the status quo while 43.3% said it was not satisfactory. This shows a lack of confidence in service provision which is an indicator of poor relationship marketing. Besides, no survey has yet been undertaken involving all students to establish what their attitude towards the services of the department is.

Existence of a Relationship Marketing Policy for Distance Education in Makerere University

Currently, there is no known express relationship marketing policy for distance education in the university. Further to this the University does not have a policy for distance education as a whole. Most of the customer care given to students has been due to frequent on-job training and briefing from senior staff members who has practiced distance education for long. However, staff are not under obligation to carry out relationship marketing activities. 40% of the staff agreed that there is no known policy regarding advising DE students they are required to follow. 26.7% were not sure whether it existed while 33.3% said they were aware about it. The few who agreed that they were aware about it said that by virtue of serving students, they were required to practice it even if it is not written policy. The success of quality assurance in an organisation depends on the total
commitment of the management. The quality assurance in an educational institution is possible when every member of the organisation contributed to the quality process.

As regards student orientation, 13.3% of the staff said that the university does not have policy on DE student orientation, 40% did not know if it existed while 34.7% said that it existed. Those who said it existed said that they are required to give students information if they reported just like other departments do. They however said that there is no known policy governing it and the way it should be done especially for DE students. Further to this, the university is silent about establishing help desks for DE students at the places they visit like their mother department, collaborating departments and libraries both at headquarters and regional center.

Because of their uniqueness, DE students need a policy that stipulates the procedures of handling their complaint systematically so that they are guided as and when they require and that any staff member whose services they desire to be available to them. 40% of the staff members said that there is no such policy, 30% were not sure while 30% said there was a policy. This is because the Academic Registrar, at the beginning of the academic year provides a program in which freshmen and women would meet their administrators. However, this program is not faculty specific. There is no known mechanism of following up whether, as regards the procedure, departments offer any other guidance to new students and whether there is a policy. The reporting time of DE students is at times different from that of other students hence a need for special mandatory guidelines for their orientation and this should extend to all units of the university.

As regards friendly services and being trustworthy while serving DE students, 56.7% of the staff said that they were under obligation to be friendly to students, 16.7% said that they were not sure, while 36.7% said that there is no policy requiring them to be friendly to DE students. This supports what students said that in some offices, staff members are not friendly while serving them which reduces their motivation. As regards the existence of a policy that requires staff to be trustworthy to students, 23.3% said that there is no such policy, 73.3% said they did not know if it existed while 3.4% agreed that there is a policy. This again creates complacency on part of staff members hence reducing the quality of relationship marketing.

Staff were asked as to whether knowledge of relationship marketing will improve quality of services delivered to DE students, 90% agreed while 10% were not sure. Those that were not sure were sceptical because there was no policy to induce them to apply it. And as a consequence, 93.3% agreed that formulation of a relationship marketing policy in MAK will improve quality of service to DE students. In order for Makerere University to build competitive advantage based on collaborative involvement with the DE students and other departments, it has to develop a clear strategy based on the policy that will be set which is in line with the findings by Sheth and Parvatiyar (2000). McIroy and Walker (1993) note that effective staff development and involvement of staff in planning are important elements of quality assurance. Staff of an institution will be able to analyse their operations and modify them to optimise the use of resources.

Students have to report physically and register with the university since there is no online registration in place. When they report, there is orientation where students are briefed on the nature of the program they are joining, meet administrators and are introduced to the various courses by the tutors. They also get materials from the book-bank which they read and return. Students also noted that staff members are friendly to them. However, some students pointed out that some staff members are not friendly. This is mainly when those particular staff they referred to are leaving for lunch or signing off which is an indicator of poor relationship marketing.

Conclusions

From the above findings the following conclusions can be made:

- Most of the staff who interact with students regularly by virtue of their positions and office physical location are female. This shows that the staff members who participated in the study interacted with students.
- Knowledge of relationship marketing is low.
There is no system of tracking and analysing information pertaining to the students’ lives including their preferences, interests, likes and dislikes. Staff are however willing and able to advise students.

Students have to report physically and register with the university since there is no online registration in place. When they report, there is a brief orientation where students are briefed on the nature of the program they are joining, meet administrators and are introduced to the various courses by the tutors. They also get materials from the book-bank which they read and return. There is no one centralised database where information about a student can be obtained. Rather, it has to be gathered from different offices. This implies that information about a student is not easily accessible.

Lack of a formal helpdesk which responds to students’ queries. There is a reception at the entrance of the building where students ask questions. This desk is at times not equipped with all the necessary information that students need.

Staff members are friendly to the students who come to them for services. However, some students pointed out that some staff members are not friendly. This is mainly when those particular staff they referred to are leaving for lunch or signing off which is an indicator of poor relationship marketing.

Currently, there is no known express relationship marketing policy for distance education in the university. This explains partly why services are wanting. The result is that quality in student support is poor which affects the quality of the DE program.

Recommendations

It is recommended that:

- A policy involving requiring special attention to DE students be formulated.
- Relationship marketing be included in all aspects of student life right from the time of admissions, registration, help-desk to be put in place and in the teaching and the learning environment.
- A draft policy statement be made and proposed to the university administration regarding initiating and maintaining good student relations.
- A fraction of the budget be set aside to allow research into students’ needs, preferences, likes and dislikes.
- A database be set up to be a repository of most of all information pertaining each student and that this should be updated regularly. This facilitate tracking a student’s progress.
- All units of the university be obliged to handle DE students fairly and they handle students on the regular programs that belong to other units.
- Staff also suggested the following to be put in order to improve their relationship marketing activities: training them in skills in distance education, providing them detailed appointment letters, clearly explaining the reward systems, revitalising the distance education Newsletter, deploying them to perform duties they are qualified for, increasing staffing, frequent meetings between staff and students and among staff, measures to improve job satisfaction and online feedback systems. To these should be included in the policy statements.

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SOLVING THE PROBLEM OF ATTRITION IN AN OPEN AND DISTANCE LEARNING INSTITUTION

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Abstract

Attrition has always been an issue in Open and Distance learning. This is not different in National Open University of Nigeria where students’ drop-out has been noticed. The researchers were therefore interested in knowing the rate and causes of students’ withdrawal. Though some people have argued that calculating the attrition rate of the university at this point is unnecessary, previous researchers have said it is desirable.

All 2003/2004 Masters in Business Administration (MBA) students of Lagos Study Centre of the National Open University of Nigeria (NOUN) formed the population for the research. This programme is supposed to have turned out two sets of graduates. Furthermore, research questions were raised and to answer those questions all the students in this programme in 2003/2004 set who were identified to have withdrawn formed the sample and this gave 178 respondents. Structured interview was administered to the respondents through phone calls. Using simple analysis, the study revealed that out of 439 students that were admitted into the programme in 2003/2004 only 13.7% are left. The causes of withdrawal of 86.3% were mainly attributed to institutional procedure problems, pattern of facilitation schedule, non-availability of course materials, poor tutorial facilitation and poor academic and administrative support. The researchers therefore suggested ways to reduce the rate of attrition.

Introduction

The National Open University of Nigeria was restated and launched by President Olusegun Obasanjo on 9th October 2002 (NOUN Student Handbook, 2008/2009) with the mandate of delivering affordable, qualitative and accessible education to all Nigerians. To kick-start the academic function of NOUN, 10,026 foundation students were admitted into some programmes in four schools namely: the School of Arts and Social Sciences, the School of Business and Human Resources Management, the School of Education and the School of Science and Technology alongside the Centre for Continuous Education and Workplace Training for the 2003/2004 academic session. As of today, five sessions after its take off, the university has not been able to graduate any set of students. Due to this delay, some of the students decided to withdraw from the programme. As a result there are reasons to assume there is a high attrition rate in NOUN. Some people have argued that calculating the attrition rate of the university at this point is unnecessary but it is felt that if attrition is defined as the drop out rate or non-completion rate, which in other words is the number of students who enrolled in a course but neither fulfil all the course requirements nor complete the course, it is proper to do so now since some students have already dropped out of the programme. Doing this at this time would help the university to know the rate of its attrition, compare the rate with that of other open and distance learning universities and put its together to reduce the rate. Apart from this, it has been asserted that the experience of the UK Open University is that 35% or more of eLearners withdraw before submitting their first assignment (Tyler-Smith, 2006). This shows that attrition rate can even be...
calculated before the completion of the first semester and it is also a pointer to the fact that a learner’s initial experience with distance learning may well have a significant impact on a decision to drop out.

It is hoped that by the end of this research we will make recommendations that would go a long way in helping NOUN as well as other open universities that would be starting in Africa and indeed in any other part of the world would be better off some reasons which would be indicated later, the Masters in Business Administration of the School of Business and Human Resources Management would be used as the population for study.

Attrition in open and distance learning

Since the inception of open and distance education attrition has always been an issue. In corroboration of this, Harold Henke (2001) says:

“Distance education has evolved greatly in the past decade, from paper based correspondence courses, to televised (or video taped) courses, to computer based training, to web based courses, to interactive media such as streaming video, each changing the way students participate in education. Whatever the format or distribution method, attrition has always been an issue.” (Italics mine).

From the above, it is clear that no matter the methodology, attrition has always been an issue in open and distance learning. Therefore, attrition is nothing to do with methodology. It is a perennial problem in distance learning. Studies in attrition in distance learning is important for two major reasons: there is the need to assess the effectiveness of open and distance education in comparison with the traditional classroom-based education and the determination of approaches to increase the effectiveness of distance learning and to increase student engagement in that form of learning (Tyler-Keith, 2006).

A lot of work in terms of research has been done on attrition. Some open and distance learning universities have determined their attrition rate and have identified causes and also proposed solutions to the problem. This paper is concerned with the determination of the attrition rate at the National Open University of Nigeria, the identification of the factors leading to the rate of attrition and also proposes solutions to curb the rate of attrition.

Because of the assumed high rate of attrition in open and distance learning programmes, many studies have been carried out in an attempt not only to explain the reasons for the high attrition rate but also to show that “distance education is an effective and viable method of structuring and delivering education” (Garrison, 1987, 95): Most of these studies based their measurement of attrition on programmes. This is also responsible for the decision in this paper to focus on the MBA programme of the NOUN as a basis of drawing inference for the institution’s attrition rate.

Rates of Attrition in Previous Programmes Studied

As had been stated earlier, it has been assumed distance education carries with it a high attrition rate. Parker (1999) argues that “with the growth of distance education has come the problem of exceedingly high attrition rates”. For example, in a research carried out by Wickersham and Dooley (2001) on a Swine Continuing Education conducted by the National Pork Producers’ Council, it was discovered that of the 84 participants enrolled in the Spring 1999 programme only 23 completed the entire course, giving an attrition rate of 72.6%. In the second running of the programme in Fall 2000 77 out of 133 completed all the courses. This would give an attrition rate of 42%. In another research carried out by Henke and Russum on two courses, namely InfoPrint Manager Overview and Printing Fundamentals that was conducted over a nine-month period shows that the attrition for InfoPrint Manager Overview was 19% and Printing Fundamentals was 23%. Tyler-Smith (2002) suggests that in some institutions, attrition rate exceeds 40%, Carter (2000) put the rate at between 20-50% and Carr (2000) estimates it to be 10-20% higher than traditional on-campus education.
It has to be noted, however, that the validity of these reports have been questioned. It has been argued by Wang et al. (2003) that these reporting are either unreliable or misleading. Tinto (1982) in Berge and Huang (2004) reported that overall drop-out rates for undergraduates in US higher education is between 40 and 45%. It is said that this has been consistent for the most part of the last century. Thus, it has been asserted that the so called high attrition rate in distance education in the US, may not be extraordinarily higher than the traditional education rate.

Factors Responsible for Attrition in Open and Distance Education

Many studies have been carried out concerning the attrition rate and the reasons for attrition in distance education. This forms a veritable background for this paper. Researchers have noted that the factors contributing to attrition are complex as a result of this complexity, there are also no simple solutions. Cross (1981) classified barriers to distance education into three subheadings, namely: situational, institutional and dispositional. While not contradicting these sub divisions reflected in Cross’ work, other research work added another subheading. Enckevort et al. (1986) added what is called epistemological variable.

Situational barriers

According to Wickersham and Dooley (2001), situational barrier includes a poor learning environment, lack of time due to work or home responsibilities and the geographical location of the study centre to the students’ residence.

Institutional barriers

Institutional barriers include the cost of the programme, problems with institutional procedures, course scheduling, course availability and the quality of tutorial assistance as well as the quality of the support the learners receive from the Learner Support Service.

Dispositional barriers

Dispositional barriers include lack of a clear goal on the part of the students, the stress of multiple roles, time management ability, the different learning styles when compared to that of the conventional university, adult pride, social and economic factors.

Epistemological barriers

Epistemological barriers include diversity of the different academic disciplines such as the research paradigms and communication techniques.

In asserting the factors responsible for attrition distance education, it is important to consider the opinions of the learners themselves. This was the step taken by Wang et al. (2003). They sent out sample surveys and in the response it was discovered that distance learners identified four primary factors leading to their dropping out: personal motivation, instructional design of the course/programme, conflicts between study, work and family and the feelings that they had learned what they wanted or needed to learn.

This research work takes all these factors into consideration in the construction of the questionnaire to measure the response of the students and the reasons for withdrawing from the course. In fact, the questions were sent to students who had withdrawn from the course to ascertain their reasons for withdrawing.

Proposed Solutions to the Attrition Problem

One of the major works on the solutions to attrition open and distance education is the work of Tinto (1975; 1987) “Longitudinal Model of Individual Departure” that indicated a complex interaction of family context and background, personal motivation, abilities and depth of...
commitment to completion; previous educational experiences and achievement; and institutional support ((Tyler-Smith, 2006). This model has been used as a means of reforming institutional retention strategies and also to predict attrition rates. It has to be stated, however, that Kember (1989) and Sweet (1986) point out that Tinto’s studies were carried out with campus-based students who are based in a different environment and hence his results may not be entirely suitable for distance learning. The following are the suggested strategies for reducing attrition rate:

Salmon (2004) suggests that since elearning is central to most distance programmes, in the early stages, the course content and course activities should be limited and there should be a focus on activities that would “promote the formation of an individual’s identity online, the development of learning group cohesion and the setting of group norms, expectations and the rules around online discussions”.

Tyler-Smith (2006) is of the opinion that it is profitable to work on the principle that to be forewarned is to be forearmed. This would be done by informing the learners of the complexity and challenging tasks involved in distance learning and letting them also know that they are not the ones experiencing the complexity of distance learning.

Survey: strategy

The first group of students who were enrolled in the 2003/2004 session were identified from the university’s database in order to ascertain the number of students registered for that session. It is assumed that the group of students enrolled in a particular session would have graduated in the 2006/2007 session for those in a four-year programme and those admitted for MBA and other post-graduate studies should have graduated a minimum of two sets, all things being equal.

The data revealed a total number of 10,026 students registered across 25 study centres. The Lagos study centre has the highest number of enrollment which sums up to 4,029 representing 42.2% of the total population.

In selecting the survey tool and distribution method, it was important to contact every student who had dropped out of the programme in all the centres. The difficulty of getting accurate information on the concerned students made the researcher to settle for Lagos study centre since it is a good representation of the total population and also has more accurate phone numbers and e-mail addresses that could be used to reach the target population.

It has to be noted that for this research work, phone interview was the major option left because most of the e-mail addresses written for the students in the database were not correct as there was no response or delivery failure notice and there was no contact addressee that could have been used as an alternative.

Out of the total number of students registered in Lagos Study Centre, the MBA students who should have completed their programmes by now were the set that provided more accurate phone numbers. The researchers thus decided to use these students for the research work.

Survey: Design

From the database of the university, 439 students representing 35.1% of the total number of students in the Lagos Study Centre at the 2003/2004 session were registered for the MBA programme. The researchers felt this number is representative for the purpose of the research. The MBA students are subdivided as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banking and Finance</td>
<td>46</td>
</tr>
<tr>
<td>Corporate Governance</td>
<td>54</td>
</tr>
<tr>
<td>e-Banking</td>
<td>01</td>
</tr>
<tr>
<td>e-Business/e-Commerce</td>
<td>22</td>
</tr>
<tr>
<td>e-Learning</td>
<td>01</td>
</tr>
<tr>
<td>e-Library</td>
<td>04</td>
</tr>
<tr>
<td>Financial Management</td>
<td>106</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>592</td>
</tr>
</tbody>
</table>
In 2005/2006 session, the total number of students had reduced to 135 and in the 2007/2008 only 60 students were registered as at May 2008 (about four weeks to the semester's examination). Using the elimination method, all students that were not registered as at May 2008 were selected and we had a total of 339 students. That is, only 13.7% were left in the programme while 86.3% had dropped out.

From the record provided in the database, most of the phone numbers and e-mails provided were wrong. At the end of the phone number/e-mail verification exercise only 178 students were left with correct phone-numbers. It was this number that formed the population used for the research. The researchers were able to reach the 178 students through the assistance provided by the present class representative of the set of MBA who provided some phone numbers of students who are no longer in the programme. The percentage of the number of students used was 40.5% of the total number of students who were no more in the programme.

As said earlier, to get response from the students, interview was used as suggested by Salant and Dillman (1994). The interview was structured. In structuring the questions, three major criteria, namely situational barriers, institutional barriers and dispositional barriers were considered. Items were developed on each of the headings (see Appendix A). In structuring the items, the word “attrition” or “dropped out” were not used.

Following the recommendations of Salant and Dillman (1994), Shneiderman (1998), the survey items were written using the Likert scale to measure students’ opinions. The items were further subjected to content and construct validity with reliability at 0.85%. Respondents were also allowed to make free comments outside the structured items.

Using the structured items, the students were interviewed through phone by the researchers and the responses were ticked accordingly by the researchers.

**Survey: Response Rate**

The survey response rates are as follows:

A total of 178 students were selected and only 170 responded. The other 8 refused interview. Therefore, it could be said that the response is 95.5%. Considering the recommendation of Salant and Dillman (1994) that 60-70% response rate for telephone calls and e-mails are adequate, it therefore means that this survey has a very good response rate probably because the researchers were lucky to identify respondents who were willing to speak or who have been looking for an avenue to express their plight as revealed in the comment by some of them.

**Survey: Results**

<table>
<thead>
<tr>
<th>S/N</th>
<th>Criteria</th>
<th>Results (N=178)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Situational Barriers</strong></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Did you withdraw as a result of poor learning environment?</td>
<td>Yes = 4.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No = 91%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No Response 4.5%</td>
</tr>
<tr>
<td>2.</td>
<td>Did you withdraw as a result of lack of time due to work or home pressure?</td>
<td>Yes = 0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No = 95.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No Response 4.5%</td>
</tr>
<tr>
<td>3.</td>
<td>Did you withdraw because of the geographic location of the centre?</td>
<td>Yes = 0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No = 85.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No Response 4.5%</td>
</tr>
<tr>
<td></td>
<td><strong>Institutional Barriers</strong></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Did you withdraw because of the financial implication of the programme?</td>
<td>Yes = 10.1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No = 85.4%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No Response 4.5%</td>
</tr>
<tr>
<td>Question</td>
<td>Yes (%)</td>
<td>No (%)</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>---------</td>
<td>--------</td>
</tr>
<tr>
<td>5. Did you withdraw because of problems with institutional procedures?</td>
<td>95.5</td>
<td>0</td>
</tr>
<tr>
<td>6. Did you withdraw due to the pattern of facilitating schedule?</td>
<td>84.3</td>
<td>11.2</td>
</tr>
<tr>
<td>7. Did you withdraw because your course materials were not available?</td>
<td>91.6</td>
<td>3.9</td>
</tr>
<tr>
<td>8. Did you withdraw because of poor tutorial facilitation?</td>
<td>78.6</td>
<td>16.9</td>
</tr>
<tr>
<td>9. Did you withdraw because of the poor academic administrative support?</td>
<td>84.8</td>
<td>10.7</td>
</tr>
<tr>
<td>10. Did you withdraw because of the too many activities in your schedule?</td>
<td>0</td>
<td>95.5</td>
</tr>
<tr>
<td>11. Did you withdraw because of the inability to cope with the learning style?</td>
<td>0</td>
<td>95.5</td>
</tr>
<tr>
<td>12. Did you withdraw because of family pressures?</td>
<td>5.6</td>
<td>89.9</td>
</tr>
<tr>
<td>13. Did you lose interest in the programme because of the rigour of getting your data filled online?</td>
<td>16.9</td>
<td>78.6</td>
</tr>
<tr>
<td>14. Could it be that the loss of interest arose as a result of the difficulty faced in assessing NOUN website?</td>
<td>0</td>
<td>95.5</td>
</tr>
<tr>
<td>15. Did you withdraw because of the inability to cope with the number of courses offered?</td>
<td>0</td>
<td>95.5</td>
</tr>
<tr>
<td>16. Did you withdraw because of poor health conditions?</td>
<td>0</td>
<td>95.5</td>
</tr>
<tr>
<td>17. Did you withdraw because of the instability of the university's academic calendar?</td>
<td>95.5</td>
<td>0</td>
</tr>
<tr>
<td>18. Will you return to the programme if the university's academic calendar stabilizes?</td>
<td>39.3</td>
<td>16.9</td>
</tr>
</tbody>
</table>

**Survey: Discussion**

Before the survey, the following questions were posed:

- What are the causes of students’ withdrawal from the university?
- How can the university reduce the rate of students’ withdrawal?

The findings revealed some interesting points:
The major causes of students’ withdrawal rest on institutional barriers. The causes and percentages were revealed thus:
<table>
<thead>
<tr>
<th>Cause</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional procedure problems</td>
<td>95.5%</td>
</tr>
<tr>
<td>Pattern of facilitation schedule</td>
<td>84.3%</td>
</tr>
<tr>
<td>Non-availability of course materials</td>
<td>91.6%</td>
</tr>
<tr>
<td>Poor tutorial facilitation</td>
<td>78.6%</td>
</tr>
<tr>
<td>Poor academic and administrative support</td>
<td>84.8%</td>
</tr>
</tbody>
</table>

The institutional procedure was a major problem to the students as they showed a great dissatisfaction in the stability of the university’s academic calendar as the delay affects their status on their jobs. This dissatisfaction is reflected in the comments as equally shown in the percentage response. A good number was equally satisfied with the mode of facilitation schedule.

The comments, it has to be stated, were not restricted to the post-graduate programmes alone but also extended to the undergraduate levels. The students expressed bitterness over the non-availability of course materials which they perceived as the greatest hindrance to learning in the National Open University of Nigeria. They also expressed concern over poor tutorial facilitation. They were not satisfied with the mode of facilitation by the tutorial facilitators.

Lastly, as far as the students were concerned, the manner in which they were handled by the academic and administrative support staff was demoralizing. Some expressed that if they had a good support they might have considered staying in the programme.

These findings have some correlation with the work of Wang et al. (2003) who identified four primary factors leading to dropping out: personal motivation, instruction design of the course/programme, conflict between study, work and family and the feelings that they had learnt what they needed to learn. The major factor however is the motivation. Personal motivation is key to academic success. The area of conflict between work, study and family did not actually have a strong impact on the students’ withdrawal probably because of the strong personal aspiration in achieving higher academic status which would also be a motivational factor on their jobs. Also in line with the work of Encevort et al. (1986) epistemological variables are determinant variables for assessing drop out rate.

On the issue of continuity by the said students, 39.3% indicated their willingness to return to their programmes if the academic calendar stabilizes. 16.9% have already made up their minds that there is no coming back (as some of them have enrolled and are about to complete some other programmes with other conventional universities) while 39.3% also expressed uncertainty. It is important to note that if the university tidies up her activities, it can make some of these students return as their concern is about the smooth running of the academic calendar and the prompt as well as accurate release of results.

**Recommendations**

Based on the findings, the following are some proposed solutions to the attrition rate among the students of the National Open University of Nigeria:

- The university should try to stabilize its academic calendar to encourage students’ continuity since a good number of the students enrol for job enhancement.
- Course material production and review should be given a priority. This is because the inability of the university to have a smooth running academic calendar lies on the fact that most of the course materials needed to continue the following semester are not yet available. If these are available, the academic calendar would run smoothly.
- Students’ academic results should be released in time so that the students can access their academic progress.
- All facilitators should be trained to meet the demands of ODL standards.
• All staff of the university should be educated on the staff/learner relationship in an ODL setting through workshops and seminars. The role of learners’ support is not and should not be domiciled in Learners’ Support Unit alone since most of the learners do not use this unit but rather seek assistance from any person recognised as staff.
• All academic staff must be mandated to have a PGD in ODL/elearning if they are to become career staff in the university. The university plan this through a staff development programme.
• The database needs to be updated. During the research it was discovered that there is no continuity in the data of the students. For example, in the 2004/2005 session we have the list of the first set of students but in the 2005/2006 the records of the students were not carried over, thus only the list of fresh students were on the database. Secondly, a larger percentage of the phone numbers and the e-mail addresses given online were inaccurate. There is the need to get to the current students and put accurate information on the database and also update the sessional admissions list to give the overview of previous admissions.

Conclusion

One fundamental mistake that the National Open University of Nigeria has made is the opening up of the University for Students’ Admission whereas the course materials were not available. One would thus warn emerging and existing ODL institutions that admissions should not be made neither are new programmes to be initiated except the course materials for the first three years (for a 4-year course) or the first four years (for a 5-year course) are available. One would want to suggest further researches in the area of attrition in Africa because it is glaring that most of the factors that would have led to attrition in Western countries may not be applicable to Africa as shown in the students’ response to the questionnaire. One wonders if we would have had any student withdrawing if there had been no institutional problems and if all course materials had been available.

References


Garrison, D. R. (1897). Researching dropout in distance education. Distance Education Volume 8, Number 1, 95-101.


Appendix 1
Structured Interview Questions to elicit the cause of Attrition in NOUN

Tick as Appropriate

What programme were you running in NOUN? ________________________________

What is your year of Admission? ________________________________

<table>
<thead>
<tr>
<th>S/N</th>
<th>Criteria</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Did you withdraw as a result of poor learning environment?</td>
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<tr>
<td>6</td>
<td>Did you withdraw due to the pattern of facilitation schedule?</td>
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<tr>
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<td>Did you withdraw because your course materials were not available?</td>
<td></td>
<td></td>
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<tr>
<td>8</td>
<td>Did you withdraw because of poor tutorial facilitation?</td>
<td></td>
<td></td>
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<tr>
<td>9</td>
<td>Did you withdraw because of the poor academic and administrative support?</td>
<td></td>
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<tr>
<td>10</td>
<td>Did you withdraw because of the too many activities in your schedule?</td>
<td></td>
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<tr>
<td>11</td>
<td>Did you withdraw because of the inability to cope with the learning style?</td>
<td></td>
<td></td>
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<tr>
<td>12</td>
<td>Did you withdraw because of family pressures?</td>
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<tr>
<td>13</td>
<td>Did you lose interest in the programme because of the rigour of getting your data filled online</td>
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<td></td>
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<tr>
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<td>Could it be that the loss of interest arose as a result of the difficulty faced in assessing NOUN website?</td>
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<td>15</td>
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</tbody>
</table>
STRENGTHENING AFRICAN CAPACITY IN NUCLEAR SCIENCE AND TECHNOLOGY THROUGH ICT-BASED TRAINING

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Introduction

The major thrust of the International Atomic Energy Agency’s (IAEA) technology transfer programmes towards developing countries is to promote the application of useful nuclear technologies in key areas of national significance to meet priority development needs with special emphasis on food security, human health, water resource management and nuclear instrumentation. In this context, the development of sufficiently qualified human resources is being given the highest priority and special modalities need to be worked out. The conventional form of individual/training through fellowships or group training suffers a number of drawbacks. On the other hand, the tremendous developments that have taken place in information and communication technologies over the last few years, is having a profound impact on all sectors of the society. As a result, new learning methods, formats and resources are being developed. Among these, offer mass customization as technology allows individual differences in the goals, learning styles and abilities of the trainees to be accommodated while providing immediate feedback on progress made and results achieved, thus enhancing productivity and positively impacting national development needs and programmes.

Towards this end, the IAEA through the African Regional Cooperative Agreement for Research, Development and Training related to Nuclear Science and Technology (AFRA) funded a regional project on ICT-based training/educational materials that focus on a number of key nuclear technologies believed to be necessary for meeting development needs. The project started in January 2003 with 15 African countries participating. Nigeria joined in 2005 with the Nigeria Atomic Energy Commission (NAEC) as the counterpart institution. By the end of the project in December 2007 there were 22 countries participating.

Presented here are the project objectives; strategy implementation arrangement; Project organization, co-ordination and reporting procedure; project situation and conclusion.

Objectives

Development objective:

The overall objective is to establish a sustainable national capability in using potential Information Communication Technologies economically for training and education in the field of nuclear science and technology, relating to agriculture, human health, environmental monitoring, water resource management, nuclear instrumentation and other nuclear and related fields.

Immediate objectives

I) to perform the conceptual design of all project elements, objectives and content, including detailed workplan and implementation strategy.

II) to acquire and/or develop and evaluate ICT learning materials in selected nuclear fields tailored to priority needs of participating countries which can be delivered economically.
III) to identify suitable counterpart institutions in participating countries, to upgrade their infrastructure up to the level of suitable training tele-centres in specific nuclear fields and to influence their empowerment by the national competent authority.

IV) to help participating countries to select suitable personnel for training as trainers in various nuclear fields and to support their training through the organization of regional and national workshops.

Target beneficiaries

At the level of this project, the direct beneficiaries are counterpart institutions (in this case, the Nigeria Atomic Energy Commission), which host various ICT-based training programmes including the physical facilities.

The end-users are professionals and technicians at various research centres who will be trained using the established ICT-assisted training program.

Project Strategy and Implementation Arrangements

The project was implemented in 3 complementary related phases:

- Initial planning phase (duration of 6 months);
- Experimental pilot phase which lasted about 30 months from the completion of phase 1; and
- Full-scale implementation phase, which started upon successful implementation of the second phase for a duration of two years.

A brief description of the specific objectives of each phase, the activities carried out and results obtained is provided herein.

The initial strategic planning phase:

This phase is intended to identify and establish a number of essential parameters of importance to the project as a whole and integral to the appropriate design and formulation of the second phase. These are:

(i) Definition of priority development areas of potential interest to be addressed by the project, in the case of Nigeria, human health, food security, and nuclear instrumentation.
(ii) The nuclear technologies/techniques used in the proposed development areas.
(iii) Identify end-user institutions where the project could be effectively launched on a pilot scale.
(iv) Assessment of ICT assets and capabilities, together with required human and physical resources.
(v) The setting up of project management and organizational arrangements with membership drawn from relevant national institutions and appointment of Project Coordinator and Project Management Team by the counterpart institution (NAEC), and nominations of Thematic Coordinator by end-user institutions.

The pilot experimental phase:

This phase focused on conducting selected activities to prepare the beneficiary institutions for the application of ICT-based learning/training modules in the selected area(s) of nuclear science and technology. Assessed the potential for the full-scale implementation phase, built the required capacities, and created a favourable environment for securing success.

The major building blocks comprising this phase include:

I. Human resources development; including training of trainers and sensitisation of decision-makers and competent authorities.
II. Learning/training content development and/or acquisition.
III. Identification, upgrading and enabling of training tele-centres.
IV. Evaluation and assessment.
Human resources development

A key element for the potential success of this initiative is the creation of a national cadre, which is capable of effectively using the selected nuclear technologies/techniques in successfully meeting the targeted priority development needs. Such the project features a number of capacity building measures whose emphasis and scope are carefully designed and selected to systematically achieve this goal. These measures are summarised as follows:

- Training workshops;
- Fellowships, where necessary;
- Advisory assistance through expert missions and exchange of national consultants.

a) Training workshops: Eight training workshops were held to address different elements comprising the problem at hand. These included training on: basic ICT skills; the selected nuclear technologies/techniques; and applications of these technologies to the solution of development problem at hand. A total of 147 personnel drawn from the participating countries were trained.

b) Fellowships: A number of fellowships were offered during the project to provide potential trainers and local supervisors with exposure to existing training/learning tele-centres.

c) Advisory missions: These were offered on demand to assist participating countries in detailed planning, building model central tele-centres, fund-raising, effectively using ICT-enhanced training/learning material and upgrading infrastructural necessities. There were three of such missions during the project.

Content development

This block aims at (i) identifying/developing appropriate technical materials in traditional form on the specific nuclear technologies/techniques of interest and its applications to the selected priority development area(s); (ii) converting this material into ICT-enhanced content and creating useful and relevant applications.

ICT-enhancement of the training/learning material proceeded along three levels of varying complexity, which were conveniently chosen for optimal implementation and cost-effectiveness. Level A involves the use of existing resources and ICT-enhanced material, while Level B introduces some modifications/adaptations to existing ICT-based material for local environment, technology, or problem area. Level C relies on complete production in fields where no suitable ICT-based material is available. The relative utilization of these three levels during the pilot phase of the project was estimated at 60, 30 and 10 percent respectively. The selected materials were developed in a variety of forms depending on the selected mode of delivery (e.g., CD-ROMs, web-based, etc.).

Great deals of the traditional content were already developed and available, others were developed through a Task Force constituted during the course of the project.

Subject areas covered include Nuclear Analytical Technique, Nuclear Instrumentation, Radiotherapy, Pest Control, Artificial Insemination, Animal Disease Surveillance and Maintenance of medical and scientific equipment.

Training tele-centers

The ICT-based training/learning materials mentioned above is intended for deployment in African countries where the necessary ICT infrastructure might not be readily available. Therefore, effort through the project resources was devoted to setting up the upgrading training tele-centres furnished
with the necessary hardware and software facilities and equipped with the telecommunication means selected for delivery and dissemination of ICT-based training/learning material.

Currently there are 12 operational tele-centres in five countries including Nigeria have received equipment and are ready for installation while the remaining five countries are still in the initial planning stage.

The Full-Scale Implementation Phase

This is the phase where all the inputs from the concerned Member States, project partners involving donor countries and development organizations are merged into a real testing phase where the ICT-enhanced learning/training material is deployed/delivered by the trained personnel in technologically equipped tele-centres and effectively utilised towards meeting the established national priority development needs. So far, Tunisia, Egypt, Zambia, Algeria and Morocco have attained this phase.

Project Organisation, Co-ordination and Reporting Procedure

The project was organised and implemented according to the established principles and rules governing the provision of technical assistance by the IAEA to developing Member States and in conformity with AFRA and donor requirements for development projects.

The overall management of the project was the responsibility of the AFRA Field Management Committee (AFRA-FMC) and Africa Section, Department of Technical Co-operation of IAEA. Technical backstopping was provided by the IAEA Technical Divisions concerned as well as regional and international experts particularly from donor countries and organisations; as well as partners.

The whole project was continuously monitored technically by the AFRA-FMC, the National Project Coordinators as well as representatives of the donors, partners and, where necessary, invited consultants.

Each participating country nominated their National Project Co-coordinator and Thematic Coordinators for each thematic area, constituted a National Steering Committee and Project Management Team.

National Project Coordinator (NPC)

The NPC co-coordinated all activities which are necessary for the implementation of the programme activities in co-operation with Ministries and other national bodies and institutions, and ensured that each activity receives the local support necessary for its smooth implementation in accordance with the programme workplan.

Thematic coordinator

Thematic Coordinators are scientists with broad experience in their thematic area and knowledge in the utilization of ICT tools, nominated by their institutions. They interfaced through the NPC between the Agency and all national institutions involved in the objectives of their thematic area, and ensure that the project’s benefits and assistance are timely channelled to all national institutions participating in their thematic area and to report any difficulty/obstacle that may hamper this process.

Regional thematic coordinator

Regional Thematic Coordinators are nominated from the PCs at the first coordination meeting. They liaise with the national project coordinators at regional level on their specific thematic area, to gather, centralise and distribute information related to their thematic area and to advise on and facilitate the implementation of activities in thematic areas.
Project Co-ordination Meetings

Project Co-ordination Meetings were held every two years to review the project progress, plan future activities and report on achievements at national and regional level. The first Coordination Meeting was held in January 2003 at the commencement of the Project. A midterm review meeting was held in 2005 and the final coordination meeting was held in December 2007.

End of project situation

At the end of this project, the technical feasibility and economic viability of the selected ICT-assisted training/learning programmes in all fields of nuclear techniques will be understood, documented and illustrated. In particular,

- The availability of ICTs training materials in the selected fields has been ascertained and costs estimated.
- A number of ICT-based training/learning modules per selected nuclear field have been developed, tested and released for use in Member States.
- A number of operational ICT Tele-centres are in place, together with adequate trained personnel to run and supervise training programmes in selected nuclear field;
- There is increased awareness of decision-makers as well as technical personnel on the potential of this tool as a suitable and cost-effective solution for training manpower.
- Deficiencies in ICT infrastructure has been identified and where possible, rectified.
- The large-scale introduction of ICT-assisted training tools is now better comprehended and requirements for expansion defined.

Conclusion

There is positive impact of this project in terms of human resources and acquisition of basic infrastructure to deliver ICT based training and education in the field of nuclear science and technology, relating to agriculture, human health, environmental monitoring, water resource management, nuclear instrumentation and other related fields. Secondly there is a strong government commitment in terms of resources provided by NAEC and the integration of the project into the overall information and knowledge management strategy of NAEC to support human resources development effort.

References


STUDENTS’ RATING OF ACADEMIC FACILITATORS AS A CORRELATE FOR QUALITY ASSURANCE IN OPEN AND DISTANCE LEARNING.

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Abstract

The process of quality assurance in Open and Distance Learning institutions is an avenue for establishing credibility, value and standard that put the ODL institutions and the programmes they offer on globally acceptable levels of quality and standard. Quality assurance confers credibility and some level of standard on the ODL institutions and the programmes offered by such institutions. The programmes offered by the ODL institutions are anchored by the academic facilitators who provide soft landing for distance learners in terms of instructional clarifications of content and courses provided under a programme. These academic facilitators, contracted to offer support services to learners in ODL institutions, are more often than not lecturers in the conventional institutions.

This paper looks at the ratings of academic facilitators of distance learning programmes by the learners. It considers the ratings as an indirect assessment of the content and value of instructions delivered by facilitators during tutorial sessions. This exercise is an indirect assessment of the management of the learning processes anchored by the facilitators and during tutorial sessions with the notion that supervision of the instructional process itself is central to the quality assurance of the overall teaching and learning processes. The paper showcases the need for rating academic facilitators; the concept of academic facilitators’ rating scale and adoptable methodologies for the purpose of quality assurance with a hindsight of an overall view of the implications and purposes of the exercise which include either formative or summative evaluation; formative evaluation in order to improve on instructional facilitation effectiveness in order to improve on the learners academic performance and summative evaluation for the purpose of confirmation of appointment, retainership or promotion of academic facilitators by the ODL management.

Introduction

Possession of the academic qualifications that enable a facilitator who facilitates at a tutorial sessions of an open and distance learning institution is an end to a means; to be able to facilitate the students to have a better understanding of what is taught and learnt. For a facilitator to discuss academically at a tutorial session is another end to another means; an avenue that shows the level of technical-know-how, the ability and capability of the facilitator. This is a reflection of the standard and value of what is imparted to the learners. It is indicative of the fact that a person can only give what he has. In contemporary distance learning practice, the learner is expected to take responsibility for his/her own learning experiences. This means that most of the learning takes place by the learners individually, studying the course materials on their own. However, there are times when certain areas of the course are difficult to understand, this is where the academic facilitator becomes necessary. Though, the role of academic facilitators is that of an instructional guide, who assists learners to crystallise the ‘grey’ areas in the learning process. This is what Rontwree (1996) refers to as ‘teachers’ guide by the side’ rather than ‘sage on the stage’.

It is what the facilitators give to the learners in terms of what he has in his or her area of specialisation in regards to the contents of courses anchored by him or her which the students take away and display when the time comes to show what stuff the learner is made of. According to Ronttree (1996), academic facilitators are supposed to be instructional guides who assist learners to improve their understanding of critical areas of the instructional content, the need for the learners to participate in the evaluation of the effectiveness of the facilitation process cannot be overemphasised. After all, only the learners are in the best position to indicate the extent of their learning achievement as a result of the interplay between their own efforts and the facilitators’ guidance.
Open and Distance education as practised and handled by the National Open University of Nigeria like in every other countries of the world where it has being well entrenched is very new to Nigeria and other West African nations. This is corroborated by Olakulehin and Ojo (2006) and Ojo et al. (2008) when they remarked and reaffirmed that open and distance learning institutions, its practices and paraphernalia are relatively new in the sub-Saharan Africa compared with the traditional institutions of higher learning which enjoys a more robust historical heritage. This may be due to the fact that the National Open University Nigeria is the first full-fledged University that offers open and distance learning mode in West African Countries.

Although lots of genuine reasons can be adduced for the need to establish ODL institutions in Nigeria and other West African countries, the onus is on these ODL institutions to constantly and continually implement policies that would confer quality, high standard and value on what they offer the public and their stakeholders. Furthermore, the fact also remains that these institutions for a long time to come must be seen as doing all ramifications in order to equate themselves with existing traditional universities and by extension the products that these universities graduate yearly.

As a confirmation of an indication of a measure for quality assurance of what ODL institutions offer the stakeholders and the general public through the learners trained by such institutions, this study showcases the need for grading of the academic facilitators by the students who they facilitate during tutorial sessions. This will enable the ODL institutions management to have the benefit of quantifying what the facilitators offer the learners in terms of content of instructions, methodology used to deliver the tutorial instructions and the attitude of the facilitators to their given assignment. Through this, the value and quality what the facilitators offer can be measured and by extension, establish their commitment towards achieving the goals and objectives of the institution. In this paper, student ratings of academic facilitators refer to a situation in which students are asked to complete a form or write a short free-form evaluation anonymously, either during or immediately after a class period, the final exam, or a session after grades are issued.

Issues in Students’ Ratings of Academic Facilitators

The facilitators recruited to handle tutorial classes for ODL students are not full-time staff of the University as it is practised in the National Open University of Nigeria. This is similitude of many open and distance learning institutions around the world. Invariably, it is not mandatory for them to satisfy the requirements that can genuinely qualify them to get promoted within the ranks noted for lectureships in the university systems. University lecturers are promoted based on the quality and quantity of their publications and not on their teaching effectiveness although their duty expectation includes teaching and community services they carry out.

Baring the absence of the above conditionality of the conventional university, the facilitators in the ODL mode can decide not to put in their best during facilitation in terms of content delivery and other impetus that could make teaching to be effective for the learners as they facilitate during tutorial sessions since no encumbrance is put in their way for the purpose of retainership.

In the conventional university where it is adopted, students’ ratings of lecturers are used for formative and summative evaluations. This translates into the student ratings of instruction are widely used as a basis for personnel decisions and faculty development recommendations. This is pointed out by Gordon (2002); Adams (1997) and Rifkin (1995) when at different times, they remarked that the results of students’ ratings of lectures, used for the formative evaluation; a means through which lecturers are provided with information which facilitates growth, development and self improvement that will assist their teaching effectiveness. Marsh and Bailey (1993) and Arubayi (1987) reported that summatively, the ratings guide the administrators to take decisions as to the appointment; confirmation of appointments; termination or promotion of academic staffs.

From the scenario described above, it could be said that there is no formal or informal yardstick in the ODL mode (as practised in NOUN) for measuring quality teaching or facilitation. This is
borne out of the fact that OD learners do not have the benefit of face-to-face teaching; an avenue through which the lecturer teach or lecture into the topic in a course that is being treated at a particular point in time. And also the fact that only means through which the OD students can have clarification of difficulties they encounter their course materials during self-learning comes up only during tutorial sessions when facilitators facilitates. This is the only available period when the facilitator can reveal to the learners the extent of his/her competence in the course that he or she facilitates.

Without ranking of facilitators through the student ability and capability of the facilitators though certificated for the purpose of facilitation effectiveness and qualitative assurances of what is being taught in the classroom during tutorial sessions cannot be established. Considering the ratings of lecturers in the conventional universities Miller (1975) submitted that students’ evaluation of instruction is the most valid, reliable and defensible tool for faculty staff appraisal since possession of masters or doctoral degree in a discipline only confer on the owner the level of what he or she has learnt while being trained in the university. Also going by the assertion of Arubayi (1987), it is the students that listen to and observe the lecturer in the classroom. This is highly applicable to the modus operandi of the ODL mode of education.

Reliability and Validity of Students’ Ratings

In spite of the value and the usefulness which the students rating of the academic facilitators would confer on the ODL institutions and the services they offer when their products are rated, it is of utmost importance that there is a need to reveal the credence for why the learners are appropriate as the evaluators of their facilitators. The ODL learners are in a unique position to rate their own increased knowledge and comprehension as well as changed motivation toward the subject taught. As learners they are in a good position to confirm whether or not teaching and tests covered all the material of their course or courses handled by a particular facilitator. In addition, they can observe and rate facts as they are exhibited by the facilitator. For instance, they can authoritative talk about an instructor’s punctuality, the legibility of writing on the chalk-board [especially for numerical courses], methodology of teaching in terms of simplification and clarity of expressions in order to pave way for better understanding of course contents and also every aspect of facilitation that are relevant to competent teaching since the learners have their peculiarity and characteristics unlike those students in the traditional universities who have everything going for them in terms of time and face-to-face teaching opportunity. They can assemble and rate whether the facilitator is enthusiastic and encourage questions from students by asking many questions in class to drive home his point. In order to establish validity in this case is the process of gathering evidence that lay credence to (buttress) the appropriateness of the inferences that can be made of students responses from the students’ rating of academic facilitators scale or instrument, it must be seen that there is relationship between facilitators effectiveness and the amount learned by the learners. There must therefore be agreement to what would be regarded as good facilitation or what could lead to good facilitation. This may be made to be part of the criteria for standard of measurement. Arubayi (1986), while reviewing 41 studies carried out in the traditional universities showed that there was statistically significant and positive correlation between student ratings and student achievement from a majority of the studies reviewed. This assertion confirmed that the students who rated their teachers were adequately and properly taught by the rated lecturers. In the continuation of these studies, Arubayi (1987), asserted that if students can agree with their lecturers on what constitutes effective teaching and also the qualities of an ideal professor, then one might be safe to conclude that students are better placed to rate, evaluate or assess instructors and instructions. In support of this assertion, Miller (1975) states that “student evaluation is the most valid, reliable and defensible tool for faculty appraisal”. For the purpose of credence therefore, the Scriven-raised nine-point sources of validity of students rating of instruction comes handy. According to him:

1. Student’s ratings of academic facilitators must be seen to have a positive and statistically significant correlation of student ratings with learning gains. The unique position and qualifications of the students in rating their own increased knowledge and comprehension.
2 The unique position of the students in rating changes in motivation (a) toward the subject taught; perhaps also (b) toward a career associated with that subject; and perhaps also (c) with respect to a changed general attitude toward learning in the subject area, or more generally.

3 The unique position of the students in rating observable matters of fact relevant to competent teaching, such as the punctuality of instructors and the legibility of writing on the board.

4 The unique position of the students in identifying the regular presence of teaching style indicators. Is the teacher enthusiastic; does he/she ask many questions, encourage questions from students, etc.?

5 Relatedly, students are in a good position to judge whether teaching style indicators are correctable.

6 Students as consumers are likely to be able to report reliably to their peers on such matters of interest to them as the cost of the course, the extent to which attendance is taken and weighted, and whether a great deal of homework is required—considerations that have little or no known bearing on the quality of instruction.

7 Student ratings represent participation in a process represented as "democratic decision-making."

8 The "best available alternative" line of argument

Conclusion

As it is known worldwide, the issue of quality assurance in the ODL mode of education is synonymous with establishing credence for the mode of education. Apart from an attempt to eliminate the widely held notion that distance education is a second rate mode of education, academic facilitation is used to eliminate the feeling that distance learners experience in the course of studying ‘alone’. But most importantly, the major aim is to enhance the internal quality assurance process of distance learning systematically by ensuring that the process of the academic facilitation meets the broad educational objectives of the courses as well as expectations of distance learners from tutorial facilitators. It can attempt to improve on the already established quantum of credence that the issue of student ratings of academic facilitators is being canvassed.

Considering the value the academic ratings by students would have on the learning outcome, on the preparedness of the facilitators for facilitations and their attitude to their given work and schedules and by extension the product churned out by ODL institutions, student ratings of academic facilitators should be assimilated into quality assurance criteria in the administration of ODL although the validity criteria for student ratings of academic facilitators must be laid down for all and sundry to know for it to have the desired reliability. It must be noted that many neo-distance learners have a slightly ‘mixed-up’ perception of the role of tutoring and tutorial facilitators in open and distance learning. This is not unconnected with the hitherto held notion that facilitators are lecturers who should take learners step-by-step through each unit of course from objective through the wrap-up. This is, however, the case, what facilitators are expected to do is to clarify areas that seem difficult for the learners to understand. This presupposes that fact that the learners would have studied the course material in order to determine which aspects are giving them problems. It is these difficult aspects that the facilitators would activate all their professional skills and knowledge to clarify. They do this by asking further questions that would lead to moments of enlightenment; use of anecdotes and analogies; practical examples as well as discussion of case studies etc. Given this standard approach to facilitation, learners can then be asked to assess/evaluate their academic facilitator against some agreed benchmarks.

The assessment of academic facilitation is one strategy that an ODL institution can use to ensure that the quality of their programmes and institution can be ascertained. When facilitation is properly done and tutorial processes are adequately evaluated, the quality of a distance education system is assured.
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Abstract

Distance education mode of learning allows for a situation whereby learners are not enclosed in the four walls of the classroom. It is modern and flexible in terms of programmes, space and time. The learners include those who want to educate and equip themselves for the purpose of updating their knowledge, learn about modern and latest skills in order to perform better and maximally in their trade and profession, science, liberal arts, social sciences, technology and a host of others. Nigeria as a nation, houses different industries whose human capital is made up of categories of personnel. This paper discusses the inherent potential of ODL institutions to organise and arrange for training in different areas of specialisation with focus on high level performance for different categories of manpower in these industries in Nigeria in order to achieve their corporate goals and objectives in the global contemporary competitive world. It concludes with a functional framework for implementing strategic continuing professional development/training using ODL methodologies.

Introduction

World-wide, Open and distance education is now accepted as an alternative mode for teaching, learning and training. Although it had been in use for quite a long time, it had never enjoyed the acceptance observable in recent times. These days, it is quite popularly used for teaching and learning of different courses virtually in all areas of education be it Humanities, Social Sciences or Sciences. Also, the current state of distance education and the use of various types of Information, Communication and Technology devices has made the delivery of instructions to learners and also, communication between tutors and learners; between learners themselves to really underscore the target to effectively educate and/or train everybody who is interested in education and/or interested in whatever skills that require improvement and development. According to Nigam and Joshi (2007), for some people, a chance to get tertiary education, for some to de-tag the label of drop-outs or unskilled or semi-skilled workers. In all ramifications therefore, distance education and open learning system is one of the most feasible and viable alternative means for teaching-learning and training that has broadened areas of education to all those who for one reason or another are not able to avail it. It has been found equally beneficial for the disadvantaged groups, such people living in rural, riverine and remote areas, women, socially, geographically and economically under-privileged groups. Additionally, it has proved to be cost effective in improving educational opportunities (Coulter, 1989; Ojo, Ogidan and Olakulehin, 2006).

It is in consonance with the inherent potential of this mode of education possesses that this paper is showcasing it as a strategic means for corporate workers on different courses be it very short time, short term or otherwise that contribute to the human capital proficiency, development and performance with the sole aim of improving the skills of the employed human capital of the corporate organization to achieve their corporate goals in the globalise world without jeopardising the time required for official tasks.
Training and Corporate (Industrial) Workers

Training in all ramifications is a critical ingredient of all successful corporate enterprises, whether local, national or global. Also, of focal importance is the potentiality of human resource of employees which now becomes more essential considering the rapid developments in technology, globalisation, knowledge-based organisations and attendant emergent need for perfection, competition and sustenance of corporate customership. Ensuring that employees acquire expertise in a range of complex tasks quickly and effectively is now an essential organisational objective in order to generate and maintain a flexible, competitive workforce. Achieving this objective in a cost effective manner is critical to sustainable economic, breaking even point and social development of all corporate bodies that are worth their salt in the emerging market world wide. As rightly observed by Schank (1994), incompetence is highly damaging to industrial productivity and profitability. While interacting with the employees of airlines, rental car companies, hotels, restaurants, retail chains, a wide range of repair services, he deduced and remarked that problems of inefficiency and incompetence confront many workers on a regular basis. He therefore concluded that the conventional approach to training is largely ineffectual, and that employees are not provided with appropriate opportunities to develop the knowledge and skills that underpin the expertise necessary to perform their duties in an efficient and effective manner. As it is expected all over the world, human capital of an organisation to perform optimally in the modern day environment, adequate must be provided by the employer or better still, individual must be ready to undergo appropriate trainings regularly to keep self abreast of techniques required for good and better performance in his/her place of work in order not to be relegated to the background in his/her chosen career. This is a pointer to the fact that there is an increasing need for individuals to take charge of development of their own learning and careers for a variety of reasons. These include the fact that there is increasing rate of change in various existing organisations and by extension, the knowledge and skills required to perform on available jobs and schedules in those organisations. Career ladders are rapidly shrinking or disappearing as reorganisations lead to flatter structures. There is therefore an ever-increasing need for workers to keep learning to keep up with rapid growth in knowledge and the rate of change that comes up in modern day global workplace environments.

Open and Distance Education as a Strategy

Recognising the paradigm shift brought about by the Open and Distance Learning mode of education where-ever it operates in terms of flexibility, space and time; ICT infrastructure allows for delivery of instructions during facilitations and in different kinds of courses that are useful in a modern society. ODE possesses the wherewithal which different training requires by human capital of various corporate organisations to perform effectively in the competitive marketing environment the global world is turning. Considering the known traditional approach to training which has always been based primarily on face-to-face method of instruction, part of the deficiencies it harbours can be identified from the cost effectiveness of the ODE. For example, in highlighting the costs associated with human resources development industry in the USA, Romiszowski (1992) estimated that, of the total cost of $100 billion per year, only $30 billion was actually spent on training, with indirect costs such as travels, accommodation and time off accounting for the remaining $70 billion. He concluded that if the approximately 70% of training funds currently spent on indirect expenses could be allocated to the design, development and delivery of high quality, self-instructional courseware, there could be a quantum leap in the flexibility, efficacy and cost effectiveness of training programmes. This vacuum ODE would bridge if all impetus required for its optimum performance is put in place where ever it is being adopted as a means of education and training.
Using Nigeria as an example to showcase Open and Distance Education being used as a strategy for training the industrial/corporate workers, the structure of a unit named Centre for Continuing Education and Workplace Training (CCE&WWT), National Open University of Nigeria (NOUN) readily come to play. Inside this kind of unit, a training arm of an Open and Distance Education of any ODE institution can be housed. It is this arm that will be catering for whatever kind and type of training that is germane to skill acquisition and development of human capital of the industries knowing fully well that many workers who are of age and those who could not leave their jobs to attend full time schooling but require one type of training or the other would through this arrangement achieve their goals of becoming equipped with the knowledge/training they require where they work. The unit apart from floating different types and kinds of short courses that may be certified by Diploma (6 Months Courses) or Certificate (3 months or as the case may be) or Proficiency Trainings, (Two/Three Day Courses) may be collaborating with particular industry/corporate organization to handle group training for their different categories of staff. To explore the potential of such group training there may be need to provide means for developing collaborative activities using asynchronous technologies if it can be arranged knowing fully well the interaction between Open and Distance learning ICT infrastructure such as Audio-teleconferencing, Audiographic communication systems video conferencing and Broadcast television/radio with attendant audio-teleconferencing.

Giving consideration to the above means that the training Centre or Unit will be providing access for training to all those who desire and need to improve their qualifications, skills and competence. The learner is free to study at his/her pace and time his/her studies according to his/her convenience. The important features are relaxed entry qualifications for specified groups, Study according to learner’s pace, place and convenience, Flexibility in selecting courses and the Use of modern and appropriate educational communication technologies. The Training Centre would be expected to offer variegated courses and programmes of studies that will attract sponsorships/favours from corporate bodies in the society to it. Such courses or programmes may include Certificate in Teaching Primary Mathematics, Diploma in Aquaculture, Diploma or Certificate In Intellectual Property Rights, Diploma In Environment And Sustainable Development, Awareness Course on Intellectual Property Rights, Appreciation Course on Environment and Proficiency courses for Front Office staff and others.

Conclusion

As the use of distance education mode for teaching learning is becoming widely accepted day-in day-out, and there is still a lot of area of human endeavour where its presence would be appreciated because it will satisfy the yearning people in all societies of the world. The result of this paper therefore indicates that promotion of open and distance education for the training of industrial/corporate workers is the call of the hour. This paper is an expression of identified needs in in our present societies. This is that this venture would strengthen the stand and prospect of Open and Distance Education of learning where the conventional educational mode might have failed.

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Abstract

Distance education methodologies have come into prominence during the last decades of the 20th Century. The need for continuous learning and unprecedented technological innovation in communication has pushed distance education approaches to the forefront of educational practice. Open and distance education comes with new concepts of technologies, new programme demands, new audiences, and new commercially competitive providers all of which present enormous challenges for educators to explore the open and distance educational options available. Open and distance education national policies focus on resource management, particularly setting up procedures for rationalising the use of technologies as a distance education resource. The policies also focus on quality of programmes regarding regulation, monitoring and accrediting of distance education delivery systems. This paper seeks to provide information on policy challenges in open and distance education practices for a broad range of emerging educational purposes and experiences.

Kenya is in the early stages of developing open and distance education and currently, the programmes are offered through various institutions which were initially set up to offer residential mode of education. A survey conducted on the challenges of open and distance education in Kenya has, however, observed that the efforts of these providers are generally affected by central policies and thus are uncoordinated. The absence of a national policy to govern and guide the different provision of open and distance education programmes in the country poses a challenge on resource mobilization and quality issues. This paper aims to explain the challenges and appropriate policy options that are essential in guiding open and distance education in Kenya.

The paper explores the importance of some of the policy options needed for the long-term credibility of open and distance learning practice. The paper briefly reviews the significant contributions to open and distance education in the last century in Kenya and reveals an early preoccupation with organisational and structural constraints.
Definition of Terms

Open Learning: An attempt to remove barriers associated with conventional education in terms of admission requirements; place and time of study; subject combinations; mode of delivery, assessment and examination process.

Distance Education: Use of print or electronic communication media to deliver instruction when teachers and learners are separated in place and/or time.

Policies: Policies are deliberate plans of action to guide decisions on open and distance education in order to achieve rational outcomes.

Higher Education: Refers to post secondary formal education.

Public Universities: Universities that are run by the government and rely on public funds.

Access: Access assumes availability of opportunities for education for all those who are eligible and meet the desired criteria of opportunity to attend university education in Kenya.

Background

All learners, regardless of their educational levels, deserve nothing less than a quality education and training that would provide them with opportunities for lifelong learning, the world of work and meaningful participation in society as productive citizens. Therefore, any education and training system should develop policies that respond to the equity and development challenges that are critical to improving the quality of life for all people. With specific reference to higher education, the principle of equity requires fair opportunities for learners both to enter higher education programmes and to succeed in them. Arnold (1996) in the South African National Plan for Higher Education, (February 2001) it is unacceptable for graduates in general and those from previously disadvantaged communities in particular to be denied the provision of high quality programmes, as it would not only impact on their ability to improve their own life chances, but would also adversely impact on the broader agenda of social and economic development. Although the South African National Plan for Higher Education has been cited as an example, the principles it espouses could apply equally to higher education institutions throughout the world. Consequently, higher education institutions, irrespective of the country of origin, must be able to create a learning environment that offers learners the opportunity to advance, develop and enrich themselves, both intellectually and materially.

Open and distance education is practised in all parts of the world to provide study opportunities for those who cannot or do not want to take part in classroom teaching at a particular institution (Holmberg, 1995). In its earliest form, open and distance education meant to study by correspondence. As new technologies developed, instruction was delivered through such media as audiotape, videotape, radio and television broadcasting and satellite transmission. Microcomputers, the internet and the world wide web are shaping the current generation of distance learning, and virtual reality, artificial intelligence, and knowledge systems may be next (Kerka, 1996). Open Learning could be defined as an attempt to remove barriers associated with conventional education in terms of admission requirements; pace, place and time of study; subject combinations; mode of delivery, assessment and examination process. Distance Education on the other hand is the use of print or electronic communications media to deliver instruction when teachers and learners are separated in place and time. These two definitions imply learner centredness and control. Typical audiences for earlier generations of distance education were adults often seeking advanced education and training at home, on the job, or in the military. Their multiple responsibilities or physical circumstances prevented attendance at a traditional institution.
Now anyone is potentially a distance learner, a concept that has implications for the organization of educational institutions, and teaching and learning.

In most cases, open and distance education is delivered through the use of specially prepared study materials and regular, mediated contacts between students and tutors, individually or in groups. Distance teaching universities offer students printed and recorded courses with mediated communication, sometimes providing supplementary face-to-face teaching. Other open universities which are more developed technologically, like the British Open University, provide not only for course materials, but also for correspondence, telephone and computer communication between students and tutors (Holmberg, 1995). This. Use of pre-produced course materials and non-contiguous communication, sometimes supplemented by face-to-face contacts, however represents the practice of most distance teaching institutions in the world. A term that is often used to describe the mode of delivery provided by many distance learning institutions is flexible learning, which, according to Moore (2000) not a specific methodology. It is an approach to teaching and learning that is open to the possible use of a variety of innovative learning practices and combinations of practices, it provides the learner with a choice of learning strategies, as well as the choice of place and time. In this sense, it is an extension of the concept of open learning. Whatever the nature and mode of delivery, open and distance learning has several challenges for learners and providers, particularly with regard to policy and practice pertaining to inclusive education and teaching.

With the advent of the new communication revolution, the world is witnessing an expansion in open and distance education. The new information revolution has enabled academic institutions to provide a flexible and more open learning environment for students. The convergence of new information technologies such as telecommunications, computers, satellites, and fiber optic technologies is making it easier for institutions to implement distance education (Harasim 1993,15-34) and indications are that distance education in higher education will continue to grow (Rahm and Reed 1998, Vol. 3).

Open and Distance Learning in the World

The earliest account of distance learning can be traced to the first century AD when St. Paul used his letters or epistles to the young churches around the Mediterranean. This was a powerful form of distance learning as can be judged by the substantial growth of the Christian church. St. Paul’s epistles are, because they continue to be read today, the most successful application of distance learning in history.

The next phase in the history of ODL started with the age of printing and posting. An Englishman, Isaac Pitman, is credited as an early pioneer. He began teaching shorthand by correspondence in Bath, England in 1840. Students were instructed to copy short passages of the Bible and return them for grading via the “new” post system.

The establishment of the British Open University in the United Kingdom in 1969, marked the beginning of the use of technology through well-designed courses (Young, 2002). The British Open University which is acknowledged as the most innovative university in the world has played a major role in the development of much of the input research in distance learning. The success of the British Open University was the major reason for the development of open universities in other countries such as USA, Japan, China and Turkey. Today, India is the undoubted world leader in ODL not only by the volume of its activity, but also its diversity.

Open and Distance Learning in Africa

Prior to the emergence of distance learning providers in Africa, many African students obtained various qualifications through distance learning providers in Europe and North America. One of the oldest distance education universities that exist in the African continent is the University of South Africa (UNISA), which has been offering correspondence courses since 1946. UNISA's success has, as a result, spurred the establishment of other ODL providers in the African continent.
(Juma, 2003). Examples of these are the open universities in Nigeria, Tanzania and Zimbabwe which started out as providers of conventional programmes, have now diversified into providing ODL as well.

It is significant to note that some organisations are providing assistance to African countries in mainstreaming of ODL into their educational systems. Major among these are: New Partnership for African Development (NEPAD) which is involved in the introduction of e-learning in primary and secondary schools; Commonwealth of Learning (COL) helping governments and institutions to use techniques of distance learning to achieve the Millennium Development Goals (MDGs). It is also assisting in the area of capacity building. It should also be recognised that the African Council for Distance Education (ACDE) has been established with its headquarters in Kenya, and it is expected to play a significant role in the development of ODL in Africa.

Open and Distance Learning in Kenya

The first government policy to address distance education was the Ominde Commission of 1964/65 which recommended the establishment of an advisory commission on ODL in Kenya. The Act of Parliament of 1966 established the Board of Adult Education at the University of Nairobi. Since then, however, a number of commissions and reports have highlighted ODL as an alternative mode of education provision for example, the Gachathi Report of 1976 emphasized the need for solving educational problems in large scale by diversifying education to include ODL; the Mackay Report of 1981, the Kamunge Report of 1988 and the Koech Report of 2000 included the use of ODL in their recommendations. The latest government initiative as contained in Sessional Paper No. 1 of 2005 has recommended the establishment of a National Open University and use of ODL in human resource development at all levels.

The practice of ODL in the country has been at all levels of education and provided by different institutions governed by their own institutional policies (Juma, 2003). Some of the major providers include: the Kenya Institute of Education (KIE); University of Nairobi; the Kenya Institute of Special Education (KISE); Kenyatta University; Egerton University; African Medical Research Foundation (AMREF); Ministry of Health; Ministry of Agriculture; Ministry of Education under school based teacher development programmes; and a number of cross border institutions. In addition there are continental institutions hosted in this country that provide and manage distance education. For example the African Virtual University (AVU) was set up to run programmes in Francophone and Anglophone Africa using the satellite technology. In Kenya, however, it has changed its mandate from providing distance education directly to the learners and is geared towards providing training to staff in institutions offering open and distance education. The uncoordinated ODL practice in Kenya has made impact on education and development: in the training of adult literacy teachers; primary school teachers; training of teachers in special education; cooperative practitioners; training of medical professionals; and primary school enrichment through the radio programmes and use of electronic modes.

While distance education holds promises, a number of obstacles will have to be addressed before it can be fully utilised in Kenya. There are a number of technological constraints that hinder distance education. Telephone and other communication infrastructure outside of major cities remain inadequate. There are also policy related issues given that there is no national policy in place governing open and distance education in Kenya.

Rationale for Open and Distance Education

Higher education in Kenya is facing a critical need to meet new demands for the 21st century, with its ever increasing population growth. This means that the population of people seeking access to education at all levels; primary, secondary, and tertiary is on the increase. In spite of this fact, educational institutions in Kenya are not expanding enough to accommodate the increasing number of students seeking access to higher education. The country needs an educational environment that would make it more responsive to challenges of demand for higher
education. Alternative ways of providing access to higher education via distance education need to be fully explored because it makes it possible for students anywhere and regardless of their responsibilities to enroll in open and distance education courses.

Open and distance education could be used to make it possible for secondary school graduates, only a fraction of whom can be accommodated in tertiary institutions, to enroll directly, and without leaving their homes, in online colleges and universities on the continent and around the world. This form of education offers several advantages over the traditional educational system, including; virtual access to teaching staff in institutions around the world; introduction of new interactive pedagogical techniques (more hands-on learning opportunities, independent research, less reliance on rote memorization); and, the creation of virtual institutions and linkages where resources could be shared by people and institutions in physically unconnected places.

The promise of Information Communication Technology (ICT) on the continent and in Kenya is enormous. ICT is expected to serve as a catalyst to African communities, allowing them to profit from and contribute to an increasingly globalised society. Emerging ICT holds much promise for breaking down traditional barriers that have limited higher education opportunities. Today, through distance learning strategies and computer applications, we can expand the content, extend the reach, and increase the effectiveness of academic programmes. Through emerging communication technology, effective computer-delivered coursework could be developed while at the same time improving access to scientific and technical information.

Open and Distance Programme Delivery in Kenya

Currently, ODL programmes are delivered by public and private institutions. These are institutions that were originally set up to offer residential programmes and are now combining them with the open and distance programmes (dual mode). This caters for a small proportion of the population that could benefit from ODL in higher education. The current media services used in ODL include print (postal and other delivery modes), and electronic (radio, telephone, mobile telephones, audio tapes, CDs, TV, computers, internet). However, there are both infrastructural and resource constraints which must be considered in the endeavour to enable students access ODL programmes in Kenya which include lack of proper communication infrastructure and electricity that almost make it impossible to access these programmes through electronic media, and road network. Only a small percentage of the Kenyan population have access to electrical power and most of whom are in the urban centres. Choice of appropriate media employed in the ODL in Kenya should therefore take into account prevailing local circumstances.

Institutional Guidelines

The arrangement for delivery of ODL in our public and private institutions is in dual mode which is only able to accommodate a limited number of students. Kenya has not yet taken advantage of provision of education through a National Open University which has the potential to increase access to higher education. While Kenya does not have an Open University, there have been uncoordinated efforts by individual universities to offer programmes in Open and Distance Learning who have come in to fill a gap which exist in Open and Distance Learning and which needs to be addressed.

While the government policy is to promote and facilitate private investment in education at all levels, most private providers have invested in the conventional mode. Little effort has been made to provide ODL programmes. Already chartered private universities, for example, are providing programmes in ODL using the authority granted in the charter for traditional programmes and there exists no provision in the Universities Act (1985) for a private investor who is interested in ODL only.
Financing

Education worldwide is funded through various means. In Kenya, education is funded by the central government and local government, private sector, NGOs, households, communities and development partners. The government expenditure on education and training, excluding the share by households, has ranged between 5 and 7% of GDP. At the national level, the recurrent government expenditure on education has been higher than any other social sector at 73% of the sectors budget allocation. The absence of an open and distance education department at the Ministry of Education, however, does make it difficult to give the programmes necessary attention in terms of their budgetary requirements.

Education being an important exit route out of poverty and while the government has put efforts to meet the high demand for education in order to embrace the achievement of Economic Recovery Strategy (ERS), Education For All (EFA) and Millennium Development Goals (MDGs), this has not been fully realised through the conventional method of learning. The large numbers of candidates who cannot continue to the higher education level in the country constitute a waste of human capital. This is a big challenge that requires the government to come up with intervention measures that is, the need to have a government policy on financing education through budgetary allocation, student loans, cost recovery and partnership must take ODL into account. In view of these challenges the government needs to articulate a financing policy in ODL.

Human Resources Development

Human Resources Development has broad needs that must be accomplished for the successful administration of ODL in the country. The human resources required includes professional, technical and administrative personnel. Initiatives that have been made by private and public institutions have involved in-house training and production of materials.

In order to bridge the gap in material requirements, local institutions have sourced materials from outside. Despite the initiatives that have been put in place, the tertiary institutions have not developed specific programmes for producing professional distance educators. There are no ODL professional programmes leading to recognized certificates, diplomas and degrees in Kenya. Execution of the ongoing ODL programmes has largely relied on staff in the conventional mode that had no formal training in ODL other than on-the-job training. In order to address the issue of skilled personnel, a policy in the field of ODL is required to provide training guidelines.

Quality Assurance.

The objective of Quality Assurance is to establish, maintain and improve standards. Quality assurance will ensure that there are qualified and competent facilitators, appropriate instructional materials, a conducive environment for teaching, teaching suitable curriculum, administrative systems, and acceptability of the graduates of the programme in the job market. Quality Assurance encompasses external as well as internal activities. It is therefore important to have a policy that would assure quality and guide standards in ODL programmes in the country.

Collaboration and Networking

There is no national body to coordinate ODL programmes which are provided by various local and external learning institutions. Due to lack of coordination agency, it is very difficult to audit and to provide informed advice to the consumers of the institutions. The need for collaboration arrangements with external providers is the need to develop ODL programme materials through a consortium by collaborating and networking with different providers in order to benefit from experiences of other providers.
Recommendations

To address the challenges, the Kenyan government needs to develop a national policy governing open and distance education in the country and take the following into account: work closely with other players to ensure the availability of infrastructure that offers an enabling environment for the development of ODL; facilitate the establishment of different media, especially radio and television, to be used in delivery of ODL programmes; enhance use of the internet as a communication medium in ODL; encourage provision of mobile, including digital, library services with priority to disadvantaged areas; establish a National Open University to enhance access to university education in Kenya; and work with other providers to ensure proper coordination of ODL programmes in the country.

The government will also need to make budgetary provision for ODL; mobilise resources for development of infrastructure and programme related costs. Facilitate the training of ODL personnel by ensuring that all institutions offering ODL have a clear policy on human resources development. The government should also establish a Directorate of Open and Distance Learning (ODL) within the Ministry of Education responsible for education to coordinate the implementation of ODL; institute mechanisms for monitoring and evaluation; and encourage the providers of ODL programmes to collaborate and network with other institutions while operating within the legal provisions.

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THE ROLE OF THE NATIONAL OPEN UNIVERSITY OF NIGERIA IN PROVIDING ENHANCED QUALITY EDUCATION FOR THE WORK AND LEARN STUDENT.

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Abstract
In Nigeria, it is a general belief that the standard of education is falling. This is sequel to liberalization policy of the federal government on education, poor teachers salary, poor funding, obsolete and inadequate teaching and learning facilities coupled with irregular supervision of teaching and learning activities. With these concerns, it is certain that the commitment of the educational institutions in ensuring that there is quality assurance in service delivery would be hampered. It is also likely that institutions of learning will produce ill-equipped students who will eventually turn out to be poor products in the society. With the establishment of the National Open University of Nigeria (NOUN) and the recognition given to the already existing open and distance learning institution in Nigeria, there is a new approach to teaching and learning activities. As a single mode open and distance learning institution, the National Open University of Nigeria was specifically established by the federal government to ensure that there is highly accessible and enhanced quality education in Nigeria. Present on record that substantial population of students in this institution are known to be working and learning at the same time. This paper therefore discusses the characteristics of the work and learn student population, their educational needs and the processes that are involved in providing quality education for them the National Open University of Nigeria. The implications of this in the development of education in Nigeria would be discussed while necessary suggestions for improvement would be mentioned.

Introduction
Open and Distance Learning (ODL) has over the centuries developed from a modest and inconsequential beginning through correspondence course to a full-fledged modern day technology- facilitated, flexible and learner- driven self- directed learning (Jegede, 2005:3). As a field of human endeavor, ODL requires a well trained crop of high quality human resources to operate, manage and sustain it in order to provide effective and efficient instructional delivery and other services to learners who are often in locations that are remote from the institution or instructional facilitator.

In the Open and Distance Learning system, arrangements made in such a way that people who are already in an employment can study. By this form of learning, Jegede (2005:4) observed that students will enjoy the opportunity of working and learning at the same time without one activity negatively affecting the other. It is also a reality for such a group of learners who are aptly regarded as work and learn students to move from one level of education to another. According to Ipaye (2007:56), progress will, however, be at individual's pace, ability and capability. Work and learn can also be regarded as a way of exploring the synthesis between the theories, conceptual frameworks in the study materials and work-based practices which all put together can constitute veritable opportunity for students to acquire enhanced quality education.

The task for learners to combine work with learning be an exciting opportunity for them to get quality education without leaving the work place. According to Ipaye (2007: 8), programmes that are built on skills and knowledge are the mainstay in ODL. This is a reality in the Schools and Study Centres of the National Open University of Nigeria (NOUN). Generally, the learners' focus is to acquire skills from their studies which they can subsequently apply in their place of work or business. This could be part of the reason Ogidan (2007:8) stated that, the fact that Open and Distance Learning is flexible and accommodates a large number of students, could be one of the reasons the federal government of Nigeria established NOUN to provide access for thousands of eligible applicants who have difficulties in gaining access to conventional Universities. This circumstance in Nigeria also made NOUN to introduce courses that are relevant to market needs thereby creating access for worker- students of different categories.
Factors affecting quality education in Nigerian universities

Institutions of higher learning, particularly the conventional universities, have become helpless in solving the problem of falling standard of education (Ipaye, 2008:12). Invariably, according to him, most of the graduates from the higher institutions are ill-equipped, poorly trained and lack the relevant skills and knowledge that are needed in the workplace. Utomi (2006:6) enumerated the following as being the reasons for the falling standard of education in Nigerian universities:

- Inadequate funding: He stated that lack of adequate funding started from the military era and it led to the following inadequacies in society:
  - Lack of equipment
  - Poor maintenance of infrastructure
  - Poor remunerations for teachers and over employment
  - Low morale
  - Poor economic situation in the country.
  - Incessant industrial action
  - Indiscipline on the campuses
  - Disrespect for teachers

- Brain drain as a result of poor remuneration: This also eventually degenerated to:
  - Poor quality of products from primary/secondary schools who are eventually pushed to the tertiary institutions.
  - Examination malpractice.

Poor quality education acquired also explains why many employers consider most graduates unemployable. Those who are lucky to get employed have to be retrained in order to meet the challenges of their new jobs. This is sad because the value of education acquired is being questioned by these training and re-training exercises. However, NOUN epitomises a shift in paradigm where learners are able to combine work and study in order to acquire an enhanced quality education. The process of education in ODL is shifting from the conventional method where learning activities are carried out through books and face to face lecturing which sometimes makes learning ineffective and teacher-centred rather than learner-centred. The mode of learning delivery in NOUN is already addressing this by ensuring that quality education is enhanced among the learners.

Benefits of quality education

Learners have a lot to benefit from quality education, particularly when they are able to stand on their own in rendering services that add productive value to their jobs in their places of employment. Fjortoft (1996:16) reported that work and learn experience improves persistence and commitment to acquiring functional skills. Similarly, Mealy and Loller (2000:28) revealed that the value of education acquired is being questioned by these training and re-training exercises. However, NOUN epitomises a shift in paradigm where learners are able to combine work and study in order to acquire an enhanced quality education. The process of education in ODL is shifting from the conventional method where learning activities are carried out through books and face to face lecturing which sometimes makes learning ineffective and teacher-centred rather than learner-centred. The mode of learning delivery in NOUN is already addressing this by ensuring that quality education is enhanced among the learners.

Keegan (1998:5) had earlier stated that work and learn experiences complement learning by providing direction and feed back which eventually culminates in meaningful self development.

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NOUN’s Vision and Mission

Specifically, NOUN’s vision and mission depicts the mandate of providing access and ensuring quality in the educational services rendered to students. Scholarly distinction is promoted in all its ramifications so that graduates are products everybody can be proud of any time and any where. The Vision and Mission statements of National Open University of Nigeria are therefore stated below.

Vision

To be regarded as the foremost University providing highly accessible and enhanced quality education anchored by social justice, equity, equality and national cohesion through a comprehensive reach that transcends all barriers.

Mission

To provide functional, cost effective flexible, learning which adds life-long value to quality education for all who seek knowledge.

Characteristics of work and learn students in NOUN

Interactions with the NOUN work and learn students show that they have some common characteristics as follows: They

- value wisdom.
- seek to socialise, particularly in tutorial classes
- are emotionally flexible
- are mentally flexible
- exhibit goal-directed behaviour
- often work with a set plan
- set aside a special time for learning
- prefer simple, explicit, structured learning materials
- possibly feel a sense of isolation but not abandonment

Table 1: Work - and - Learn NOUN Student Distribution

<table>
<thead>
<tr>
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<th></th>
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</thead>
<tbody>
<tr>
<td>17-22</td>
<td>51</td>
<td>1,480</td>
<td>4,398</td>
<td>5,929</td>
</tr>
<tr>
<td>23-27</td>
<td>572</td>
<td>4,869</td>
<td>9,952</td>
<td>15,393</td>
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<tr>
<td>28-33</td>
<td>1,933</td>
<td>7,401</td>
<td>10,495</td>
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<tr>
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<td>1,920</td>
<td>6,057</td>
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<td>2,055</td>
<td>6,198</td>
<td>6,827</td>
<td>15,080</td>
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<tr>
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<td>1,773</td>
<td>5,017</td>
<td>5,160</td>
<td>11,950</td>
</tr>
<tr>
<td>49-53</td>
<td>939</td>
<td>2,568</td>
<td>2,300</td>
<td>5,807</td>
</tr>
<tr>
<td>54-58</td>
<td>391</td>
<td>765</td>
<td>657</td>
<td>1,813</td>
</tr>
<tr>
<td>59-63</td>
<td>110</td>
<td>71</td>
<td>148</td>
<td>329</td>
</tr>
<tr>
<td>64-69</td>
<td>27</td>
<td>20</td>
<td>47</td>
<td>94</td>
</tr>
<tr>
<td>Above 70</td>
<td>11</td>
<td>16</td>
<td>24</td>
<td>51</td>
</tr>
<tr>
<td>Total</td>
<td>9782</td>
<td>34462</td>
<td>47115</td>
<td>91,359</td>
</tr>
</tbody>
</table>

Table 1 and Figure 1 above show both tabular and graphical expressions of the population of National Open University of Nigeria students. Figure 1 displays the students' population on the basis of age in the academic sessions of 2003/2004 and 2007/2008. Students in the 2003/2004 and 2005/2006 had written some of the university examinations while students in the 2007/2008 had done their matriculation. But some of them are still going through the registration exercise and as such have not written any examination. This group of students have registered and collected their study materials. The table and figure show that the majority of the work and learn students in NOUN are between the ages 23-48 years while students in ages 17-22 are more in number than students in ages 54-69. More male students are identified to be involved in the work and learn programme than female students.

Table 1 and Figure 1 are clear indications that students are combining work with studies at the same time. However, the number of the mature work and learn students is more than the number of the students who are relatively young and just graduating from the secondary schools. As young as they are, they combine study with work in order to care for themselves and at the same time improve their educational standard.

The role of NOUN in providing enhanced quality education

At present, NOUN is the only federal government established single-mode tertiary institution in Nigeria that is dedicated to quality open access education through distance learning (Jegede, 2003:10). Management practices in NOUN are strictly and consistently aimed at achieving quality education which takes into cognisance the perspective of what quality education should be on one hand, and on the other, synchronises the effort and aspiration of the Nigerian nation which is clearly stated in the nation's educational policy. In specific terms, the National Open University of Nigeria is playing a good role by paying attention to the following important areas that can enhance the quality of education among the work and learn student population. The areas are:

Academic interactions

- Use of self instructional learning materials through access devices and learner activities
- Use of Tutor-Marked Assignments
- Inclusion of tutor comments in the assignments
- Introduction of individual and group project
- Introduction of practicals and field work
Academic support services

Academic Support Services are rendered to the students to provide guidance in regulating or checking students’ activities in the following areas.
- Inadequate level of students preparedness
- Poor study and reading skills
- Poor time management skills
- Pressure of time (adult learners are on jobs and family obligations)
- State of isolation, where there is no peer pressure
- High level of anxiety/frustration
- Bad choices of programmes/courses
- Readability and assimilation level of course material
- Nature and level of assignments

Regular interaction with the students.

NOUN ensures that there is regular interaction with the students either by phone, face to face or through the use of internet which eventually helps learners to achieve the following.
- Get introduced to the course effectively,
- Divide course work appropriately so that studies get better organised
- Make studies and learning to be more stimulating
- Correct learners when they go wrong
- Reinforce learning with encouragement
- Apply learning to real or hypothetical problems
- Revision of course material becomes easier
- Build purposeful relations between learners and the institution
- Provide contact between learners, the tutors and the institution (tutorial, laboratory work, etc)
- Provide communication between the learners, the tutors and the institution (assignments, project)
- Aid continuous and uninterrupted non-time bound interaction with counsellors during which the counsellors provide help to students on issues like, taking appropriate decisions about time management, solving concerns and encouraging self motivation.

Media for counselling

The media for counselling are effectively serviced and utilised by the university. Through each medium, appropriate support staff, tutorial facilitators, counsellors, information technologist and library staff provide information twenty four hours and seven days in a week to students. They also help to monitor and encourage students in what they do from time to time. The available functional media are as follows:

- Face to face interaction
- Telephone contact
- Writing letters
- Audio cassettes
- Video CD
- Radio broadcast
- Online synchronous mode of interaction
- Online asynchronous mode of interaction
Work-Place Experience of NOUN Students

Interactions with the students online and in face-to-face during counselling and tutorial facilitation revealed that learning through work is an exciting opportunity for them to get university education without leaving the workplace. It affords student-workers the opportunity to build on existing academic knowledge and utilise such knowledge in work-related functions.

Most learners enjoy the unlimited opportunity of learning at their own pace and place while the possession of study materials makes it possible for them to decide on when to do self-learning through the materials that have been specially prepared for them. They are also exposed to the use of electronic media like radio, television, audio-video, telephones and computers. Just as they are routinely exposed to elaborate support services, they are acquainted with the modern techniques of evaluation. The students are however encouraged to work in line with the procedure of earning cumulative credits that will lead to the award of a degree.

The mode of learning in NOUN programmes encourages students to go through their study materials and apply the knowledge at workplace, which makes them to be self-referral in their studies. The knowledge acquired is enhanced because they have the natural tendency to grow and evolve through the processes of working and learn in ways that they can develop their full potential. Enhanced quality education inspires, motivates, and guides the students to learn. An educational approach that teaches students to be self-referral involves a process where students discover that the basis of all disciplines is consciousness and as they grow in consciousness and acquire deeper knowledge they come to understand things in terms of themselves and how knowledge relates and connects to the world around them.

The students enjoy the use of study materials with simple language expressions that bring inspiration, motivation and guidance to them by a holistic approach. For example, if students recognise creativity, intelligence, professional expertise, artistic productivity and other such qualities, they will naturally use such in developing useful qualities in themselves.

The students are receptive, and so intrinsically motivated to learn instead of being extrinsically motivated solely by grades or peer pressure to learn. Enhanced quality education makes students to enjoy learning. Deeper understanding of learning materials along with practical application by them creates new possibilities for students. They therefore experience a sense of accomplishment and success.

Enhanced quality education also has the goal of creating enlightened students. It also gives room for students to develop to their full potential as being accomplishes this goal of enlightening the student when they have improved in mind and learning. A student is truly educated when he is able to experience knowledge in terms of himself and to express it in ways that are of value to himself and to others. When others appreciate his work, then a student feels fulfilled because he has achieved something worthwhile for himself and society.

Implications for the development of education in Nigeria

Enhancement of quality education through the educational activities of the National Open University of Nigeria will have a far-reaching implications for the development of education in Nigeria. The method of service delivery particularly the work and learn student population will help the society to re-gain the confidence once reposed in the university as a citadel of learning. The human products would be able to put the knowledge they posses into practical use.

Information technology would not only be embraced but become more crucial in the dissemination of knowledge. This is so since it will be a mark of positive response to the demand of the modern age that applicants must be computer literate and be able to use computer skills in diverse ways to solve problems.
With enhanced quality education, the modern day method of teaching and learning would become functionally learner-centred to the extent that learners would have the responsibility of deciding what knowledge they want to acquire thereby dictating what they want to learn. It may have a drastic effect on the curriculum since subject areas that are obsolete would be jettisoned and replaced with functional knowledge that can stand the test of time while market demand will take over what the curriculum should offer as subject areas for teaching.

If enhanced quality education is integrated in the development of study materials backed up with online guidance, learning would become easier. With this, learners will be able to rely on and return to their study materials any time they need guidance instead of concentrating on face to face lecture method of receiving instruction. With this new approach to disseminating knowledge, learners would be able to enjoy self-referral instead of running from pillar to post. Educational institutions, administrators and educators have no option than to embrace the procedures for providing enhanced quality in Nigerian education. Each level of the Nigerian educational system must be equipped with the processes and ingredients of quality measures which would make the education more functional, meaningful and relevant to the needs of the society generally but particularly reflect the demand in the work place.

Suggestions for improvement

In addition to the various innovative efforts in operation by NOUN towards achieving an enhanced quality education for the students, it is suggested that NOUN should continue to carry out constant review and regular assessment of the following:

- Quality of the various academic programmes.
- Quality of the course materials, course writers and ancillary staff.
- Quality of the support services (academic, administrative).
- Quality of the media inputs and the medial-mix.
- Quality of the interactions between learners and university support staff.
- Culturally specific learning materials.
- Level and types of technology required and used for service delivery.

Moreover, the need for student support should be emphasised in interpersonal communication. This is important since it is obvious that responsiveness reduces the sense of isolation that a distance learner can feel. The frequency and content of the contact between students and the facilitators of learning strongly connects the learners to studies. Student Counsellors’ contact with the learner through written, the telephone, faceto, or electronic demonstrate concern for the learners’ academic welfare. The University policy should further encourage the learners to combine work with study since such an arrangement is strategic, helpful and integral to the process of enhancing the quality of education imparted to the students. It can also be helpful in making learners to endure the rigours of studying and work and learn is a good and effective strategy for manpower development, and which also enhances quality education, the conventional universities and other tertiary institutions would do well by embracing and incorporating this new trend into their development plans.

Conclusion

It is from enhanced quality education that meaningful education can be derived. If education must therefore be meaningful and useful in solving human problems as they arise, it must be of very good quality which is characteristic of those work and learn students of the National Open University of Nigeria enjoy. With this kind of pragmatic system integrated into the students’ learning activities, NOUN is poised to continue to assist in raising the standard of education in Nigeria and become a good model to other institutions particularly the conventional universities.
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SUB THEME V

COLLABORATION AND PARTNERSHIP IN ODL: MODELS, CHALLENGES AND RESPONSES
COLLABORATION BETWEEN OPEN AND DISTANCE LEARNING INSTITUTIONS AND CONVENTIONAL INSTITUTIONS: NEEDS, CHALLENGES AND BENEFITS

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Abstract

Research has shown that for Open and Distance Learning (ODL) institutions to succeed generally, collaboration and ethos of partnership have emerged as important strategies. Open and Distance Learning (ODL) institutions help provide mass access, as well as affordable university education, whilst providing succour for those yearning for placement in conventional, face to face (F2F) universities, but unduly disenfranchised. Collaboration is needed in various facets of the ODL processes: such as course material development, admissions, examinations, information and communication technologies applications in ODL and in aspects of course delivery such as tutorial sessions, and provisions of facilities for laboratory activities. The extent to which these can be effectively actualised depends on effective collaboration and partnership between ODL institutions and F2F institutions aided by technologies. Thus, by working collaboratively, ODL institutions can provide more effective services to their students and thereby satisfy the educational needs of the society. Despite the benefits and success, effective collaborative practices are not without challenges. It is therefore worthwhile to explore the areas of needs, challenges therein and benefits derivable from collaboration between these types of institutions.

This study attempts to establish the need for collaboration between ODL institutions and conventional universities. It focuses on areas such as course material development, examination, course delivery - tutorial sessions, provisions of facilities for laboratory activities, information and communication technologies applications in ODL. Based on the results, suggestions are advanced for ensuring best collaborative practices for open and distance learning.

COLLABORATION ENTRE INSTITUTIONS D’ENSEIGNEMENT À DISTANCE ET INSTITUTIONS CONVENTIONNELLES: BESOINS, DEFIS ET AVANTAGES

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Résumé

La recherche a démontré que, pour la réussite des institutions d’enseignement à distance en général, collaboration et l’esprit de partenariat sont des stratégies importantes. Les institutions d’enseignement à distance permettent à une multitude de gens d’acquérir l’enseignement supérieur à des coûts abordables, tout en apportant des solutions à ceux qui rêvent d’admissions dans les universités conventionnelles en face à face, mais n’y arrivent pas. La collaboration est nécessaire à divers niveaux de processus d’enseignement à distance: développement de matériaux de programmes, admissions, examen, applications des Technologies de l’Information et de la Communication (TIC) en enseignement à distance et au niveau de l’enseignement (séances de travaux dirigés, et de la mise à disposition d’équipements et les activités en laboratoire. Pour vraiment arriver à ce niveau, il convient de collaborer et de travailler partenariat entre institutions d’enseignement à distance et institutions conventionnelles à l’aide des technologies. Ainsi, en collaborant, les institutions d’enseignement à distance peuvent arriver à être efficaces dans la prestation de services à leurs étudiants et, donc, satisfaire aux besoins dédiés dans le domaine de l’éducation. Malgré les avantages et le succès qu’elles peuvent apporter à l’enseignement à distance les pratiques de collaboration comportent des difficultés. Par conséquent, il convient d’examiner les besoins, les défis et les avantages de la collaboration entre ces types d’institutions.

Cette étude essaie d’établir la preuve empirique de besoins de collaboration, des difficultés et des avantages, en s’appuyant sur le cas de la National Open University of Nigeria (NOUN). Les données ont été recueillies à l’aide d’une enquête auprès d’un échantillon du personnel enseignant et administratif de la NOUN et de certaines universités conventionnelles et autres établissements dispensant des enseignements et fournissant des services à la NOUN, avec un accent tout particulier sur les processus suivants: développement de matériaux de cours, admissions, examens, enseignement – séances de travaux dirigés, mise à disposition d’équipement pour activités en laboratoire, applications des
Introduction

Open and Distance Learning in Nigeria

Open and Distance Learning (ODL) is in vogue all over the world, and there is a growing realisation that to succeed, there should be effective collaboration between ODL institutions and their conventional face to face (F2F) counterparts. This assist towards achieving the Millennium Development Goal (MDG) and providing Education For All (EFA) initiatives.

Open and distance learning in Nigeria dates back to 1940s, with the commencement of correspondence studies with various distance learning institutions in the United Kingdom.

As far back as the early 1960s, there was the realisation of the important role of education as a tool for speeding up socio-economic development in Nigeria. This, according to Adeoye and Ikpe (2006), “spurred the government to search for alternative models of providing education for the populace other than the traditional conventional system which was rather restricted and limited in scope”. This was also necessary for those who had experienced some form of formal education in the past and needed to update their knowledge and ultimately improve their productive capacity, more so that the nation was grossly lacking in appropriate skills and knowledge amongst the ever-growing workforce, hence the advent of the NOUN as a remedial measure.

The idea of an open university system for Nigeria as a separate and distinct institution with a national spread was subsequently reflected in the National Policy on Education by 1977. The document stated emphatically and without ambiguity that “maximum efforts will be made to enable those who can benefit from higher education to be given access to it. Such access may be through universities or correspondence courses, open universities, or part-time and work-study programme”.

The system which encompasses education for all, education for life, self learning etc forms the bedrock of the National Open University of Nigeria (NOUN).

Present Higher Education in Nigeria

Nigeria has one of the largest university systems in Sub Saharan Africa, with over ninety (90), state, private and federal institutions. The growth witnessed in this sector has been remarkable but as observed by Hartneth and Strasser (2004), it is not yet ‘uhuru’, since they reported that “long term brain drain, combined with insufficient output” has not left the university system any healthier. The need to seek alternative measures for the current demand for placement in tertiary institutions was further stressed by Ojerinde (2008), who had shown that in the year 2008, over one million candidates participated in the University Matriculation Examination, but only two hundred thousand candidates get placement into the universities in view of the restrictions imposed by their limiting capacities.

In response to strong social demand, the federal government had always taken steps to expand access to tertiary education in Nigeria. Some of such policy actions include:
  - an increment in the number of federal/state/private universities
  - introduction of quota system in admission, to address regional/class imbalance, and
  - the introduction of open universities, such as the National Open University of Nigeria (NOUN).
Establishment of the National Open University of Nigeria (NOUN)

The National Open University was formally established on the 22nd July, 1983 with the view of becoming the fountain head and spring board of modern open and distance education in Nigeria. The institution was, however, suspended by General M Buhari on April 25th 1984, though the act establishing the institution was not abrogated.

A workshop on evolving a national policy on distance education in Nigeria held from the 27th to 29th September, 2000 in Abuja and was a major turning point for ODL in Nigeria. At the end of the workshop participants evolved a ten-year plan for rejuvenating distance education in the country. Since then, a number of things have happened which include:

- The enactment of a National Policy on Open and Distance Education
- The establishment of the National Virtual Library and
- Re-establishment of the National Open University of Nigeria, amongst other activities.

The National Open University of Nigeria was thus re-born on the 1st day of October, 2002 by President Olusegun Obasanjo.

Target Clients

The National Open University of Nigeria (NOUN) is designed to provide access to all Nigerians who yearn for education in a manner convenient to their circumstances. It will cater for the continuous educational development of professionals such as teachers, accountants, bankers, lawyers, doctors, engineers, politicians, self employed businessmen and women. The clientele range is elastic and dynamic, so the programmes are constantly reviewed to meet ever-changing needs.

Method of Delivery

The best way to reach a learner is to use the technology the learner already has or that which can be made readily available to him/her. In view of this, NOUN has adopted the following methods which are considered suitable for our circumstances.

- The basic method of delivery employed by NOUN is the use of printed materials. These are specifically and carefully developed course manuals by tested experts in the various fields of study. Unlike the conventional textbook, these materials are specially designed to suit the peculiar circumstances of the distant learner and invariably replace the lecturer in a face to face system. Other methods of delivery adopted include:
  - The use of audiotapes, videotapes and CD-ROMs which complement the print materials, and in the not too distant future,
  - Special and well scheduled radio and television programmes are expected to play a major role in the delivery of programmes and to this end, NOUN had recently taken delivery of an FM radio transmitter which has been doing some test runs on 105.9 MHZ, in the Lagos area. There are plans to acquire shortwave (SW) transmitters for national coverage. The government had also ceded the educational TV at Tejuosho-Yaba, Lagos to the university.
  - NOUN will as such take full advantage of ICTs to provide learners with access to internet via the use of VSATs, and microwave radio at each study centre. Currently over sixteen study centres have been linked with facilities for video conferencing, which will be extended to all the study centres spread all over the country eventually.

It is thus obvious that for the NOUN to achieve its goal, it must partner with a number of institutions, bodies and organisations. This symbiotic relationship is expected to be the tonic for successful implementation of its programmes.
Collaboration

The importance attached to collaborative and partnership practices need not be overflogged. According to Gupta (2006), “the open system practices ethos of sharing and collaboration by pooling intellectual and physical resources”. This, he reiterated, helps to “avoid reinventing the wheel, keep cost low, enhance reach, impart high quality education with global needs-driven curriculum, replicate best practices and facilitate learner mobility”.

The Study

This study focuses on the need for collaboration, challenges and benefits therein, in this practice, with the National Open University of Nigeria (NOUN) in focus. Data was collected by using structured and semi structured questionnaires designed and validated by the researchers. The population from which the sample was drawn consists of academic staff of the National Open University of Nigeria and some tutorial facilitators. A total of twenty five academic staff consisting of Course Coordinators and Programme Leaders and some Tutorial Facilitators who are usually engaged from conventional universities were randomly selected and administered with the test instrument. The choice of these categories of staff was advised by the fact that they were directly involved with collaborative practices in NOUN. Twenty two of the questionnaires were successfully completed and returned and were used for analyses.

The samples were both male and female, with a minimum qualification of a Master’s degree in their respective fields. They also had varied experiences, ranging from two (2) to over twenty (20) years of teaching at the tertiary level, both in conventional and the open and distance learning institutions. Duties performed by these staff included:

- course coordination
- tutorial facilitation
- admission exercise
- examination duties (collation of questions, setting of examinations, e.t.c.)
- course material development/writing
- monitoring of course material development
- performance of clerical/administrative duties.

Result of the Study

The general challenges encountered in the course of discharge of duty in ODL Institutions

For this item, the respondents were of the view that the challenges encountered included:

- adequately satisfying the learning need of the learner
- lack of sponsorship towards participating in conferences
- delays with production of necessary course materials/lack of same
- inadequate funds/facilities, lack of research grants
- issues of motivation
- inadequate manpower
- poor remunerations
- erratic power situation
- unconducive environment for real academic work/hindering research work
- regimental work period
- delays with payments to course writers/facilitators/examination script markers
- lack of understanding of ODL by a majority of the public
Areas of Need

The respondents identified the following areas of needs for collaboration between ODL and conventional institutions. They include:
- content experts, to assist with course material development/authorship/editing and updating of course materials
- examiners/supervisors
- script markers/moderators
- unlimited access to online course materials from other institutions
- sourcing for relevant materials and published course materials from sister institutions for adoption
- organisation of regular workshops/induction courses for course material developers and facilitators
- prompt remuneration and motivation of course material developers
- regular updating of staff through participation in international workshops, conferences and seminars
- sourcing of adequate facilities for practical sessions
- collaboration in curriculum development

Benefits

The respondents recognise the following benefits derivable from collaborative practices between the two classes of institutions. They are:
- reaching the unreached
- manpower development through usage of staff as developers/writers and tutorial facilitators
- enhancing standardisation of educational systems and maintenance of academic quality
- promoting the adoption of true lifelong learning
- production of learning materials of high quality
- encouraging interaction between students/staff of the two divides
- useful in research situations, since one could serve as a control during comparative analysis of either system
- facilitates exchange of current academic ideas and personnel as may occur during sabbaticals leave.
- use of laboratories, lecture theatres and offices of the conventional institutions
- increase access to qualitative higher education
- reduction in cost of production and ODL delivery

Challenges with Course Material Development

The common challenges in the development of course materials as posted by the respondents are:
- time constraint
- dearth of senior academics that could assist material development
- identifying potential writers
- follow up/monitoring of course writers to ensure delivery
- issues bothering on copyright and royalties to writers
- delayed remuneration to course developers, lack of motivation and incentives
- unwillingness by many to participate
- lack of current literature for use
- erratic power supplies
- unavailability of regular/easy access to the internet
- issues of intellectual property rights
- slow pace of writing by many developers/delay in publishing
- substandard products from some authors (quality assurance)

Evaluation of Learning Outcomes

The learning outcomes of students in the NOUN are evaluated through the following means:
- Self Assessment Exercises (SAEs)
- Tutor-Marked Assignments (TMAs)
- End of Semester Examinations (ESE)
- Student Industrial Work Experience Schemes (SIWES)
- Practicals
- Projects

Challenges with Assessment

The respondents were able to identify the following challenges encountered with regards to assessment of students learning outcomes:

- undue delay with processing of results
- ambiguity with registration of courses for examination
- delivery of question papers to various centres
- leakage of examination questions
- examination malpractice/impersonation at venues
- failure on the part of some students to properly write their matriculation/identification numbers on answer scripts
- disobedience of rules and regulations governing conduct of examinations by some students
- missing examination results/TMAs
- incomplete results
- enormous cost of conducting examinations
- lack of proper/adequate supervision of facilitators assessing students
- lack of feedback to students on the outcome of graded TMAs
- inadequate facilities for conduct of examinations
- use of ambiguous/substandard questions
- organisational lapses- non inclusion of some question papers e.t.c.

Suggestions

After a careful perusal of the inputs from the respondents, the following suggestions are advanced. The researchers are of the opinion that these may advance the frontier in open and distance learning.

- ICTs should not only be considered, but used as a tool for improved productivity and interactivity in open and distance learning, since with satellite technology and video conferencing, OFL institutions can collaborate in the dissemination of knowledge, e.t.c.
- As opined by Gupta (2006), other avenues of collaboration may also be exploited for enhanced productivity, such as with governmental bodies, corporate bodies, banking/insurance institutions and Non Governmental Organisations.
- Aside from domestic conventional universities, collaborative activities should be encouraged with foreign universities which could lead to the sharing of infrastructure, ICTs, and intellectual resources.
- The enactment of a national policy on distance education should be on the front burner. This could facilitate the establishment of a ‘National Distance Education Council’ that would serve as a regulatory body for open and distance learning.
- ODL institutions should strive towards self reliance by engaging in such practices that may generate funds through sponsored projects, consultancy and detour as much as possible from bogus projects.

Conclusion

This study has established the needs for collaboration, challenges and benefits, therein, with the National Open University of Nigeria (NOUN) in focus.

Open and distance learning is the vogue. Its benefits are obvious. Like an adage which says ‘two hands can wash each other better than one’, the need for collaborative practices, not just between
ODL institutions and conventional institutions alone but with various corporate bodies, governmental/non governmental agencies should be encouraged. This will undoubtedly assist the university in no small measure towards realising its mission and vision.

References


BEYOND BRICKS, MORTAR AND UNIVERSITY TOWERS: 
RETHINKING DELIVERY SYSTEMS 
IN AFRICAN HIGHER EDUCATION

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Abstract

The researchers are participants in the Africa Higher Education Collaborative [AHEC], an initiative of the Institute for International Education’s Council for International Exchange of Scholars [CIES]. CIES has brought together a multinational and multidisciplinary group of twenty African participants representing Egypt, Kenya, Nigeria and South Africa through the AHEC initiative, with a view to providing an effective vehicle for comparative analysis of cross-cutting issues impacting upon access to African higher education.

The AHEC group will be working together over eighteen months, pursuing inquiry along several themes, all centred on the issue of access. The group involved in this presentation is a sub-group whose focus is on ‘Improving equity and access to higher education by improving delivery systems of higher education, including pedagogy, methodologies and didactics’. Within this theme, the group has defined its research topic as follows: Beyond bricks, mortar and university towers: rethinking delivery systems in African Higher Education.

Our objective in this presentation is to share work in progress on the project, and to illuminate what the project seeks to achieve eventually. Our ultimate intention is to develop richly textured case studies of our respective countries so that we have a solid basis for comparison, distilling best practices, and making recommendations for the future development of delivery systems in Africa.
Introduction

We begin from the premise that achieving equity of access and of outcomes remains one of the central challenges confronting higher education in Africa. This goal is animated by a concern to advance development, with positive outcomes for economy, democracy, and social justice. In much of Africa, where the economic divide is glaringly wide, social inclusion of marginalised and under-represented groups in higher education is a vital political as well as moral imperative. However, even where access to marginalised groups is increased and participation in higher education widened, this is not consistently matched by equity of outcomes. One consequence of rapid expansion of tertiary enrollments is a negative effect on quality (http://siteresources.worldbank.org/EXTAFRREGTOPTEA/Resources/Constructing_Knowledge_Societies.pdf; Materu, 2007). A more complex and nuanced view of access and participation in higher education opportunities may be increased through appropriate economies and cost efficient strategies in the context of scarce resources (Koorts, 2000; Badat, 2005).

Governments and development agencies in Africa address the challenges of increasing access and widening participation are stymied by prohibitive costs of establishing, equipping and sustaining new higher education facilities in contact mode. Plainly a reliance on traditional forms and systems of higher education predicated upon costly physical infrastructure does not offer a sustainable avenue to increase access on the scale required. We therefore wish in the study to explore viable and sustainable alternatives in delivery systems that can extend the benefits of higher education across the continent. Open and distance learning offers tantalizing possibilities to widen access, reach the geographically remote and historically marginalised, and to extract maximum impact from the use of scarce resources, through the achievement of economies of scale.

Background and Context

There has been a massive expansion of higher education during the 20th and early 21st Century around the world. Africa has not gone untouched in the explosion. The countries in this study, namely Egypt, Kenya, Nigeria and South Africa, have also experienced massive increase during the same period. For example, the enrollment rates in Egypt for undergraduate studies grew from 484 206 in 1988/9 to 1 167 891 in 1998/9; in Kenya the undergraduates increased from 40 816 in 1996/7 to 49 400 in 1999/0; in Nigeria there was a growth enrollment from 6 707 in 1965 to 411 347 in 1998; and in South Africa the enrollment growth has moved from 303 000 to 736 000 students in 2006 (Said, 2003; Ngome, 2003; Jibril, 2003; Bunting & Cloete, 2007). Yet, Africa’s growth is relative and dwarfed by the growth experienced in other countries. For example, Clancy et al., (2007) report a staggering increase of up to two-thirds of age cohorts in the admission rates of many countries. What is it that makes African higher education to be severely stunted in this way? There are many factors that seem to inhibit massive growth in the continent’s higher education system, and some of these will be explored in detail in this study in order to gain better understanding of how these factors militate against growth and therefore what interventions would help to correct such a situation.

First, it is clear that countries with high participation rates also have a high upper secondary participation and completion rates. All levels of education system are related, and expansion in one level of the system causes pressure on the level of the system. African education systems are often characterized by a steep pyramid, most enrolment numbers can be found at the primary education level and only a very small fraction manage to reach and complete secondary education levels, let alone higher education (Caillods, 2004; Bregman, 2004). It can be expected that the problems experienced in the primary education sector as well as the
inability for many students to complete secondary education is a major inhibitor for participation rates in many African countries. In countries where secondary education participation rates are high, e.g. South Africa, the education system is bogged down by high levels of inequalities and only about 15% of students who graduate from high school qualify for higher education admissions (Department of Education, 2007).

The Case for Increased Access and Participation

It is trite to say that there exists a complementary relationship between higher education and economic development. Teferra & Altbach (2003) argued that higher education represents a key force in the modernization and development of African societies. Consequently, African countries have granted higher education a priority position in the national and regional planning processes. In pursuance of this, many African nations became signatories to the objectives identified at the World Conference on Education at Jomtien in 1990 where the declaration of Education for All (EFA) was proclaimed. These nations also subscribed to the pronouncement of the millennium development goals identified at the dawn of the twenty-first century, as the most pressing issues confronting our global society.

In Nigeria, the importance of higher education was emphatically and unambiguously expressed in the National Policy on Education (1977, revised 2004) that “maximum efforts will be made to enable those who can benefit from higher education to be given access to it.”

In South Africa, one of the main tenets of higher education policy and planning is to increase participation and success rates. This follows from the primacy of race as an issue in South African history and politics, and poverty as a defining factor in social and economic relations (Hall, 200).

Higher Education in Africa - Challenges

Contemporary social realities do not reflect the policy expectations of the higher education sub-sector in Africa. The African higher education landscape is besieged by a myriad challenges including poor technology, weak policy choices, lack of follow-through in policy implementation, extreme corruption, and severe under-funding. Despite these, the role of higher education in socio-economic development of nations and individuals remains incontrovertible (Bloom, Channing and Cann, 2001).

It is clear that the higher education sub-sector in many African countries is at crossroads, and has been weakened considerably when compared with the years of independence – 1960s-70s. This sub-sector has been consistently bedeviled by a myriad of challenges such as poor technology, weak policy choices, lack of follow-through in implementing policies, extreme corruption and severe under-funding (Easterly, 2005; Ilelede, 2005; Aigbokhan, Imahe & Ailemen, 2007). These challenges have grossly affected access to higher education in Africa in terms of quantity and quality.

Quantity features in the sense that huge proportions of qualified candidates are unable to access admission places due to institutional inadequacies to accommodate additional intakes. This is notwithstanding the fact that the existing institutions are already hard-pressed, and overstretched beyond their optimal capacities in terms of lecture and research facilities, qualified and competent personnel, hostel accommodation, libraries and laboratories, as well as, recreational and health facilities.

As a result, there is an upsurge of unsavoury cultural and unacademic practices such as cultism, prostitution, examinations malpractice, plagiarism etc in these institutions. In terms of quality, evidence from employers of graduates of higher education institutions (HEIs) indicates that there is palpable inadequacy in their competencies. A number of organisations have had to establish training institutions to retrain new graduates employed by them in rudimentary skills such as information technology skills, communication skills, logic and general knowledge,
in order to address their shortcomings (Obanya, 2005) is equally disheartening to note that a large number of these graduates remain on probation three years after recruitment. Thus, there is a need to revitalise and revamp the curricula and delivery systems of higher education systems in the country, and by extension, the entire continent, in order to empower them to be competitive in the fast pace era. This challenge is aptly captured by a World Bank Report on the subject:

In today’s global, knowledge-based economy, nations around the world are increasingly focused on generating human capital through a well-educated workforce. In Africa there is a dire need to better develop and use both human and financial resources more efficiently in order to secure equitable access to higher education among more diverse student populations in the region. Achieving this goal will require a collaborative effort that involves national commitment, regional collaboration and international cooperation. Furthermore, Africa-based research and analysis on related issues of access to higher education needs to be expanded in order to better influence policymaking throughout the continent. In the emerging knowledge societies, exponential growth in the quantum of knowledge produces a growing gap between those who have access to knowledge and culture and learn to master them and those who are deprived of such access as we strive to reduce the digital divide and other inequalities in access, must also reduce the ‘knowledge divide’ which is liable to grow exponentially. Training in new information and communication techniques requires a high level of education, and the art of navigating in an ocean of information. The future the knowledge societies therefore rests in large measure on the excellence of the training of teachers, mostly at the higher education level, whose tasks and functions are destined to become more diversified in pursuit, among other things, of the objective of education for all (2005).

The roots of the problems facing the higher education institutions in Africa are multifarious, though interrelated. The inability of higher education institutions to meet the rising demand for admission places is due, on one hand, to the changing context of higher education in the 21st century, which has greatly challenged the notion of single stream HE for life. The shelf-life of knowledge has contracted so sharply such that, everyone now requires some form of continuing education or another to update, re-tool, and/or re-skill existing knowledge in their specific vocational areas, in order to meet the challenges of the contemporary society. This has resulted in the necessity to re-enter HEIs to improve their knowledge and empower them to conform with the requirements of the contemporary globalized society.

Given the rising spate of demand for admission places, insufficient and uncertain budgetary allocations to HE and the incessant increase in recurrent and capital costs required to support its rapid expansion, it is easy to understand the scaled dimensions of the problems of access to higher education in Africa. The admixture of challenges bedeviling the system have made the institutions incapable of contributing significantly to socio-economic development in the continent through the production of high quality human resources in diverse fields, who can impact the economy positively.

Access and Participation

Admission to higher education in most African countries seems to be characterized by what Clancy et al (2007) describe as ‘inherited merit’. To start with, in small higher education systems, entrance will always be very competitive and advantageous to those with superior economic, social, and cultural resources. In such a situation, compensatory measures become necessary to close the distance between the academic level and the social handicaps faced by students from disadvantaged social backgrounds. This study will examine the various measures taken by the different higher education systems to do this, if any. In other words, what are the means through which higher education is distributed amongst the various social groupings in these societies?
The small post-secondary sector is not geared for a mass education system where a large population comes out of the school system underprepared. The small elite university system goes against the global labour market trends where most jobs require a post-secondary education system and even those that do not, education becomes a 'positional good', something whose value depends on how many others have it (Levy & Murnane, 2004; Dore, 1997). One way of distributing higher education widely in society is to grow the higher education sector, and yet the prevailing university type is very expensive to replicate and make it the main vehicle for massifying higher education. Ng’ethe et al (2008) is of the opinion that few African countries have actually been engaged with the issue of size and shape of their higher education systems. Any growth that occurs seems to be relatively unplanned and is merely a response from the supply side pressures. In a country like South Africa for example where there have been discussions about shape and size in the early 2000s it seems to have been about correcting the historical racial distortions of the current system rather than actually engaging with the ultimate growth needed.

Whilst traditional modes of provision have significantly improved in many countries, a system of elite higher education without the balancing force of mass higher education would not be politically or socially viable, and a system of mass higher education without the academic models and values of the elite institutions would be uneducationally and politically. The first thing that seems to happen in countries that have increased post-secondary education participation, is to provide educational opportunities that can be distributed to the different social classes. The second thing is to provide a flexible system which allows for individuals to enter and exit the system at different points and move vertically and horizontally. According to Ng’ethe et al. (2008), African higher education systems provide a binary system that differentiated institutions horizontally, but are delivered in two different institutional types. There are all sorts of complications that can be expected in such systems for example academic and vocational drift, isomorphism, articulation problems, etc. This study will seek to look at such problems created by a lack of undifferentiated systems as well as the possible effects of including another institution in higher education in order to increase participation levels.

Heterogeneity and Differentiation

In an expanded secondary education system, it can be expected that the outcomes will be extremely heterogeneous. A more diverse student population is likely to be distributed unevenly in a differentiated higher education system. All of a sudden there would be a group of students who are likely not to have considered higher education as a strong option in their lives. The students need a lot of support in admissions, registration, cost and financial assistance, personal counselling. In addition, many of them are already parents and would need support in this regard to be able to attend a college. Many are employed and will not have enough time for their studies. But many more would need considerable support in workplace connections as they will not have the contacts and networks that students from middle and affluent families have. Also, academic support and remediation seems to be very high on the list of things required for success in a massified higher education system. All these factors, when executed well, make a lot of difference in the effectiveness of an expanded and differentiated higher education system.

A differentiated system will only work when articulation and recognition of programme from one institution to another is in place and effective. African countries have attempted to tackle this matter through the establishment of National Qualifications Frameworks. However, engendering articulation is a far complicated matter beyond the limited powers of qualification frameworks. It involves multiple institutional and multiple sub-sets of educational systems, and system-wide information systems. On the other hand, articulation cannot be established from pilot information based on institutional partnerships. Uniqueness of each institution cannot be replicated on a national basis as there are just too many variables to make generalization impossible. For example Engineering means different things in different institutions and there is no way that articulation from one institution can be expected to work in another. Also, partnerships tend to rely on individual actors and they leave the institution, they often leave with their enthusiasm and sponsorship. So, there is currently no conceptual work on which to
build a new differentiated and articulated post-secondary system for many African higher education systems.

Finally, lessons from other countries show that it is becoming very difficult to plan growth in post-secondary education without incorporating the private sector. Private higher education has grown extensively in developing countries, including countries in Africa, and in many cases surpasses public higher education institutions. A great number of private higher education institutions seem to fall in the lower end of the higher education system, and this Kim et al. (2007) attribute to the treatment of private higher education as non-integral part of higher education system in many countries. These authors argue that all higher education, private or public is for public good and therefore funding, quality assurance, and all monitoring mechanisms must speak to a single system if this private investment is to be exploited for increasing higher education participation. In this study, this issue will be explored at length.

A Typology of Access in the African Context

Our first objective is to develop a conceptual framework to illuminate and interrogate different notions of access. Several barriers to access present themselves as challenges to be overcome. Among the more readily apparent, we distinguish between physical access, technological access, constituential access, prerequisites for access and epistemological access. In this section, we will elaborate on a typology of access as an analytical tool.

Physical access is characterized by lack of geographical proximity to higher education institutions. Higher education institutions in the African context are most frequently clustered in urban enclaves. Vast geographical expanses, which are mostly rural, do not have any higher education facilities in a number of countries. Accessing existing facilities close to urban centres often means travelling great distances by those who can least afford it.

Technological access is limited by several factors in the African context. Inequalities in income distribution result in a widening digital divide measured by the number and spread of telephones and web-enabled computers. The more affluent sectors of society enjoy the fruits of technological advancement through increased information and communication through a better quality life, diverse public services, more opportunities and greater wealth flowing from such advancement. Educational delivery and support systems increasingly rely on information and communication technologies for administration, information storage and retrieval, teaching and learner support. Sectors without access to new technologies are clearly at a significant disadvantage in accessing higher education opportunities optimally. Countries with low resources often have to spread these among diverse and competing demands, leading to dilution of available resources. Adding to the mix are antiquated hardware and software platforms, low bandwidth, and high costs of telecommunications.

The resultant effects are devastating as figures on the continent show. There is a widening gap in terms of per capita access to the internet. Socio-economic factors are the most significant in indicating limited access, with location (urban/rural), age, culture, background and levels of schooling all being exacerbating factors, suggesting a domestic divide between groups within countries. This leads us to the next category of typology, viz constituential diversity. Constituential access within the typology refers to the range of groups within society that are marginalised from accessing higher educational opportunities. This includes the urban poor, rural sectors of the population, mature students, working class students, and those who were discriminated against under oppressive regimes.

Prerequisites for access to higher education opportunities stand in the way of many seeking entry to higher education. These are normally in the form of selection criteria which sift from those applying even though they may meet minimum university entrance criteria. More elite universities often turn down students with very good school leaving certificates, who would have a reasonable expectation to be granted access. This normally happens where demand for entry far outstrips available places at contact institutions.
Gaining entry to a university often does not mean that students will achieve successful outcomes. A complex compendium of skills, experience, tacit knowledge and cultural capital combined with application and diligence normally makes for successful outcomes. Students coming into the university from impoverished backgrounds, added financial woes, language barriers and inadequate support and mentoring mechanisms can struggle to achieve success. The result is a high dropout rate, frustrated aspirations and considerable cost for little discernible benefit.

Open and Distance Learning as a Strategy to Increase Access and Equity

In view of the foregoing, there is a need to identify and assess the scope and dimension of the challenges facing HEIs on the continent, ultimately develop criteria and mechanisms for evolving sustainable national, regional and institutional policy initiatives for enhancing access to and delivery of quality higher education in Africa. This calls for alternative policy options that allow quality higher education to be delivered large numbers of people in a way that does not raise costs, yet does not mortgage quality.

Traditional face-to-face approaches to higher education assume that there is an insidious link between quality and access (Daniels 1999). But open and distance learning systems are carefully and professionally planned and implemented, drawing experience from best practices across the globe, the fear of lowering quality can be put to rest. This is the rationale for the evolution of the field of open and distance learning as a viable alternative to conventional formal HE approach which seems to have suffered a lost of momentum due to the exponential increase in and diversity of student population as well as the corresponding reduction in the volume of finance available for the system.

The term open and distance learning is an amalgam of two concepts. Open learning – a philosophic construct which defines learning based on independent and flexible studies or initiative rather than formal classroom practice; while Distance Education refers to a mode of delivery of education in which the teaching behaviours are exhibited apart from the learning behaviours between persons located at geographically non-contiguous places through the aid of suitable instructional media. If the inadequacies of the conventional systems are reviewed vis-à-vis access, quality and costs of HE, it is easy to understand why the open and distance education system has provided a way of recruiting students and shifting the balance of expenditure away from the state and towards the learner in ways that does not put great pressures on them.

The greatest argument in support of distance education is the economies of scale: as additional students are added, the unit costs of replicating existing instructional materials for them will reduce to the barest minimum. In addition, open and distance learning has a marked advantage over on-campus education because it can minimize the opportunity cost. One can study through the distance mode while continuing in gainful employment – whether industry, office or agriculture. Also, distance education can provide plenty of educational opportunities by creating access to higher education, casting aside some of the rigid entry-requirements of the conventional system with regard to age and qualifications, requirements of strict schedule of studies, stipulation of attendance, imposition of teacher/institution designed curriculum etc. It can be useful particularly for the dropouts to whom instruction can be provided irrespective of age, employment status, gender, religious/ethnic-religious etc. through multi-media instructional packages.

A Typology of Sustainable Higher Education Delivery Systems

A variety of terms describe the type of education provision that involves some version of an open learning approach and uses open and distance teaching techniques to a greater or lesser extent. They follow here in summary of their manifestations:

Single mode institution: these are set up to offer programmes of study at distance; although some face to face interaction may be involved but this is often optional; teaching and
learning is usually ‘mediated’ through any or a combination of the following: print, including correspondence; audio, including radio (one-way, two-way) cassettes, telephone, or audio conferences; by video, including television (one-way, two-way), cassettes, CDs, DVDs or video conferences; by computer, including computer-based training, e-mail, computer conferencing, or worldwide web.

Dual mode institution: offers two modes – one using the traditional classroom-based models; and one using distance methods; may also offer the same course in both modes, with common examinations; regards the two types of learners: on-campus and external; and may or may not allow ‘cross-over’ regulations.

Mixed mode institution: offers learners a wide choice of modes of study: dependent, group-based, or some combination; maximises flexibility of place and pace of study; the result of ‘convergence’ of face to face and distance modes; increasingly characterises organisations that were once ‘single-mode or ‘dual mode’.

E-learning Delivery Methodologies

E-Learning in general can be defined as the formal dissemination of instructive curricula which is not dependent upon time or place via the use of delivery options such as audio, video, multimedia communications and computer technologies. Students learning by means of distance learning techniques provide for challenging and collaborative academic opportunities and require the use of pedagogical methods which include course design, synchronous, and asynchronous communication, and special instructional techniques.

Types of E-learning

Synchronous E-Learning

The method of Synchronous e-learning delivery offers the benefit of a live classroom via the Internet

- Virtual classrooms
- Application sharing
- Instant messaging
- Audio and video conferencing
- Shared Whiteboard - a virtual blackboard
- PowerPoint slides
- Voice-Over-Internet Protocol (VOIP)
- Net surfing
- Video - streaming and prerecorded
- Chat application – text messaging
- Virtual break-out rooms
- Polls & quizzes
- Assessment tests (results feedback)
- Session records and playback

Asynchronous e-learning

- Self-paced courses
- Discussion groups

Self-Paced Courses

The obvious advantage of a self-paced course is convenience. People can get the learning they need at any time. This can include just-in-time learning where a person gets exactly what he/she needs to perform a task. Self-paced courses are created with e-learning authoring tools. Self-paced courses can be delivered in many ways including:

- Internet
Features of Self-paced courses
Multimedia, interactivity, bookmarking, tracking, simulation, online chat or online discussion, search, notes and highlights.

Since self-paced courses can be offered without a teacher and without a required completion time, many people need external motivation to take and complete a course of study.

Discussion Groups
A discussion group is a collection of conversations that occur over time. Other names for discussion groups are message boards, bulletin boards, and discussion forums.

However, no single e-learning method is best for every learning need. Several e-learning technologies as well as traditional learning methods are used.

Delivery Technologies
A variety of methods can be used to deliver content at a distance. Technologies that can be employed include:
Videoconferencing, audioconferencing, Web conferencing, print correspondence, video/audio correspondence, and Internet delivery.

These methods can be used in combination or exclusively. Conferencing methods require regularly scheduled meetings of students and faculty members (synchronous communications), while correspondence methods are typically asynchronous. Internet courses may employ both synchronous and asynchronous communications.

i. Videoconferencing uses video and audio transmission technologies to deliver course content to students in one or more remote locations and allows for face-to-face meetings between faculty members and students over distances like traditional classroom settings. Videoconferencing provides students the means for interacting directly with their faculty members and with other students and requires regularly scheduled meetings.

ii. Audioconferencing utilises telephony to facilitate synchronous discussions among any number of participants. As with videoconferencing, this method requires scheduled meetings of students and faculty members.

iii. Web conferencing employs both Internet technology and telephony. Students are directed to a Web site for visuals and course materials while student/faculty member interaction is handled by telephone or by voice-over-Internet technologies.

iv. Print correspondence is probably the oldest method of delivering course content at a distance and involves the exchange of learning materials and assignments by mail. With the advent of the Internet, correspondence can also be handled via email.

v. Video/audio correspondence involves the use of videotape, CD, and DVD technologies to provide course materials at a distance. Student assignments can be delivered in either print or electronic formats.

vi. Internet delivery uses the Internet to provide course content and facilitate communication between students and faculty members. Internet delivery method can involve both synchronous and asynchronous communication. Commercially designed packages such as Blackboard® and WebCT® facilitate the development of Internet or Web courses.

vii. Combined delivery methods Realistically, distance courses will employ most of the above means for delivering content to students and for facilitating communications between students and faculty members. For example, a course syllabus, the course schedule, and course readings might be provided entirely by a faculty-developed Web site, while communication might be handled using a combination of videoconferencing and email communications.
Conclusion

This paper, while very much work is still in progress, has attempted to examine the extant practice of higher education in Africa, with a view to identifying sustainable alternative approaches to delivery of higher education, aimed at overcoming challenges of physical and epistemic access to quality higher education in Africa.

Three clear alternatives emerge from this study: Fi the establishment of intermediate institutions to cater for the needs of marginalized groups of learners who may not possess the cognitive skills required for higher education as we know, but are compelled to attempt to access higher institutions because there are no institutions available to take care of their particular needs. Second, is the open and distance learning system which has the marked advantage of absorbing large groups of learners and adjusting to student needs in terms of place, pace and time. It is also related to the first type of institution in the sense that it has the advantage of being able to take care of the educational needs of students from marginalised backgrounds.

Nonetheless, while the promise of distance education has been compelling, the gap between policy and impact is understandably wide for a number of reasons. Save for a very few institutions with adequate resources, experience and capacity, most distance education institutions on the continent are in relative infancy.

The third approach which is also closely linked to the second is that of technology-enabled learning systems. The merits of e-learning within the context of distance education delivery cannot be overemphasised. However, in selecting delivery modes and/or technologies, planners and policy makers must take into consideration the objectives, infrastructure, budget, learner characteristics, and the time allowed. As much as possible, an indiscriminate adoption of technology for delivery must be avoided.

It is a fact that the benefits of technology-enabled education are far-reaching. As with any approach, there are identifiable pitfalls which must be avoided. This includes lack of understanding of the basic concept and rationale behind the mode or technology being selected. Thus, policy makers must ensure that instructors and learners are comfortable with e-learning tools and environment as they are with classroom-based instruction.

If they are not, they cannot make sound decisions about delivery media selection. Some fundamental principles are applicable in this regard: (a) Think pedagogy first, technology second; (b) needs identification and analysis of the course to determine the desirable learning outcomes; (c) access to instructional/learning resources including technology-based resources, by both learners and tutors.

In order to harness the inherent benefits of distance and electronic learning, there is an imperative for regional collaboration and cooperation across Africa. Countries need to establish policies, laws and regulations that allow for a pan-African critical mass of higher education managers who are able to leverage the skills, knowledge and expertise available across borders. Therefore it is important to recognise the role of strategic management in an environment where the balancing of scarce resources and rising expectations have to be managed together with the increasing clamour for relevance and legitimacy.

Ostensibly, management should now be specialized and the collegium idea of classical university systems jettisoned (Pityana & Baijnath, 2005).

References


Abstract

China’s Radio & TV Universities, a nation-wide distance education system in China, constitutes one of the mega universities in the world. Through more than twenty years practice and development, they have offered opportunities to a large number of learners via multimedia technology in the Chinese society and made great contribution to the realisation of education equity and social justice.

To look at China’s Radio and TV Universities' achievements in the past, the author takes the view that one of the advantages for a large ODL system actually lies in its systematic management and collaborative mechanism. The merits for systematic school running reflect in resources sharing, standards setting, and effective management. The model of China shows that developing countries should adhere to the principle of capacity building and fix their eyes on quality education through feasible measures. A developing country should not only concentrate on constructing learning resources, but also on staff development to enhance its cohesive strength and attain sustainable development. Furthermore, on the basis of that, it should extend more collaboration between faculties and institutions so that innovation and vitality can be introduced and capacity of competitiveness can be cultivated.

China’s terrestrial land space ranks third in the world, constituting 1/15 of the world’s total terrestrial land space and 1/4 of that of Asia. China, a country with a high and uneven terrain, has the Qinghai-Tibet Plateau, which is known as the "roof of the world" for its average elevation of 4,500 meters, and plenty of deserts and hilly areas. The plain area in China only accounts for 12% of its total terrestrial land space.

In addition, with a population of 1.3 billion, China’s population is the largest in the world but not well distributed. China’s west occupies more than half of the country’s land, but people living there make up only 5% of the total population, while China’s east occupies less than half of the country’s total ground space, but 95% of the population live there.

Also, with 56 nationalities, China is a country that has the most nationalities. And most of these nationalities have their own languages.

Obviously, it is a more difficult task to popularise higher education in a country with so large a population and so complicated natural environment than in developed countries.

Alongside China’s economic advances, people’s needs for education have grown increasingly stronger. How to materialise comprehensive utilisation of the social resources and provide services for the broad masses of the people, and supplying higher education for the rural areas, border areas and regions inhabited by ethnic groups, has now become the most pressing problem to be solved.

One of the ways to solve this problem in China is to devote major efforts to developing distance education. Setting the school running orientation towards local areas, basic-level areas, rural areas, and outlying and ethnic-groups and using the distance education system
of China’s radio and TV universities, we have made outstanding contributions for the popularisation of higher education.

Using modern teaching methods like radio and television and internet, radio and TV universities have educated a large number of applied higher education professional talents for our society, particularly remote border areas. Among them, an approximate total of university or college graduates have come to over 6 million, and an approximate total of various kinds of non-university or non-college trainees have reached over 40 million person-times. Admissions in the 8 years from 1999 to 2007 totaled 4.58 million and 2.38 million completed their undergraduate courses, approximately accounting for 1/8 of the admissions at various forms of higher education and 1/3 of the total admissions of continuing higher education of the corresponding period. With the establishment of open environments of learning, the open education system will give people more learning opportunities and at the same time meet their varied needs for learning in different ways.

As has been acquainted with many people from the same occupation, the usually so-called China’s Radio and TV Universities are a nation-wide distance open education teaching and teaching management system in China rather than a specific educational institution. China’s radio and TV education is actually a teaching network that comprises Central Radio and TV University, local radio and TV universities at various levels and even teaching points, covering all the urban and rural areas all over the country and rationally distributed.

Up to 2007, apart from Central Radio and TV University, China has set up 44 radio and TV universities at the provincial level, 956 branch radio and TV universities at the district and municipal level, 1875 radio and TV working stations and 3292 teaching points at the county level. The organic combination of radio and TV universities at various levels achieved via satellite and the internet has set up a service platform for the establishment of a lifelong education system as well as a learning-oriented society.

Two important factors attribute to the above mentioned achievements, one is the strong cohesiveness of the system and the other the realisation of the superiority of multi-sided collaboration.

Bring into full play the resources of the Central Radio and TV University and harmonise the initiative of China’s Radio and TV Universities at all levels

With Central Radio and TV University at the pinnacle of this teaching network, the radio and TV universities at the provincial level standing in the middle, serving as a link between what goes above and what comes after, and the teaching points spread all over the urban and rural areas throughout the country directly giving students support in their learning programmes, an extensive pyramid-shaped educational network takes shape.

In this educational network, the division of responsibility and the relationship between rights and duties attached to Central Radio and TV University and the radio and TV universities at various levels are made clear by signing agreements, forming a modern distance education system under which overall planning, classified administration, division of labour coupled with collaboration, and classified guidance etc. are carried out in all the links such as admission enrollment, teaching and teaching management, and test and examination work.

The Central Radio and TV University is responsible for a series of support services related to learning such as teaching design, teaching management and providing teaching resources, making it possible for each teaching point and each learner at the terminals of the system to have easy access to the top-notch quality resources owned by Central Radio and TV University and share the lectures by all the master teachers from all over the country.

Guided by the Central Radio and TV University, China’s radio and TV universities at different levels, in association with the teaching practices tried out in their own areas, vigorously explore the teaching models that are suited to their own circumstances. The advantage of systematic
school running is fully displayed in local radio and TV universities’ (as they face the students directly) capability and elasticity of assuming tasks of teaching and doing management work in massive quantities and meeting their local demands.

Through normalising the unity of the system, the advantage of quality guarantee comes into full play. On the basis of “five unities,” unity of subjects, unity of teaching programme (syllabus), unity in textbooks, unity in examinations and unity in marking papers, China’s radio and TV universities have brought about optimisation, regrouping and sharing of education resources and ensured teaching quality and overall efficiency.

This learning environment, with satellite (network in the sky) and the internet (network on the earth) as a means of teaching and central and local (network of people) radio and TV universities combining into one, is one that other forms of education do not possess. Each terminal of the network, or each sector or point, or the pinnacle of the network can all give full play to their own advantages and attain a mutual complementary effect.

Expanding Opportunities and Extending Collaboration

China’s radio and TV universities are a group of open universities with distinctive features in school-running models. Their school-running principle, school-running style and system management modes are marked at every moment by openness and collaboration.

1. Open opportunities to all learners

Open to learners: Diversified forms of school running are targeted at people in employment, officers, rank and file soldiers, peasants, and handicapped, etc.; university or college education is coupled with non-university or non-college education, which help to meet the varied needs of all people for learning in different ways. More than 4/5 of the students studying in radio and TV universities come from the administrative regions below the district and municipal level and more than 90% of the students are people in employment above 21 years old.

Open in learning manners: Top priority is given to students’ freedom in learning. Students are free to choose courses offered from the “curriculum supermarket,” and their credits will be valid in eight years. As a result, students can deposit their credits as if depositing money in the bank.

Open in learning environment: Satellite-based digital transmission platform, computer network, and distance teaching platform have led to the materialisation of networking of various teaching resources, digitisation of multimedia and two-way interactive learning with students at the centre. In addition, special learning-related services are also provided for the students.

2. Integrating resources from society

An outstanding characteristic shared by China’s radio and TV universities is running school by integrating resources from the society.

Teaching staff: There are 85,000 full-time teachers and 38,000 part-time teachers in China’s radio and TV universities. There are only 133 full-time teachers, but 1126 part-time teachers, including chief editors and lecturers in the Central Radio and TV University.

Integration and utilisation of education resources: Integrate and utilise the top quality education resources from institutions of higher learning, scientific research institutes, state ministries and commissions, industrial businesses and radio and TV universities themselves.

It was only by bringing about the integration of resources from the whole society that China’s radio and TV universities came up to this non-conventional progress, successfully creating educational opportunities for millions of students in such a developing country like China.
3. Strengthening collaboration with other institutions and organisations

A prominent feature that China's radio and TV universities have developed from their operations in school running in the past three decades is the extensive participation of many institutions and organisations from the whole society. Seizing the opportunity to align themselves with institutions of higher learning, industries and businesses to make collaborative school run, China's radio and TV universities use the labs and facilities of other institutions of higher learning, scientific research institutes and industrial enterprises to bring into play all social resources to promote the development of the education course of radio and TV universities, which, as a result, have strengthened China's radio and TV universities' flexibility in meeting the needs of the society. Furthermore, the collaboration has also enhanced the development of a large number of application-oriented talents needed in economic construction and has helped the universities to set more accurate objectives.

4. Providing the public with learning support service platforms

Using education resources from China's radio and TV universities, the Central Radio and TV University has also established distance education public service system that provides institutions of higher learning and other educational agencies learning support services while they carry out distance educational programmes.

For this purpose, the Central Radio and TV University has set up a special agency which aims at providing public services for many other distance education universities and institutions in China. The obligations of this public service system include establishing service platforms that can be shared by the society, assisting educational agencies providing various kinds of support services for distance learners, satisfying the learners' needs to complete their studies, and at the same time helping educational agencies to successfully carry out their administrative and conventional teaching management work which is not teaching itself, setting the stage for sharing the resources individually owned by educational agencies and recognising each other's credits.

5. Developing overseas collaboration

Alongside China's reform and opening up to the outside world and advances in economic construction, more and more people feel that they need to know more about China and, for this reason, they are interested in learning the Chinese language.

Many countries in Europe and North America also take the Chinese language as one of the foreign language courses offered in their primary and secondary schools. However, the challenge of inadequate teaching staff and teaching resources needed to meet such demands still confront these schools and educational institutions. Moreover, the fact that usually students taking this course are comparatively few makes it a difficult job to begin classes. Distance education can just serve to solve these problems effectively on shortage of teaching staff and decentralisation of students and make it possible for all to share top quality teaching resources.

Central Radio and TV University has done two things in developing collaboration with countries outside China. The began teaching Chinese on TV using US' SCOLA satellite TV channel, providing American university and secondary school students with TV classes that reflect the life of contemporary Chinese people. Secondly, they opened the Confucius Institute Online, in collaboration with the State University of Michigan, USA, the first one to be established throughout the world.

The Central Radio and TV University is responsible for the construction of online teaching resources and American students learn Chinese are given a certain amount of time per
week to receive individual tutorial online. At the moment, tutorials give person-to-person guidance in the U.S. to students through the internet. And students are now being recruited from China’s universities to act as volunteer tutors based in China and give guidance to American students learning Chinese. This is also a reflection of the advantage of the internet.

In the past few years the Central Radio and TV University has attached greater importance to developing collaboration and exchanges with countries outside China. Through exchanging information and establishing links with distance education agencies from all the countries in the world, we have gained a wider vision and a greater ability. Actually, the Central Radio and TV University started to develop wide-ranging exchanges and collaborations with distance education agencies in Africa. We translated our audio and video teaching material “Practical Technology on Agriculture” into English and French and gave them to some African countries. We also sent inspection teams to South Africa and Egypt to learn about the development of distance education in Africa. China and African countries have many things in common. They are developing countries, vast in territory, decentralised in population and underdeveloped in education. Therefore, many of the problems that crop up in these countries are identical. We are ready to exchange ideas and conduct further studies on distance education with our African friends. We also hope our African friends will come to China and have a closer look at China’s radio and TV universities and conduct studies. Let us act in concert and make our contributions for harmonious progress of our societies and also by helping more people gain access to good education.

References


GUIDE ASSOCIATION: A MODEL OF EXCELLENCE FOR ACADEMIC COOPERATION

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Introduction

GUIDE Association - Global Universities in Distance Education – is a network of 71 European and international universities devoted to e-learning. The Association was founded by the Università Telematica “Guglielmo Marconi” to promote collaborative inter-institutional networks, better quality and excellence in ODL universities.

Networking is a core concept in academic and research institutions involved in the transformation of traditional educational systems. GUIDE Association favours multiple interactions within a common space for the sharing of know-how and professional skills, answering to the current requirements of the new ICT society.

The introduction of such kind of cooperation model within universities implies the examination of the impact of new technology trends in the educational systems of different countries on both organisational and educational issues. To this end, GUIDE organizes a series of thematic workshops, especially focused on the analysis of the difficulties met by every single institution of a specific geographic area in the field of Information and Communication Technology. The meetings among members of the same area include conferences, thematic workshops, seminars and discussion forums, which enable the establishment of a permanent communication system and a continuous professional interaction.

An integral part of GUIDE’s mission is to highlight and favour the development of a new awakening strategy for the adoption of financial instruments, such as microcredit, smart cards and new modes of payment, intended to promote e-inclusion and e-accessibility. Through the analysis of some microfinance interventions in developing countries such as Cameroon and Bolivia, the study intends to show the way in which education, focusing on health and business, has been integrated with microfinance.

Starting from such projects carried out in the fields of health, business, nutrition and finance in developing countries, GUIDE Association aims at promoting sustainable integration of ICT that would allow the access to higher education. The workshops organised by the Association have the scope of encouraging awareness of and confidence in whatever financial and educational services that are available locally.

In this framework, GUIDE Association is currently involved in three main projects.

Cooperation network project
International research is a process of inquiry that encourages critical thinking and international understanding for lifelong learning. Actively participating in research, creating a research network, and trying to enhance and strengthen such networks through research contribute to your intellectual, personal, and professional growth. By means of original explorations and a strong network, people will have the opportunity to produce new knowledge and contribute to a global society. This is why nowadays networking seems a core concept in academic and research institutions involved in the transformation of traditional education systems.

The introduction of such kind of cooperation model within universities implies the examination of the impact new technology trends have on the education systems of different countries on both organisational and educational issues.

In this context, GUIDE Association is considering the need to foster a strategic approach to innovation, promoting the implementation of a culture of continuous exchange and the constitution of collaborative inter-institutional networks for quality and excellence in ODL universities.

Before starting any kind of cooperation thoughts absolutely necessary to advance a culture of cooperation that would spread beyond time and space. People coming from different countries should be aware that through the encounter with other cultures they would come out enriched and deeply transformed.

In a certain way, cultural difference is revealed when another culture emerges. Clashing of differences gives rise to dynamism and creativity shaping the concept of academic knowledge.

Motivated by such an urge and the support of its members, GUIDE is conducting an in-depth investigation on the current development of electronic and distance education cooperation research activities and partnerships.

The study has been accomplished through the submission of a questionnaire made of closed- and open-ended questions and has been designed considering four main areas of interest:

- research models
- research projects
- international cooperation
- international organisations

Each major area will raise a whole range of sub-parameters.

The main objective of the questionnaire is to draw a clearer picture of the current European situation in terms of research cooperation networks which can lead to the identification of common quality standards that should characterise the European area.

Starting with the analysis of the collaborative work models and research systems used and promoted by the 25 GUIDE European members, the study explores the possibility to define best practices for International higher education collaboration. As previously underlined, at this first stage the investigation is involving only EU countries to be successively extended to other areas like Africa, Asia and South America.

Considering the problems related to digital divide at local and global levels and to the standardisation and conformance in the implementation of ICT in training and research programmes, ubiquitous networks seem to be the answer to the needs of the environment of the new information society.

The main issue is to establish common guidelines for an e-university cooperation model of excellence within a cross-cultural context, that is the sharing of best practices and professional expertise in the new networking technology.
The final result will be the draft of an official document signed by all participating universities which will represent a flexible instrument outlining some common principles for the definition of a suitable and efficient network infrastructure promoting information sharing, exchange and cooperation.

Other than supplying a possible good model for a cooperation network, the final document will attempt to underline the critical areas and also be used to measure and track the quality standards of institutions cooperation network and prioritise areas for potential improvement.

Promotion of local development through microcredit

The second project is a combined programme created in collaboration with the Comitato Nazionale Italiano Permanente per il Microcredito called “Promotion of local development through microcredit”. The programme aims at promoting local development in the Republic of Cuba, the Dominican Republic and Republic of Haiti through Microfinance intervention that would include Awareness Actions, Capacity Building and Technical Assistance.

In particular the programme intends to support the development of those countries where it is difficult to access credit and manage a small business by the strengthening of the institutional competencies and the promotion of financial inclusiveness especially for women and young people.

The reason for the development of such project is the enormous impact microcredit is having on those social communities that have already experimented it. Microcredit has awaken collective values such as faith, reciprocity and cooperation that constitute the productive sources of each society. Such instrument has demonstrated to be a catalyst for those people who wish to grow as individuals. Nevertheless there are still many people who are excluded from it.

The main objective of the programme is to contribute to the fight against poverty and social exclusion through the spreading of microcredit. For this scope, it is necessary to consolidate the institutional competences of the interested countries and the improvement of the capacity to access microcredit and manage a small business of people who cannot give any real guaranty.

In order to achieve such goal, a revolving credit will be founded on the 7th months of activities. In each one of the three countries the credit will be managed by a local credit institute that will be identified through the agreements signed between the managing institution, the executive institution, the financial institution and the borrowing government.

Information and Awareness Activities

The awareness activities will take place through partnerships and information campaigns about microfinance and microcredit addressed to central authorities, local bodies, research organisations, credit institutions and financial associations. Such agency will be conducted through the improvement of conventions and the organisation of workshops and seminars.

Capacity Building Activities

The capacity building is addressed to central and local bodies, credit institutions, GDL, Steering committees as well as to that part of the population who do not have access to credit. The activity is carried out through the constitution of a Steering Committee in each country who will have special functions; first of all, that of defining the rules at the basis of revolving credit management.

Subsequently, to such activity there will be the creation of working groups for social development (GDL) (one for each area and/or field of interest in each country) and the transfer of the necessary know-how to carry out one’s own functions.

Technical Assistance
The technical assistance activity will occur through the development of virtual platforms between the Comitato and the respective countries as well as through training of the platforms, administrative staff. The virtual platforms will be created during the first months of programme activities since they can function as useful instruments also for those activities of technical support to GDL and Steering Committees. The aim is to use the technical information and knowledge exchange as well as the access to specific fields by promoting the dissemination of best practices and favouring the coordination of the involved institutions. Technical assistance will be available during the whole programme and will be carried out through training sessions that will supply the necessary support to face the operative phase of the program. Specific activities will be technical and professional support to GDL and constant monitoring of the project. The Steering Committees, on the other hand, will be able to ask the executing institution to supply them with their consultancy and support of professionals in specific fields whenever necessary.

This programme has been designed taking into account sustainability criterion. According to them, development needs to offer basic environmental, social and economic services to all community members without threading the operability of the community system itself. Such balance has to be found within the programme in order to supply possibilities of economic development without invalidating institutional, environmental and social systems that lean on such opportunities.

Institutional Sustainability

The activities the programme promotes contribute to the sustainable development of the communities involved and of the local institutions. The projects have been conceived following a precise approach that points at involving local stakeholders, being representatives for the civil society or for governmental authorities in the training and responsibility process directed to the development of the three countries. The awareness and capacity building, the courses, seminars, as well as the technical assistance, they all contribute to the development of a microfinance sustainable model. Hence, such activation determines an important process of learning by doing.

Social and Cultural Sustainability

As already mentioned, the programme intends to reach the objective of development tailored to the implementation of those initiatives that favour the fight against poverty and the financial inclusion for those people who do not have access to credit. The planning strategy follows the principle of equity and respects any social and cultural features of the beneficiary country. The meaning of equity the programme is trying to inspire, reflects the pursuit of an economic development that would improve the life conditions of all those people who will actively participate in the projects without compromising the building capacity of those who will not be directly involved.

The attention towards equity issues is inspired by the concept of empowerment meant as increasing the possibilities of individuals and groups to actively control their own life. The search for empowerment can be found in the programme — (i) in the creation of opportunities that enable the weakest people and underdogs to emancipate themselves from a condition of low responsibilities and low opportunities, where the relationship with the institutions is essentially characterised as public assistance — (ii) in a prompt agency such as the constant involvement of local human resources. In this framework, financial sustainability will also be involved (it will be possible to employ less resources for travel and accommodation expenses).

Through microcredit, the above mentioned projects hope to initiate a great number of possibilities to fight poverty but we have to bear in mind that such a fight moves away from the logic of charity to embrace that of responsibility instead. A double responsibility that is able to involve microfinance institutions on one hand and the beneficiaries on the other hand in a mutual faith.
relationship. The financial resources become in this way instruments of social justice and empowerment.

Formamente Project & Broad Conclusion

The third project is GUIDE Association’s official journal, Formamente, published twice a year and dedicated to the multidisciplinary research in the field of the new Information and Communication Technologies and its application to higher education and e-learning sectors. Such project is not only strictly connected with the Cooperation Network Project in terms of mutual objects but can also be seen as one of the answers. Formamente is indeed a qualified instrument oriented towards knowledge-sharing, adoption of quality standards and promotion of scientific communication.

Providing contributions selected from high-level, specialised journals, and original articles, Formamente harmonically combines the function of an internal observatory of contributions of excellence and of an instrument of theoretical and practical thinking.

As an interactive tool for research dissemination and sharing of outcomes the review represents a common space where the different interested areas could cooperate and take actions.

The Journal aims at disseminating valuable information and research materials for professionals, students, teachers and researchers, improving collaboration and knowledge-sharing on issues related to the new information age and the role of higher education institutions in the globalised knowledge society.

Research themes of Formamente include distance learning methodologies and technologies, e-learning applications, case studies and best practices, new technologies for education, e-communication, mobile learning, management of courses and universities cooperation.

GUIDE Association has found in Formamente an effective instrument to foster its members’ scientific communication in order to improve knowledge-sharing, adoption of quality standards and exchange of good practices and project models of excellence.

The Journal is editorially structured in three sections:

- Research, which includes articles and materials;
- Applications, which comprises case studies and best practices;
- Highlights, offering additional materials on selected events, conferences plus interviews with outstanding professionals and researchers in the Open and Distance Learning world.

Formamente is a multilingual journal: articles and materials are published in their original language and are provided with keywords, a short abstract in English and an additional synthesis in Italian.

The review pays particular attention to bibliographies: any mentioned e-mail address is constantly checked and updated, whilst bibliographic items provided in the integral version, make the paper remarkable in the field of anthropological studies.

These characteristics together with the deep accuracy in the elaboration, have enabled Formamente to achieve the CNR’s code ISSN – International Standard Serial Number. In order to consolidate its own objectives, the review takes advantage of a Scientific Committee, set up by GUIDE founding members, who represent an international group of recently founded and well established open universities. Scientific Committees members, who are skilled in
different research fields, help provide a sense of a "global" knowledge dimension, thanks to their different anthropological and cultural identities, institutional goals and student variety.

The cover page of Formamente is the image of one of the most representative statues of the ancient Rome, "the girl from Anzio", which is supposed to represent a young priestess offering Apollo, the God of creativity, the votive symbols of its cult.

The graphic has turned the image towards a symbolic confluence of old and new, where the statue’s plasticity and the architectonical solidity constitute the sign of a wish and comes to symbolise a revival gathered in its continuum and technological as well.

Formamente is a paper review, but is also synthetically available online at GUIDE website. Its basic principle is that of a rapid and evolutional information-spreading whereas the review is intended as a sort of evolutional editorial model of digital preprint, capable of satisfying the interest of GUIDE members with updated news, indexed thematic abstracts.

Formamente online starts a global and interactive action of collective and connective confrontation for the whole community, which is self-determining and active, just like a structure of continuous growing.

By this way GUIDE joins evolutional methods and research paths to create a knowledge platform and a shared and prospective training.

The paper review proposes a particular mixed model: free publication upon request of GUIDE members, who, thanks to their authority, qualify and certify the quality of the original papers proposed and the selective publication of already certified papers, chosen from selected reviews of excellence and of technological innovation.

The above mentioned are the scientific intents and propositions that we intend to pursue. It is difficult to evaluate whether Formamente has achieved these objectives since, over the first year, it has published two double issues.

Number zero, the draft issue, has encouraged us to carry on, as well as the pleasant approvals, which our editorial office often receives.

Scientific Committee members help us with their contributions and reviews, and accredited structures at international level recognise us the role of observers and qualified mediators of scientific information.

We believe that this ambitious policy of scientific information could be ascribed to criteria of eco-sustainability, cooperation and knowledge-sharing, which GUIDE takes inspiration.
ICT AND QUALITY ASSURANCE IN ODL

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Abstract

ICT-based ODL has also been taken up by conventional universities. Thus, there is a proliferation of virtual programmes, computer-mediated instruction in lecture halls/websites. Nations can therefore tackle the dearth of quality academic staff. Combined with transborder education and increased web-based delivery of higher education, the quality of ODL is thus challenged further. Content would be updated easily and user should be notified when the last changes were made. Video conferencing with the students would be a more appropriate feedback system and would make the programme less static. Limited bandwidth on the user side slows down the performance for multimedia and frustrates the learners. Thus, robust multimedia courses cannot be developed. One of the key quality assurance processes for ICT-based ODL is trialling the unit of study websites before they go live. This is done by trialling the websites from a student perspective, checking whether the websites are technically sound, checking that a unit of study outline is consistent with Board (Univ.), adequate Student Support Services - live websites, staff support via phone or email for the development of websites and ensuring copyright issues are adhered to with the help of the library. There should be comparison of learning competence with the traditional classroom. ICT-enabled education is not just transferring class notes or a videotaped lecture to the Internet, new paradigms of content delivery are needed. Interactivity between professor and student and amongst students should have priority. Students should engage in the material deeply and attain academic maturity. Distance learning should not be ‘delivered’ just by CD ROMs, but by motivated live qualified teachers. Trial launching is thus a good way of assuring quality in ICT-enabled ODL.

Key words: Video Conference, Quality Assurance, ICT, Multimedia, Student support Services.
seulement à l'aide de CD ROMs, mais avec des enseignants motivés et qualifiés. Par conséquent, les essais de lancement sont une bonne voie pour assurer la qualité en enseignement à distance assisté par les TIC.

Mots clés: vidéo conférence, assurance qualité, TIC, multimédia, soutien aux étudiants, enseignement transfrontalier

Methodology

ICT-based ODL has been in vogue for the past decade and has been taken up even by the conventional universities. But there are no strict methodologies for quality assurance in these cases. In this article, a qualitative methodology is devised by following the general quality assurance methods of UNESCO, COL etc. This would enable the users to understand whether the material on the web through ODL has credibility or not.

Questions to be answered regarding the website of the e-course launched:

1. Is the e-course approved by the university/Board?
2. Does the respective university handbook/public document clearly specify the technological requirements of the online courses so that the students are aware of the prerequisites before enrolling?
   In few words, explain each of the following:
   a. RAM
   b. Software
   c. Hardware
   d. Internet connectivity speed
   e. Multimedia
3. Whether the e-course has been test-launched?
4. What was the result of the test launch?
   a. No. of students taking the test
   b. Problems encountered (broken links, multimedia not functioning, language of e-course not understood etc.)
5. Were all the broken links taken care of?
6. All grammatical/editorial/spell checks done?
7. Did the editor verify the course content with popular textbooks (international/national) and which of them?
8. Was the e-course dealing with special topics, then were the reference materials with which the authenticity of the topics verified by the editor?
9. Did the academic supervisor give a green signal to the authenticity of the e-course material?
10. Was there any 24-hour helpline available for students?
11. What was the last time that the course was revised (did not be more than three years)?
12. Are there regular sessions of peer review for the e-courses? Is it clearly mentioned in the web? It is in what form? (Video conferencing/chat sessions/email etc)
13. Is there supporting staff from the IT department of the university which will regularly look into technical difficulties encountered?

These questions are to be answered by the e-course preparation team before the launch of the course and the answers to this must be consolidated and clearly mentioned in the website of the e-course. A separate link: “Quality assurance policies followed” may be maintained.

Implications of this study for practice

ICT-based open and distance learning has been launched especially in the case of higher education operation in many Southeast Asian countries. A new direction and responsibility for the faculty, challenging pedagogical practices have arisen. Mushrooming of e-courses by private, as well as conventional varsities, ICT-based teaching and distributed learning (virtual as
well as physical learning) is being practised by many higher education institutions. The ICT-based distance education has indeed offered remarkable opportunity for many governments to deal with the dearth of quality academic staff. Nationally as well as transnationally the quality staff can now be shared. So has developed the concept of border education through the means of ICT-based open and distance learning mode. As a result there is an increasing demand on the quality of education from stakeholders as well as the public, regarding ICT-based ODL, the quality is now of prime importance. But there is a lack of concrete methodologies for coordinating various ODL initiatives at the national as well as international level. So the user is often vulnerable to low-quality/unauthenticated e-courses. The above qualitative methodology will be of particular use in these cases.

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“To make sure that things are getting better all the time - The internal quality assurance system at Uppsala University” by Bo Sundqvist of Uppsala University
Abstract

Most countries in Africa South of the Sahara have some of the lowest enrollment rates in secondary and higher education. This is due to the high cost of obtaining such education coupled with poverty and low income in the societies of this region. Recently, by the private sector, have increased access to programmes and enrollment. Increasingly, higher education is reaching even those deep in rural areas, thanks to the distance education initiatives being launched widely in sub-Saharan Africa. Distance education is affordable and flexible to the needs of the working class, the disabled, and female learners.

The Internet and the globalisation of knowledge have given rise to centres and peripheries of knowledge. The centres are in developed countries and appear growing stronger at the expense of the peripheries in poor countries. With the evolution of English as a global language for scientific scholarly work coupled with ICT, opportunities exist for cross-border knowledge transfer through collaborative efforts between universities in the centre, and those in the periphery. Such opportunities can best be realised through distance learning, particularly using electronic media through eLearning platforms. Open and distance learning offers the best opportunity for massification of higher education in sub-Saharan Africa needed to generate the required masses of experts for socio-economic turnover. Collaboration through cross-border initiatives with universities in developed countries will accelerate the pace of knowledge transfer to the region, thus stimulating the growth of the nearly stagnant economies of sub-Saharan Africa.

Introduction

Self instructional texts meant for distance learning date back to as early as the 18th Century. It has been reported (Chabaan, 1996), that distance education at university level was available at the University of London as far back as 1856. Since then, distance learning has grown to become one of the largest providers of higher education around the world.

Distance learning is characterised by the quasi-permanent separation of the teacher and learner through most of the learning period, as opposed to conventional face to face education. The learner must have self-drive, assisted by easy to follow learning materials. A combination of print, audio, video, digital media, has today made self-learning all so much easier. A strong two-way communication between the learner and the teacher is needed for ensuring that both maintain some kind of dialogue, and this has been made easier by today’s information age.

The primary advantage of distance learning is its capability to overcome participation barriers that would normally arise due to remote location of the learner, constraints of employment, family responsibilities, and physical disability. Distance learning also appears to have opened new opportunities for second chance learning to those who could not attend first chance. Many students of distance learning are much older, mature people, who realise at a later stage in life, a need to improve their academic qualifications in order to rise to higher ranks in their career. Most second chance learners are people who at their time, did not have secondary school qualifications required for enrollment in conventional universities. Most open and distance learning institutions have now in place foundational programmes, that enable such learners to enroll for degree programmes.

Open and distance learning (ODL) is now becoming an important avenue for recurrent learning, as it facilitates adaptation to changes in technology for those already in the work place. ODL
offers professional development programmes in rapidly changing areas such as medicine and engineering, to enable the learner cope with new technologies in their fields.

Knowledge as catalyst for development

With no doubt, knowledge is the catalyst for socio-economic development. The ability of humans to make efficient use of the resources around was determined by available knowledge on technologies and methods of converting the resources into products or services. The various levels of social development that humanity traversed are synonymous to the magnitude and level of knowledge those societies had. The present state of underdevelopment in most sub-Saharan countries may duly be attributed to lack of knowledge, since most of these countries are endowed with rich natural resources. It is therefore without doubt, that Asmal (2004) referred to knowledge as the wellspring of economic and social development. The knowledge centre, being human brains and skilled hands, continue to be the driving force for development. Thus, it has been observed, that the knowledge economy, geographic shifts, mobility of the labour force, and increased trade in services are the main factors driving nations to place more importance on developing and recruiting human capital or brainpower through international education initiatives. The most successful countries are those that were able to recruit the brightest students and scholars from other countries, thereby increasing their scientific, technological, and economic competitiveness.

In today’s environment of globalisation, there seems to be no boundary for knowledge transfer, with human capital remaining very mobile, and restricted only by the economics of supply and demand. Fast developments in science, technology and innovation have created knowledge-based economies and has also accelerated the speed of globalisation (Knight, 2004). The emerging economies of India and China are characterised by increases in academic output in terms of graduates and research, spurred by cross border initiatives. It has been reported (The Economist, Sept 8th, 2005), that the higher education enrollment in China, which was about 2-3% in the 1980s had risen to 17% by 2003. The number of doctoral students jumped from 14,500 in 1998 to 48,700 in 2003. It is also reported that the number of people attending universities in India, almost doubled in the 1990s from 4.9 to 9.4 million.

In order to capitalise on knowledge, numbers of experts in any field is critical. A certain critical mass of trained manpower is always needed to bring about innovation that eventually spins off new enterprises. Most African educational systems were intended to be units for generating manpower required for the functioning of the public service. Care was taken to keep the graduate numbers low, so that only those needed to fill existing vacancies were trained. As a result, the tendency was for universities to train job seekers! Towards the early 1980s, with increasing numbers of graduates, some universities began to re-orient their programmes, aiming at equipping the graduates with entrepreneurial skills. Thus, training was now to be focused on training job creators rather than job seekers. To provide for the large numbers of knowledgeable people, African countries have embarked on a massification process – a process of training graduates in large numbers.

Access to higher education in Africa

For many decades, the higher education sector was neglected, and was not given priority in donor funding agreements. Basic education and secondary education were funded. Furthermore, the delivery and financing of higher education was solely a government business! Most post independence governments had a firm grip on the higher education sector and did not allow private sector participation. As a result, very few secondary school leavers got the chance to attend higher education.

Recent entry of the private sector has considerably rejuvenated the higher education sector, with sudden increases in enrollment for degree programmes. However, most private universities focused mainly in business, law and humanities. Few have ventured into medicine and ICT. However, engineering, agriculture, veterinary medicine, etc are still
offered only in public universities. This is due to the high costs of providing resources and infrastructure for such programmes. Although African private institutions may be absorbing the excess demand, and are providing diversity of courses and competition, they still have to convince stakeholders on their ability to offer quality education (Mabizela, 2004). Most of the private universities lack strategies for staff recruitment and staff development, relying heavily on part-time staff and retired professors. There is the question whether or not private universities can attract top students from the mainstream secondary school leavers. Some governments in Africa are realising the important role the private sector may play in higher education, and are now granting student loans, development grants, and support services to the private universities.

The commitment of government to invest in skilled manpower is not just limited to study grants and loans. Globally, countries that have made it, had to invest significantly in research and development. Universities in Africa have not been centres of knowledge creation when compared to other parts of the developed world. Funds allocated towards R&D in Africa are still short of 1% of the GDP. It has been reported (Weber, 2006) that the amount of public funding towards R&D as a percentage of GDP is more than 2% in the USA, about 3.12% in Japan, and about 2% in the EU. Similar levels of support exist in the developed countries, regarding support for higher education. In the USA, higher education receives 2.7% of GDP. It is 2.5% in Canada and South Korea.

Given the low GDP in most sub-Saharan countries of Africa, support and access to higher education in Africa remain very low. However, in a globalised environment, higher education is now being seen as a commercial product, and has reached the global marketplace, where it is slowly becoming internationalised. It has been reported that there are more than 27 Australian universities offering offshore programmes in China (Garret, 2004). The advent of the internet and the globalisation of knowledge has given rise to centres and peripheries of knowledge. The centres are in developed countries and appear to be growing stronger at the expense of the peripheries, in poor countries. This globalisation of higher education, exacerbates dramatic inequalities among the world’s universities (Altbach, 2001). Therefore, meaningful knowledge transfer will only occur where there are strong linkages between the centres and the peripheries. The use of English as a lingua franca for scientific communication and for teaching, especially when combined with ICT, makes the creation of linkages a reality. However, developing countries still have many special academic needs that need to be protected. Third world countries that have entered into international academic linkages, should ensure that these arrangements are based on national needs and allow choice among programmes and partners.

Open and distance education in Tanzania

Tanzania’s Development Vision 2025 establishes education as a strategic change agent for mindset transformation needed for finding solutions to its main challenge of poverty and poor economic growth, so as to place Tanzania among developed countries of middle level income by 2025. The Tanzanian national Higher Education Policy (HEP) published in 1999, lists six major problems facing the higher education sector in Tanzania:

(i) an appalling low student enrolment
(ii) gross imbalance in science relative to liberal arts
(iii) gender imbalance
(iv) poor financing
(v) unregulated, proliferation of tertiary training institutions
(vi) a tendency to distort the real worth of academic programmes.

A number of strategies have been proposed and implemented to address these problems. For example, public facilities have been expanded, several new private universities have been allowed to operate. Table 1 shows the list of universities currently authorised to operate by the Tanzania Commission for Universities, the regulatory body for higher education in Tanzania. Cost-sharing initiatives allow the government to use limited resources to support more students. Affirmative action programmes have been implemented allowing an expansion of
female participation. Efficient use of infrastructure and resources has contributed to significant gains in the enrollment capacities of the public universities. Then the government has supported the initiative for higher education through the open and distance learning mode.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Name of Institution</th>
<th>Location</th>
<th>Ownership</th>
<th>Status</th>
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<tbody>
<tr>
<td>1</td>
<td>The University of Dar es Salaam (UDSM)</td>
<td>Dar es Salaam, Mlimani Campus</td>
<td>Public Accredited</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The Sokoine University of Agriculture (SUA)</td>
<td>Morogoro</td>
<td>Public Accredited</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>The Open University of Tanzania (OUT)</td>
<td>Kinondoni, Dar es Salaam (with branches in all regions)</td>
<td>Public Accredited</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>The Hubert Kairuki Memorial University (HKMU)</td>
<td>Mikocheni, Dar es Salaam</td>
<td>Private Accredited</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>The Tumaini University (TU)</td>
<td>Moshi, Municipality</td>
<td>Private Accredited</td>
<td></td>
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<tr>
<td>6</td>
<td>The Muhimbili University of Health and Allied Sciences (MUHAS)</td>
<td>Upanga, Dar es Salaam</td>
<td>Public Accredited</td>
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<tr>
<td>7</td>
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<td>Dar es Salaam, Survey Area</td>
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<td>Dodoma</td>
<td>Public Accredited</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Saint John's University of Tanzania (SAUT)</td>
<td>Dodoma</td>
<td>Private Accredited</td>
<td></td>
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<td>Stefano Moshi Memorial University</td>
<td>Moshi, Kilimanjaro</td>
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<td>11</td>
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<td>Private Accredited</td>
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<td>The Mzumbe University (MU)</td>
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<td>The State University of Zanzibar (SUZA)</td>
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<td>Public Accredited</td>
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<td>14</td>
<td>The International Medical and Technological University (MTU)</td>
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<td>15</td>
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<td>Tunguu, Zanzibar</td>
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<td>Aga Khan University - Tanzania Institute of Higher Education (AKU-TIHE)</td>
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<td>17</td>
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<td>Usa River, Arusha</td>
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<td>19</td>
<td>Muslim University of Morogoro (MUM)</td>
<td>Msamvu, Morogoro</td>
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</tbody>
</table>
The Open university of Tanzania (OUT) was established by an Act of Parliament no. 17 of 1992. The university offers certificates, diplomas and degrees through the Open and Distance Learning (ODL) mode. In 2007, the OUT was granted a Charter as an accredited institution, with five faculties and three institutes. Within a few years of its establishment, the OUT has been able to spread its activities throughout the country, with regional centres in each of the country’s 23 administrative regions on the mainland, and a centre in Zanzibar and Pemba Islands. There are five district towns with examination centres. Table 2 below shows the cumulative enrollment at the OUT by programme, since its establishment.

### TABLE 2 Cumulative enrolment by programme

<table>
<thead>
<tr>
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Open university students largely constitute of mature people who are working. Most of them missed a chance for higher education during their school days due to fewer places available in public universities. A few others did not have entry qualifications, but enter degree programmes after successfully completing a foundation programme. Some of the students attempt a few modules and are forced to defer studies due to pressures of employment or family. As a result, only about 50% of all enrolled students are active at any one moment.

Although the student numbers appear to have grown fast, the same cannot be said of staff numbers. Currently the university has just 172 academic staff, for handling an average of 17,000 active students at any one moment. This would give a staff/student ratio of 1:100. In reality the staff workload is much higher because about 30% of the staff are on study leave, undertaking postgraduate studies at various other universities. Preparing study materials, setting and marking of examinations, the OUT continues to rely on part-time lecturers, especially from the University of Dar es Salaam.

Recently, the government of Tanzania has embarked programme to revitalise secondary education, with the establishment of secondary schools in every ward. It is hoped that most of the scholars who joined the system in 2006, will be able to enroll in universities in 2011. The present capacity in campus-based face to face programmes in most universities in Tanzania will not be able to absorb the massive numbers of qualifying candidates. The Open University of Tanzania is likely going to be the only institution able to accept all these candidates, through its growing network of regional centres at regional and later district level. With improvements in bandwidth...
and anticipated drop in the price of computers in the near future, delivery of higher education through Open, Distance, and e-learning will be more viable.

During the 2007/8 academic year, the Open University of Tanzania enrolled 1,500 trainee teachers, who had earlier been licensed by the Ministry of Education and Vocational Training (MEVT) to teach in secondary schools before attending any training. Teacher training normally takes between three and four years in face-to-face institutions. It takes about six years in open and distance learning programmes offered by OUT. But this special programme, the ministry requested OUT to fast-track the training, so that students can be ready to graduate after three years. The pioneer group of students are now in their second year, and most of them are making satisfactory progress. The success of this programme will be an important milestone in the efforts of the Tanzania government to meet the growing need for teachers for its rapidly growing education sector. In 2005, there were 77,238 secondary school leavers in Tanzania. The figure rose to 115,302 in 2007. It is expected that in 2010 there shall be 326,955 secondary school leavers. It is estimated that 50,000 new teachers are needed to meet this rapid expansion of the education sector.

The vast numbers of scholars scattered across a country like Tanzania, constitute the greatest challenge to the OUT. Some areas cannot be reached from Dar es Salaam in less than three days. During the rainy season, most roads are unstable, and the university hires a charter plane to distribute exams and tests in the peripheral centres. Stringent requirements for quality control means a lot in terms of cost of managing examinations and tests, and routine distribution of printed study materials. The OUT continues to rely heavily on public financing, as it charges fees at about 20% the unit cost. To complete a bachelor's degree in education, students spend about Tsh 1.8m (less than USD 1,600), as direct tuition cost for the entire programme. To study for the same degree at the University of Dar es Salaam as a private candidate (partially subsidised), tuition would cost a minimum of Tsh. 4.8 m (About USD 4,000). It is this low fee structure that makes studying at the OUT attractive, and has enabled thousands of Tanzanians from low income families to earn a higher educational qualification.

Apart from scholars inside Tanzania, the OUT has enrolled about 139 students from Kenya, 91 from Uganda, 5 in Lesotho, 5 in Zambia, 3 in Ethiopia, in Burundi, 2 in Rwanda, 2 in Malawi and 2 in Hungary. There is a growing interest in the sub-Saharan region to study by distance from OUT. Currently, the OUT operates a study centre in Nairobi to cater for students in Kenya. Interest has been shown by the Triumphant College in Windhoek and the Namibian College of Open Learning (NAMCOL) to serve as a coordinating centre for OUT students in Namibia.

On the other hand, the Open University of Tanzania seeks to collaborate with the University of Coventry to offer by distance mode, the Masters of Communications Management (MCM). There is also interest to secure collaboration with the Glasgow Graduate School of Law to offer their LLM in IT and Telecoms by distance. Cross-border initiatives like these will facilitate smooth knowledge transfer, where both the centre and periphery have something to offer one another, but more precisely, this is a unique opportunity for scholars in Africa to get a chance to undertake postgraduate degree programmes at just a fraction of the actual cost.

Conclusion

Open and distance learning offers the best opportunity for massification of higher education in sub-Saharan Africa. Collaboration through cross-border initiatives with universities in developed countries will accelerate the pace of knowledge transfer to the region, thus stimulating the growth of the nearly stagnant economies of sub-Saharan Af
References


HOW OPEN AND DISTANCE EDUCATION SUPPORTS THE DISADVANTAGED

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and

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Abstract

The philosophy of distance learning lies in the open access to all social members via offering affluent learning programmes so that social productivity can be increased and national competitiveness can be enhanced. Open and distance education in China has effectively supported different kinds of learners in both urban and rural areas, especially those who can’t enter into the campus-based educational institutions for one reason or the other.

This article will examine how the Radio & TV universities in China have designed and developed various kinds of learning programmes to support the disadvantaged groups of students and help them to be successful. It offers the readers a picture of how the CRTVUs addressed different groups of students developing relevant learning contents, designing interactive learning management system and focusing on student-centred strategy in the process of teaching and learning. It will reveal how the practitioners have constantly adjusted their plans, methodology and contents so that effective teaching and learning provision can really demonstrate its benefits. The authors indicate in their paper that when the CRTVUs can really meet the social demands of the diversified groups of learners, they can show to the public their considerable commitments to establishing the harmonious society.

Introduction

Most distance education institutions have the masses as their foundation, which can be seen from the initial stage when they first enrol their students. Owing to its distinguished characteristics, open and distance education can provide opportunities for the disadvantaged in each country and help them to be successful citizens. There is a case study from China Central Radio & TV University (CRTVU), which indicates that open and distance education is an effective way to support the disadvantaged in the less developed areas. By describing a situation and through data analysis, the authors try to demonstrate the advantages of distance learning in one of the developing countries.

Why CRTVUs support the disadvantaged

When talking about social fairness, people naturally link about the income distribution of physical substances but forget the equality of educational provision. With the development of human society, people are now fully aware that educational equity is actually an important component of human rights. This is not only because education is now seen as a facilitator of social development, but is also regarded as an important factor which accelerates social equity, which is seriously needed in developing nations of the world. China hopes to establish a harmonious society, which immediately poses the question of massification of higher education for her teeming citizens. On the one hand, the demand for quality higher education is increasing while on the other hand, the inadequacy of educational infrastructure in the society poses a challenge which implies that the responsibility of providing quality higher education historically falls on the shoulders of higher institutions. Owing to limited number and capacity of the traditional universities, distance education institutions have evolved largely only in the urban areas in the past thirty years. According to the statistics from the CCRTVU press yearly book (2006), nearly six million tertiary-level adult learners have graduated from China Radio & TV Universities (Hereafter CRTVUs) and there are more than 18 million people for in-service
training, certificate education and continuing education programmes including large-scale and socialised training as well as reemployment training, etc. Through data analysis, we can find out that the most benefited people are those disadvantaged in the less-developed areas. More than 94.5% of our students are working adults dispersed in different walks of trade, and more than 78% are coming from grassroots units below the prefectural level. About 25.4% of our students are located in the less-developed areas of China’s western part. These kinds of students are benefited from distance education mode as they could not find a place in the traditional universities owing to time restriction, family and financial commitments. The establishment of CRTVUs with the philosophy of open access for all admissible adults as their educational provisions can fit in with the particular conditions of the learning adults. In the course of implementing distance and open learning, CRTVUs have realised social fairness and educational democracy. Just like Prof. Ge Daokai, our new President said, “Distance education is to be seen as the ladder for the general public to make progress; it is to be regarded as a weight to demonstrate equal educational opportunities; and it can also be taken as a support for students to gain enrichment and motivation.”

Practice from the CRTVUs

The CRTVUs are making their marks in the provision of distance education. The nation-wide distance education providers reflect unique features in offering wider ranges of learning programmes to the vast number of people no matter where they are or their cultural background. CRTVUs provide both degree and non-degree programmes, which have drawn large numbers of adult learners from all parts of China. With China’s economic transformation and social development, CRTVUs’ mandate of providing quality ODL for target students is gradually becoming a reality. The needs and expectations of learners are being met while at the same time, innovations and new learning strategies are being introduced. To achieve the objective of running satisfactory education for the masses, CRTVUs have adopted a series of measures and actions in the past few years.

In 1999, CRTVU launched an open education project to find new ways of fostering qualified professional talents. The project was very successful as more than two million graduates have already been produced. Through the implementation, CRTVUs have changed in many respects in educational concept, pedagogy, resources, teaching management and research. Now the pilot project has become common practice within the CRTVU system.

In 2004, CRTVU started implementing “One student in one village” project to increase the overall education standards in the rural areas via distance learning. By offering courses in planting, breeding and management, many students in rural areas have indeed helped the local peasants to be better off. Now more than 80 thousand students have registered for relevant courses. CRTVUs now offer 74 specialities in ten fields of studies and those specialties are closely related to students’ job performance and this has greatly helped in their various jobs. Also, to support the less-developed countries, CRTVU has launched a scheme of supporting 100 countries, with learning materials and other infrastructural needs which are needed in rural areas.

In 2002, being aware of the needs of the physically handicapped, CRTVU started an education college for the disabled people. Owing to physical deformity or psychological obstacles, it is hard for disabled people to conduct normal learning via traditional methodologies. Therefore, distance learning with its prominent features has brought benefits to most of the disabled people. Making in-road into this special group of people and meeting their needs, CRTVU, together with some of the local RTVUs, has found very effective ways to support disabled people with the provision of artificial limbs for the handicapped in that area. Another provision is the independent learning resource package, which emphasised teaching design and careful selection of the multiple media to meet the demands of the disabled people. In addressing the needs of the deaf and dumb, sign language has been included in the general content courseware. In addition to the above provisions, CRTVU encourages e-communication, e-discussion and other collaborative learning activities so that students can maintain their motivation and keep on learning. Now we have 23 teaching points throughout the country and all of them are working smoothly.

In consideration of the ethnic composition of the nation, the CRTVUs have developed close relationship with the local government and institutions and this has greatly contributed to the
success of the distance education programmes in some areas like Inner Mongolia and Xinjiang Uyghurs, the local RTVs have developed bilingual language programmes for ethnic minority groups to keep their language and culture. In 2002, CRTVU set up Tibetan College in Tibet University, where more than 1,300 students have already graduated. The programmes designed and developed have really benefitted for the people. Meanwhile, the CRTVUs have helped other ethnic groups to design IT and subject-oriented training programmes via the distance education system.

Implication of the programmes in CRTVUs

Though CRTVU have made commendable progress in the above-mentioned projects, future challenges which may be imposed by the economy and societal consideration are of serious concern. In our view, the successful implementation of the above-mentioned projects is based on CRTVUs' carefully designed programmes, which can be seen from several respects:

1. Establish an effective learning platform for students

By assembling both universities and social resources, CRTVUs have carefully designed and constructed an effective learning platform, where diversified adult learners from both urban and rural areas can retrieve necessary information and useful course materials, thus attaining the objective of sharing quality resources. However, with the great appeal for more applicable courses and more individualized support from the CRTVUs, we need to enlarge a wider spectrum of learning programmes, upload those courses into the learning platform, and make it available for easy composition for certificates and diplomas.

2. Provide multi-media learning resources

In meeting the specified needs of diversified groups of learners, multi-media learning resources have been developed, where students can select what is most suitable for their learning style and learning environments. For certain programs, learning materials have been prepared to suit the needs of students and also according to their own particular circumstances. This is flexibility, the hallmark of open and distance education.

3. Offer considerate support

For learning to be successful, a guided-learning mode is comprehensive among teachers and students. Before, during and after the course, teachers will play a proactive role in guiding their students along the effective learning path. Firstly, the clarified learning objective is to be induced when freshmen have been enrolled. The effective management of learning process has to be conducted, where interaction between students and teachers is stressed and quality control is carried out. With the combination of autonomous learning and instructor-guided learning mode, knowledge can be disseminated, reflective thinking can be developed, and capability to improve learning outcome can be formed.

4. Develop quality assurance strategies and criteria

CRTVUs are committed to providing quality education for students. Therefore, management at every stage of learning is of vital importance. Quality is assured not only by setting up rules, regulations, standards and criteria, but also effective supervision, direction and coordination. Quality assurance can be realized not only by evaluating students' periodical learning outcome, but also by evaluating performance of the instructors and other management, which calls upon administrators to have clarified criteria and effective procedures for implementation so as to achieve objectives. In addition, CRTVUs have deepened technology strategy to give easy access to students, and have instituted effective administrative strategies to offer convenient and flexible services. We pay special attention to the function of interaction and constantly improve our teaching strategies in accordance with the students' expectations and feedback. Furthermore, we also ask our instructors, technicians, and administrative staff to be responsible, proactive, and to fully exert their initiatives, respond to our students' enquiries timely and quickly, offer appropriate information and constructive suggestions, adopt adaptive methods and satisfy every reasonable demand so that quality can be really assured.
Conclusion

In the course of providing relevant programmes, distance education can really alleviate the pressure from regular higher educational institutions (HEIs). To some extent, we can see that ODL has in fact filled the gaps in educational provisions between developed and less developed areas in our country, it has balanced educational distribution and made it possible for everyone to enjoy quality education. We think that ODL can reflect education equity and social justice. It is our mission to adhere to the principle of distance education and open learning and try in every way to meet challenges from the society. It is a long-term strategy to bring ODL into full play while establishing the lifelong learning system in China. We are sure that by our efforts, we can facilitate the formation of a harmonious society and make contribution to the development of the world distance education and open learning.

References


SUB THEME VI

E-LEARNING AND ODL IN DEVELOPING NATIONS: PROBLEM AND PROSPECTS
EDUCATION, ICT AND THE USE OF MOBILE STUDY CENTERS

Mrunal Chavda
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Arvind Virmani says, “There has been a convergence of technologies in different areas of communication such as telephone, telegraph, radio, internet and data networks. Multimedia is rapidly becoming a reality, and a digital revolution is in the offing. Even electricity wires are usable for simultaneously carrying of information” (Virmani, 2003: 1907). The relationship between education and poverty is quite clear; educated people have higher earning potential and are better able to improve the quality of their lives which means they are less likely to be marginalised within the society at large. Education empowers a person and it helps them to become more proactive, gain control over their lives and to broaden the range of available options (Khan, 2007: 82). Educational technology and newly emerged technological gadgets have no put limit on its wide use in ODL. Education and learning are the vital means for productive and sustainable development across the globe. ODL has come as an option to many who cannot manage to get into the mainstream education system for many reasons. The emergence of information infrastructure and info highways, knowledge pits have given the option to chase the dream of lifelong learning. The virtual communities interact over the internet to give the enormous amount of knowledge to be shared, edited and used. ODL has opened a new avenue for the introduction of technology to remove some obstacles to reach to the learners, and overcome common causes of dissatisfaction among the audience. “E-learning is highly appropriate for poverty groups and can help those who are usually deprived of education or other social services. It can provide education to people in rural areas without schools, women facing social or cultural barriers that limit their access to educational institutions, socially disadvantaged groups that include minorities who are usually marginalised, and students with disabilities” (Singh, 2004: 90). However, elearning is for those who can access internet in the nearby area /school/govt. agencies but those who are in the remotest regions are still deprived of education, MSC will be a boon for them.

“... a quarter century after the ODL system started in our country, it is rare to find well staffed and well equipped study centers which also do not have the necessary equipment. In all the counts, IGNOU which was to act as a model for other institutions is guilty of serious lapses in the management of these centres.” (Singh, 2004:330). Neglect of study centres brings discouragement among students. “In our country, relatively speaking, well run study centre, even when they were well staffed, no well equipped. Students hardly felt attracted to them and did not visit them as it became unavoidable” (Singh, 2004: 132).

This paper attempts to find the answer to the age old question of reaching to the students and solving their problems with the help of advanced technology, i.e. RFID. The idea is to bring study centre/regional study centre to the reach of farthest located students with the aid of new technology. The primary data was collected from 1500 respondents via mail survey out of which 1000 respondents mailed their responses back. Closed as well as open-ended Questionnaire was aimed to get internal-level response and semantic differential questionnaire was used. The data revealed that the students ‘the Open and Distance Education System were dissatisfied with many issues i.e. counselling, study material, faculty guidance and time factor. All were unanimous on the issue of the wastage of time. Out of 1000 respondents, 85% believed that they are wasting time in commuting whereas 79% observed study material is obsolete. Interestingly, 94% felt the urgent need for the counselling. These responses prompted the author to look out for an alternative.

The main natural resource in the field of communication is the spectrum, particularly the radio frequency segment of this spectrum. This ownership right is normally with governments. There can be free usage for Distance Education sector with the 4th wave of information and technology. Radio Frequency Identification (RFID), a technology similar in theory to barcode identification, is
steadily finding acceptance and adoption across verticals. Retail ports, industries, warehouses, parking lots, toll roads, travel/car fleet units, airports, judiciary and government are a few of the significant adopters of this technology. In RFID, the electromagnetic or electrostatic coupling in the RF portion of the electromagnetic spectrum is used to transmit signals. An RFID system consists of an antenna and a transceiver to read the radio frequency and transfer the information to a processing device, and a transponder tag, which is an integrated circuit containing the RF circuitry and information to be transmitted. RFID systems can be used just about anywhere, from clothing tags to missiles to tags to food -- anywhere that a unique identification system is needed. The tag can carry information as simple as a pet owner's name and address or the cleaning instruction on a sweater to as complex as instructions on how to assemble a car. Some auto manufacturers use RFID systems to move cars through an assembly line. At each successive stage of production, the RFID tag tells the computers what the next step of automated assembly is. RFID is also called dedicated short range communication (DSRC). RFID scanning can be done at greater distances.

RFID technology has been in its infancy as it has come to the surface in around 2004 as the time for RFID take-off and industries converging on deploying RFID applications and services. Radio frequency identification (RFID) is a technology that allows automatic identification and data capture by using radio frequencies. The salient features of this technology are that they permit the attachment of a unique identifier and other information — using a microchip — to any object, animal or even a person, and to read this information through a wireless device. When linked to databases and communications networks, such as the Internet, this technology provides a very powerful way of delivering new services and applications, in potentially any environment. Radio Frequency Identification (RFID) is evolving as a major technology enabler for tracking goods and assets around the world.

RFID systems consist of tags, readers and a range of applications that track, monitor, report and manage items as they move between physical locations. These devices and software must be supported by a sophisticated software architecture that enables the collection and distribution of location-based information in near real time. Each tag has a unique identification number called an Electronic Product Code (EPC), and potentially additional information of interest to manufacturers, healthcare organisations, military organisations, logistics providers and retailers, or others that need to track the physical location of goods or equipment. All information on RFID tags, such as product attributes, physical dimensions, prices or laundering requirements, can be scanned wirelessly by a reader at high speed and a distance of several meters. The basic components of any RFID system include:

- **Tags (or transponders)**, which can be either active or passive. Active tags have their own means of sending a signal, whereas passive tags rely on power from tag readers.
- **Data stored on tags**, which could be a simple ID number relating to an online catalogue or complex information such as manufacturer, lot number, serial number and so on.
- **Readers (or interrogators)** are used to identify tags within the reception coverage area and aggregate and “smooth” the data collected.

IT infrastructure to support the collection, management and use of key RFID data.
In 1998 researchers at the Massachusetts Institute of Technology (MIT) Auto-ID Center began to research new ways to track and identify objects as they move between physical locations. This research, which has a global outlook, centered on radio frequency technology and how information held on tags can be effectively scanned and shared with business partners in near real time. The work of the Auto-ID Center focused on:

- Reducing the cost of manufacturing RFID tags
- Optimising data networks for storing and delivering larger amounts of data
- Developing open standards

The interrogators send all the tag data they collect to software provided by Vue Technology, an RFID solution provider focused on item-level tagging applications in retail environments.

Electronic Product Code (EPC): a unique number reference for a physical object be it a product, case or pallet.

- Electronic tags: that uniquely identifies an object which it is attached, via a unique EPC number that can be read without contact by a (RFID) reader.
- Object Naming Service (ONS): an application run on a host computer/system that collects the read EPC number and informs the host computer/s where to find information about the object. Typically this information may reside on a host computer, host network, or on other computer systems accessed via the Internet.
- RFID Air Interfaces – specifying radio communication protocol between tags and readers.

It is a form of identification that is contact-less and does not require line of sight.

The RFID Solution is a revolutionary application of automatic identification and data capture (AIDC) technology. A standard RFID system consists of four main parts:

RFID Tags - Flexible, paper-thin smart labels that applied directly to library items. Each RFID tag contains a tiny chip, which is readable and writable and can store information to identify items in your collection. In library applications, it also stores a security bit and if needed, information to support sorting systems.

Antenna - A conduit between RFID tags and the coupler. RFID antennas emit radio waves that activate RFID tags as they pass through an activation field. After a tag is activated, it can send information to or receive information from the coupler.

Coupler - The link between RFID tags and the PC. The coupler can send information in two directions: It can read information from a tag and send it to the PC (read mode), or it can read information from the PC and send it to an RFID tag (write mode).

PC - The link between the coupler and your library automation system. VTLS has developed software that runs on your PC to provide an interface between the RFID hardware and your library automation system.

1. Tag enters RF field created by the antenna.
2. Antenna's RF signal activates the tag.
3. Coupler sends a modulated signal.
4. Tag demodulates the signal and returns its data to the reader.
5. Coupler sends data to the computer.
6. Computer transmits new data through the coupler to the tag.

An RFID system consists of a tag made up of a microchip with an antenna, and an interrogator or reader with an antenna. The reader sends out electromagnetic waves. The tag antenna is tuned to receive these waves. A passive RFID tag draws power from the field created by the reader and
uses it to power the microchip’s circuits. The chip modulates the waves that the tag sends back to the reader, which converts the new waves into digital data.

Students’ Kit can be inclusive of ipods, mikes with headphones. And students and faculties can be trained also for the same. The benefits are speed, paper work, interior reach and time saver. The setbacks are misuse of ipods; training is costly, negative attitude and technological barriers.

Advantages of RFID technology

- The tag can trigger security alarm systems if removed from its correct location.
- Scanner/reader and RFID tag are not (so) orientation sensitive.
- Automatic scanning and data logging is possible without operator intervention.
- Each tag can hold more than just a unique code.
- Each item can be individually labelled.
- Tag data can be comprehensive, unique in parts/common parts, and is compatible with data processing.
- With the right technology a plurality of tags can concurrently read
- It can be read only or read-write.
- There is a very high level of data integrity (digital check sum encoding).
- Provides a high degree of security and product authentication — a tag is more difficult to counterfeit than a barcode.
- The supporting data infrastructure can allow data eval and product tracking anywhere provided the scanner/reader is close enough to the tag.
- Since each tag can be unique they can act as a security feature if lost or stolen e.g. a stolen smart travel card can be cancelled.
- The technology is rugged and can be used in hostile environments.
- The technology lends itself to being updated. For example, as a car goes through its life its service record can be electronically logged with it.
- The technology can be used to increase security. For example, it may be construed that a child is at school as their tag in their school bag was logged when they came through the school gates.
- Enrolled students’ grievances will be removed and performances could be enhanced.
Confidence could be built among existing students and new ones could be attracted.
Education at the door step in the real sense, empowering the least empowered.
Students part of the operation with new technology.
Improvement in ODL communication, delivery methods, and administration.
Cost saving on both sides (submission of assignments, projects, examination).
Mini school/college.
Helping disabled, women and old people.
Geographical barriers removed.
Information hub for students.
Data transfer easy, faster and cheaper.

Disadvantages of RFID technology

External influences such as metalwork, material properties, and radio interference can constrain RFID remote reading.
Currently there are no internationally agreed frequencies for RFID operation (other than 13.56 MHz, which is primarily used by smart cards but also by other RFID tags) and permitted scanner/reader powers differ between countries. This limits product take-up. [For example, there are significant differences between USA and European UHF frequencies.]
There is a high cost (long pay-back) for integrating RFID technology into existing inventory control systems.
Too costly and expensive to implement.
Government grants and policy.
Technological failure.
Privacy issues.

The world is living where Knowledge is considered a growth engine. The ODL has long played a significant role in the country’s educational scenario. The success of RFID technology depends largely on its integration with existing applications and enterprise solutions. It is critical that the interfaces for RFID solution integrates seamlessly with the existing business applications and enterprise solutions thus creating least user class as well as interoperability of data and systems for different RFID sources, for example, checking employee-asset rights and confidentiality parameters. Deployment of such a system will also require careful estimation followed by balancing of multiple database access and transaction loads. Mobile Study Centre is bringing a mixture of traditional brick and mortar education and elearning where in e-learning portals are given to learners of the remotest area. RFID have the potential to achieve the MDGs, a new way for F2F (face to face) education in a knowledge-based economy one needs to keep up to date over the skills and the latest developments. Developed nations have an option of much use of ICT while developing nations and transitional ones do not. The digital divide of the world has to be narrowed down. If people can not reach out education, even in ODL mode or elearning, then the author firmly believes that the education should or rather must reach out to people even though it is costlier or through Mobile Study Centre.

References

http://www.nakota-software.com/rfid accessed on 11-12-2007
Abstract
This paper explores the possibility of bringing elearning to the universities in Asian countries. It is expected to have a great impact on the socio-economic growth of the region. The idea of elearning is to extend affordable, quality higher education to all areas of Asian regions based on the existing insufficient telecommunication infrastructure. In the context of a developing country like Bangladesh, the process of design and implementation of e-learning framework required to be accommodated satisfying a number of constraints. This is an example that describes a distance learning environment using the Internet via satellite in Asian regions where Internet infrastructure is insufficient. Through collaborative networks of public–private partnerships we will be able to solve the dual problem of infrastructural barriers and weak ICT policies. This paper describes the constraints and design framework to overcome those obstacles.

Key words: ICT infrastructure, asynchronous learning, distance learning

Resume
Cet article explore la possibilité d’utiliser l’e-apprentissage dans les Universités dans les pays asiatiques. Il devrait influer considérablement sur la croissance socio-économique de la région. L’idée de l’e-apprentissage consiste à faire en sorte qu’un enseignement supérieur de qualité soit accessible à toutes les régions d’Asie à partir de l’infrastructure insuffisante de télécommunications existante. Dans le contexte d’un pays en voie de développement comme le Bangladesh, le processus de conception et de mise en œuvre du cadre de l’e-apprentissage a besoin de répondre à un nombre de contraintes. Il s’agit d’un exemple qui décrit un milieu d’enseignement à distance à l’aide d’Internet par satellite dans les régions d’Asie où l’infrastructure Internet est insuffisante. Au moyen de réseaux de collaboration de partenariats entre le public et le privé, nous pourrons résoudre le double problème des barrières d’infrastructure et des politiques peu efficaces de TIC. Ce papier décrit les contraintes et le cadre nécessaire pour surmonter ces obstacles.

Mots clés: Infrastructure TIC, Apprentissage asynchrone, apprentissage à distance
Introduction

E-learning has the potential to enable Asia achieve education for all. E-learning most often means an approach to facilitate and enhance learning through the use of devices based on computer and communications technology. Such devices would include personal computers, CDROMs, Digital Television, P.D.A.s and Mobile Phones. Communication technology enables the use of the Internet, email, discussion forums, and collaborative software. The merit of distance learning is that students can receive cutting edge lectures from professors all over the world. For those areas with sufficient Internet infrastructure, there would be no problem receiving these kinds of lectures.

However, it is difficult for countries with insufficient Internet infrastructure to receive them. This project proposes and demonstrates a distance learning environment utilising satellite links as an Internet infrastructure that can be quickly installed with low cost for those areas.

ICT infrastructure

World Internet Status

![World Internet Users December 2007](Source: www.internetworldstats.com Copyright © 2008, Miniwatts Marketing Group)

Asia Pacific Region’s Characteristics

- Large and Diversified
- Accounts of 66 per cent of world population
- Fastest growing economies
- ICT penetration high in Urban centres
- Rural population account for up to 80%

Rural Population Characteristics

- Incidence of poverty is high
- Literacy is low
- High religious and cultural values
- Poor connectivity and accessibility
- ICT penetration is low
Technology Policy and strategy guidelines

- Scalability
- Modular
- Ease of Integration
- Robust and ease of maintenance
- Secure
- Minimise total cost of ownership
- Open source vs proprietary

Internet Usage in Asia
Internet Users & Population Statistics
for 35 countries and regions in Asia

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia Only</td>
<td>3,733,783,474</td>
<td>56.5 %</td>
<td>510,478,743</td>
<td>13.7 %</td>
<td>38.7 %</td>
<td>346.6 %</td>
</tr>
<tr>
<td>Rest of the World</td>
<td>2,873,188,185</td>
<td>43.5 %</td>
<td>809,393,365</td>
<td>28.2 %</td>
<td>61.3 %</td>
<td>228.1 %</td>
</tr>
<tr>
<td>WORLD TOTAL</td>
<td>6,606,971,659</td>
<td>100.0 %</td>
<td>1,319,872,108</td>
<td>20.0 %</td>
<td>100.0 %</td>
<td>265.6 %</td>
</tr>
</tbody>
</table>
Internet Usage Statistics:
450,000 Internet users as of August, 2007;
0.3% of the population, according to ITU.

Internet Usage and Population Statistics:

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Users</th>
<th>Population</th>
<th>% Pen.</th>
<th>GDP p.c.*</th>
<th>Usage Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>100,000</td>
<td>134,824,001</td>
<td>0.1 %</td>
<td>N/A</td>
<td>ITU</td>
</tr>
<tr>
<td>2007</td>
<td>450,000</td>
<td>137,493,990</td>
<td>0.3 %</td>
<td>US$ 470</td>
<td>ITU</td>
</tr>
</tbody>
</table>

Note: Per Capita GDP in US dollars, source: United Nations Department of Economic and Social Affairs.
Technology
Cellular subscribers 0.80 Per 100 people

Internet users 0.20 Per 100 people

Personal computers in use 0.30 Number per 100 people

Telephone mainlines 0.50 Per 100 people

Telephone mainlines and cellular subscribers 1.30 Per 100 people

All Teachers Will Use Technology Effectively to Help Students Achieve High Academic Standards.

Ensuring that the nation has effective 21st-century teachers requires more than just providing sufficient access to technology for teaching and learning. Improve the preparation of new teachers, including their knowledge of how to use technology for effective teaching and learning.

The implementation of e-learning
The implementation of the e-learning system by an institution can be achieved using one of three approaches. This implementation will depend on the level of readiness in terms of the budget, infrastructure and human resources such as experience, skills, knowledge and attitude. Some institutions are already practising e-learning in one way or the other without using the network but by deploying the computer stand-alone learning materials such as the CD-ROMs, CAI courseware and other locally produced courseware.

There are three main approaches to use e-learning within education:

1. Using the technologies to support or supplement the traditional face-to-face course
2. Integrating online activities into a traditional course to enhance the learning experience
3. Delivering a course that is entirely online
Planning and Implementing

Most eLearning situations use a combination of these techniques.

Along with the terms learning technology and educational technology, the term is generally used to refer to the use of technology in learning in a much broader sense than the computer-based training or Computer Aided Instruction of the 1980s. It is also broader than the terms Online Learning or Online Education which generally refer to purely web-based learning. In cases where mobile technologies are used, the term M-learning has become more common.

E-learning is naturally suited to distance learning and flexible learning, but can also be used in conjunction with face-to-face teaching, in which case the term Blended learning is commonly used.

2.4. Implementation conti....

However, in locations without sufficient Internet infrastructures (We call these locations “Internet developing areas”), it is difficult for students to participate in these distance learning programmes due to a lack of sufficient network bandwidth to receive high enough quality video and audio from those universities.

The SOIASIA Project has proposed a distance learning environment using a satellite link as an Internet infrastructure for these Internet developing areas. We designed the distance learning environment with lecturer, student and gateway sites and formed partnerships with 11 educational organisations in Asia. We established a distance learning environment including 5 lecturer sites in Japan and the United States, 11 student sites in Asia and 1 gateway site in Japan, and evaluated the environment through actual university level lectures as proof experiments.
Communication technologies are generally categorized as asynchronous or synchronous. Asynchronous activities use technologies such as blogs, wikis, and discussion boards. The idea here is that participants may engage in the exchange of ideas or information without the dependency of other participants involvement at the same time. Electronic mail (Email) is also asynchronous in that mail can be sent or received without having both the participants' involvement at the same time.

Synchronous activities involve the exchange of ideas and information with one or more participants during the same period of time. A face-to-face discussion is an example of synchronous communication. Synchronous activities occur with all participants joining at once, as with an online chat session or a virtual classroom or meeting.

Features of E-Learning

- Learning is self-paced and gives students a chance to speed up or slow down as necessary.
- Learning is self-directed, allowing students to choose content and tools appropriate to their differing interests, needs, and skill levels.
- Accommodates multiple learning styles using a variety of delivery methods geared to different learners; more effective for certain learners.
- Designed around the learner.
- Geographical barriers are eliminated, opening up greater education options.
- 24/7 accessibility makes scheduling easy and allows a greater number of people to attend classes.
On-demand access means learning can happen precisely when needed.
Travel time and associated costs (parking, fuel, vehicle maintenance) are reduced or eliminated.
Overall student costs are frequently less (tuition, residence, food, child care).
Potentially lower costs for companies needing training and for the providers.
Fosters greater student interaction and collaboration.
Fosters greater student/instructor contact.
Enhances computer and Internet skills.
Draws upon hundreds of years of established pedagogical principles.
Has the attention of every major university in the world, most with their own online degrees, certificates, and individual courses.

Barriers to online learning

Like any other educational innovation, there are pitfalls and barriers confronting the introduction of e-learning. These barriers pose as challenges. We are confident that e-learning can facilitate the teaching and learning process in higher education particularly when universities do not have the manpower, funding or space to accommodate large enrollments of students. From our experience, we have identified the following dimensions as areas of challenge to focus our attention:

Accessibility and equity
Maintenance of system and infrastructure and safety
Selection of appropriate hardware and software
The potentiality and limitations of the selected systems tool design (e.g., WebCT)
Technical skills and support
Top management support
Courseware design and development team
Pedagogical skills
Training of lecturers, students and support staff
Provision of efficient elearning network (LAN, WAN, Internet)
Recognition/reward
Intellectual property and copyright
Problems of adoption and innovation

Conclusion

ELearning has become a feasible tool for facilitating education for a wide spectrum of participants using a variety of technologies. Despite technical limitations, elearning might be successfully implemented in developing countries like Bangladesh and possesses the capabilities for overcoming many problems associated with traditional classroom-based learning framework. This paper described the process of successful implementation of elearning program in Bangladesh. Considering the rapid expansion of the usage of mobile communication devices in the country, development of technology and reduction in cost, an elearning framework is expected to contribute significantly to educational development and thereby have a long term effect on poverty alleviation. The initiative can further be enhanced by exploring newer technologies like m-learning to be incorporated into the programme. Research should focus on improving interactivity in the course materials.
Acknowledgement

I am grateful to my respectable supervisor Mr. Md. S. Islam, assistant professor, IICT, BUET for his endless cooperation to successfully complete this paper. I particularly thank my class teacher Professor Dr. Md. Abul Kashem Mia, associate director (academic), IICT, BUET for his moral support.

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www.soi.wide.ad.jp
www.soi.itb.ac.id/soi/about.html


Background

AIDS Relief Foundation started from a desire to use Information and Communications Technologies (ICTs) to improve the way in which we address the AIDS pandemic in Africa. The central focus was on AIDS, the tragic results of which Joy Tang, ARF’s founder experienced first hand while traveling through Africa. As of April 2003, ARF began doing business as the oneVillage Foundation.

OVF headquarters offices are in San Jose, California; it has affiliates in Winneba, Ghana, Ibadan, Nigeria and Nairobi, Kenya.

Mission

OVF sees the challenge and opportunity of using Information Communication Technology (ICT) to address World Urgent Issues, by providing a platform for an integrated approach to sustainable development. People have lost, or stopped practicing, the knowledge of sustainable living. Our mission is to connect art, science and education with pro-active hands on community-oriented actions on ground that promote more sustainable ways of living in both developing and developed parts of the world. We are devoted to increasing cooperation and access to ICT in under-served communities, facilitating local content creation and disseminating and building bridges among digital and physical communities globally.

Vision

We envision the development of powerful networks powered by ICT to develop local efforts, promote integrated and whole systems oriented approaches to sustainable development that will be prototyped through Multi-purpose Community and Unity Centers. Through the Centers and oneVillage Initiatives, we facilitate community-oriented development processes that empower local communities in both developed and developing regions of the world. The result will eventually lead to a rapid scaling of sustainable technologies that will address World Urgent Issues as part of a Concerted Global Effort.

Forty Million Hopefuls, a presentation given to the black congressional caucus in 2003 by OVF Founder Joy Tang was a plan to develop projects to promote local economic self-sufficiency through entrepreneurship training. This effort eventually led to the development of OVF regional affiliates in the African countries where various projects are being designed and executed.

oneVillage Foundation is officially registered in Nigeria as Global Resources Information Technology Network (GRITEN) with Registration number: IAC/IT/NO 22671 and the major plan of OVF is to use Information and Communication Technology (ICT) to build complimentary relationships between developing and developed regions while increasing the rate of sustainable development. This includes economic development, entrepreneurship training, health care, orphanage care and ICT augmented educational programmes and so on and so forth.

The oneVillage Foundation Initiatives is a comprehensive platform for sustainable economic development, built on six ‘pillars’, which are the foundation of oneVillage Initiative Ecosystem.
The pillars are: education, governance, economy, wellness & healthcare, and culture & tradition. Complementing the elearning and collaboration portal has resulted in the plan to develop Multi-purpose Community and Unity Centres as demo sites to highlight the benefits of this comprehensive approach to development.

Multi-purpose Community and Unity Centres which are also called the Open Digital Village (ODiV) is a physical convergence points for local community revitalisation and improvement featuring the most relevant sustainable practices and technologies. [www.onevillagefoundation.org](http://www.onevillagefoundation.org)

The Ibadan Open Digital Village (IODiV) ICTs for Education, Capacity-Building and Community Development.

Abstract

The Ibadan Open Digital Village (IODiV) for Information and Communication Technology (ICT) Capacity-Building and Community Development is an initiative of OneVillage Foundation (OVF) which is focused on using ICTs tools to educate and organise people for both personal life skills and sustainable economic development which includes improving the lives of students and staff of major training institutions, disadvantaged and vulnerable individuals and families, supporting local businesses and building a sustainable economic using a combination of Open Source, Open Hardware and Wireless Technologies. There will be establishment of free wireless networks and internet access to schools and institutions in the project catchment area which will increase access to information and knowledge on varied subjects and research skills will also be improved.

This paper demonstrates the use of Information and Communication Technologies (ICTs), including Open Digital Library (ODL) modules to support poverty alleviation and rural and urban development, promote and increase literacy levels, develop a sustainable and open society and demonstrate the viability of low cost wireless solutions to aid in community development. The availability of trained university and polytechnic lecturers within the center will greatly enhance the potential to make open schooling available to significant percentages of the students in need of it. The model is transferable to other developing nations of Commonwealth countries.

Executive Summary

Developing countries are faced with the challenges of youth unemployment and poverty. This crisis is crystallised by weaknesses in education systems and a failure to incorporate Information and Communication Technology (ICT) into acquisition into youth development programmes. Without the proper skills to survive in a technologically literate world, school dropouts and even graduates are vastly unemployed.

Furthermore, the lives of many African youths, particularly those with high unemployment rates are ingrained with poverty, violence and deprivation. Many African youths are forced to subsist as child soldiers or as participants in ethnic, religious and political violence. The scourge of AIDS has also orphaned thousands of children across the continent, leaving many vulnerable to exploitation and displacement. These young people have little hope of receiving a basic education, let alone gaining access to critical technology skills that can ensure better employment and a brighter future.

As a case study, Nigeria has been deeply affected by poverty, social unrest, and health-related challenges. Public schools are often the first to suffer when money is scarce. Pervasive corruption has also led to misuse of education funds. As a result, education at all levels is suffering in Nigeria and so are the lives of millions of young people. The problem of under-education in Nigeria runs deep in the general population. According to recent UNESCO estimates that about 25% of males and 41% of females ages 15 and over are functionally illiterate in Nigeria. And while these percentages are expected to drop slowly in the next five years, that still leaves over 22 million people without basic literacy skills.
Very few percentage of young people have used computers or know how to apply technology as a tool for learning in their daily lives and to improve their communities. A small number of fortunate schools have one or two computers, but the computers go unused because they are outdated, broken, or teachers do not have adequate skills to teach the technology. Unless they have real and frequent interaction with computers, children are simply too far removed from practical reality to gain concrete technological skills and learning. In addition, technology training and courses are not part of the educational curriculum in the early stages of primary and secondary school levels, leaving a key window in youth catalytic learning development unopened. Broader community access to technology is lacking in Nigeria.

The cost of using technology tools in “roadside cybercafés” is prohibitive (the average monthly cost is about $40 for 20 hours of Internet service). Given that the average gross national income (GNI) per capita is only $260.3, very few people own personal computers and only 200,000 are Internet connected. Out of the over 150 million people in Nigeria, only 6.6 people per thousand have personal computers. For a country’s size and international importance, Nigeria has a long way to go before its youth receive the technological education they need and deserve in order to be economically competitive in the global marketplace. Perhaps more than ever, Nigeria’s young people need new opportunities to gain access to technology as a tool for improvement of themselves and their communities. Since the government is not always able to meet people’s educational needs, the aggregate effort by non-governmental organizations has begun to “fill in” in small ways to link youth, education and technology. This paper describes one of such efforts called “The Ibadan Open Digital Village”.

Description/Background

The Ibadan Open Digital Village (IODiV) is the replication of our first of its kind Open Digital Village in Ghana, called “Winneba Open Digital Village (WODiV)”. The Ibadan Open Digital Village (IODiV) is a community-focused project to use Information and Communication Technologies (ICTs) to educate and organize people for both personal life skills and sustainable economic development; improve lives of students and staff of major training institutions; disadvantaged and vulnerable individuals and families; support local businesses and to build a sustainable economy using a combination of Open Source, Open Hardware and Wireless Technologies. This project specifically provides connectivity and local access to ICTs; focuses on ICTs for Education and Community Development through the use of Wireless Technologies to give access to the academia, health posts, nurses and police training institutions, small and local businesses and the general community.

Vision/Theme

African youth are demanding a voice in society and using Information and Communication Technologies to empower themselves. Building on the momentum of similar and previous efforts, we believe the key to addressing the African conundrum is through community scale development strategies. Open Digital Villages (ODiVs) promote better ways of living and give the underprivileged the opportunity to fulfill their dreams and aspirations through the development of a network of telecenters deployed throughout Nigeria.

Concept

ODiV Multi-purpose Centres facilitate effective ICT-augmented sustainable development programs (Holistic ICT for EcoLiving). IODiV focuses on an integrated human network oriented approach that refines techniques and processes for effective deployment. This includes evaluating technologies and approaches for their usability, applicability and performance in relation to the greater Nigeria as consistent with OVF vision and mission. This is being done through the effective integration of web 2.0 tools such as wikis, blogs and social networking platforms. Such a process maximises the potential of technology local use and makes sure that large scale technology rollouts are appropriate to local needs.
The project started up in Ghana and first place of replication is Ibadan, Nigeria while the region of intervention for the programme will be throughout Africa.

The project is first being replicated in Ibadan, the premier university (University of Ibadan) and one of the first generation Polytechnics in Nigeria. The Polytechnic in Ibadan and other institutions like, School of Hygiene, College of Education- where teachers are being trained, University of Ibadan College Hospital- where medical doctors are being trained and resides. In addition to these, IODIV is located in the centre of Ibadan and surrounded by private secondary schools and colleges where the leaders of tomorrow are groomed.

Methodology

**One Village Foundation Initiative (OVF)** is an **Assets-Based Development Model (ABCD)** that identifies local needs and designs systems that address those needs. OVI evolves this process by developing a highly integrated development model that promotes local self-reliance, while also increasing competitiveness within the global economy. This includes a Holistic ICT for Development model that designs the relevant ICT infrastructure to enable this process.

We work closely with our partners using the centre to analyse local areas of needs and opportunities, particularly those relevant to partners and stakeholder groups. The initial infrastructure at the centre will be utilised to provide basic analysis and development services for these groups as well as provide opportunities for talented youth at local institutions to excel using these tools.

A series of seminars will be convened at the IODIV will be a multistage community outreach programme:

- Explain OVF and our partners agreement and what we seek to achieve.
- Weave various community inputs into a development framework for multistakeholder collaboration
- Identify Asset and Opportunity Clusters and how the centre can move the process forward to realise the alliance’s goals
- Complete report on preliminary opportunity statement on how the centre will be used to reach those goals identified by the community.

Financial Sustainability

The centre will be sustained through the development of income-generating social enterprises that deliver useful ICT services to the community increasing the region’s economic productivity and competitiveness within the global economy.

Goals

IODIV demonstrates the use of Information and Communication Technologies (ICTs), including Open Digital Library (ODL) modules to support poverty alleviation and rural and urban development; promote and increase literacy levels; develop a sustainable and open society; and demonstrate the viability of low cost wireless solutions to aid in community development. Specifically:

- Develop ODIVs as centres for youth to learn basic technology skills, software applications and share best practices;
- Demonstrate ODIVs as hubs that expedite the process of replicating sustainable human habitats and production systems;
- Complement and support the national human capital development efforts by building a platform to absorb and develop individual talents and contributions using ICT, for the realisation of Nigeria’s vision 2020;
- Operate as model for social enterprises development in Nigeria and Africa;
- Promote access and develop confidence in Open Source applications in Emerging Markets.

Target Groups
This project is a multi-stakeholder partnership focused on the youth, who are the future of all nations, involving universities, polytechnics, colleges of education and secondary school students, NGOs and the private sector as well as local and national government officials in Nigeria.

Long Term Vision
An Open Digital Village (ODiV) is considered an early Multipurpose Community (Unity) Centre. We anticipate that the Holistic ICT approach will develop a more integrated approach to sustainable development that includes the development of Demo site for sustainable technologies. Within this structure social enterprises promoting sustainable technologies relevant to local needs will be promoted and cultivated.

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INSTRUCTIONAL SCAFFOLDING: AN EXPERIMENT IN USING TEXT MESSAGING TO SUPPORT DISTANCE EDUCATION IN THE DEVELOPING WORLD

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Abstract

Mobile phones, in their current state, are designed to meet western needs. Subscribers in developing countries, however, now constitute the greater part of the global 2.4 billion mobile phone users. Africa is currently the fastest growing market for mobile phones with an annual increase of 65% over the past five years. Mobile phone users in the developing world have also developed innovative uses for the mobile phone beyond simple voice communication. Even as conventional desktop computers (PCs) have not seen the diffusion in Africa that they have had in the western world, the adoption of mobile phones and for that matter SMS text, has been astonishingly rapid and pervasive, reaching even the poorest communities (Eagle, 2005).

There are particular reasons the developing world has taken to mobile phones so readily. Unlike desktop computers, mobile phones are not dependent on steady supply of electricity and they provide the computational capabilities of the desktop from a decade ago. Mobile phones have therefore become heavily imbued in economic and social networks for both young and old people of the developing world (Eagle, 2005). Because of its widespread use, the mobile phone can be viewed as a liberating tool, but its potential contribution to distance education has received little attention.

As a result, the author explored the potential use of text messaging to enhance the learning of distance education students in an introductory computer class. The study had one main aim: to assess the extent to which instructional scaffolding can be provided using mobile phones and for that matter text messaging. In carrying out this aim, the author also evaluated five desktop text messaging applications for the purposes of aiding faculty.

Key words: SMS, scaffolding, educational scaffolding, distance education.

E EDUCATIF: L’EXPERIENCE DE L’UTILISATION DE SMS COMME SOUTIEN A L’ENSEIGNEMENT A DISTANCE DANS LES PAYS EN VOIE DE DEVELOPPEMENT

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Résumé

Il existe aujourd’hui un grand nombre de technologie. Néanmoins, elles ne sont pas encore utilisées par les enseignants et les étudiants pour enseigner et apprendre de façon adéquate. Les SMS sont, pour l’enseignement à distanc, d’un soutien considérable pour la communication en direct avec les étudiants tout moment et n’importe où.

Ce papier examine les SMS et leur potentiel en matière d’enseignement à distance. Il se sert de la disponibilité des SMS à tout moment dans le cadre d’une méthode expérimentale de soutien aux étudiants en enseignement à distance dans les pays en développement. Il présente un rapport sur une étude de cas et évalue cinq plateformes gratuites de SMS disponibles.

La prolifération de gadgets mobiles a mis les SMS à la disposition d’un large éventail d’utilisateurs dans les pays en développement, sur diverses plateformes, à des coûts minimum. L’utilisation de téléphones portables croît rapidement au fur et à mesure qu’un nombre grandissant de personnes maîtrisent la manie dont on les utilise et apprécient leur utilité. C’est un avantage potentielle pour l’enseignement à distance dans les pays en voie de développement.

Mots clés SMS, échafaudage, échafaudage éducatif, enseignement à distance, messages, Technologie éducative.
The student experience of distance education

Becoming a long distance student is a significant challenge which involves, sometimes, full-time employment and academic work. Distance education students most often find themselves in an academic environment in which self-direction and independence in learning is a paramount approach (Klopfenstein, 2003). Distance education students can find this disorienting and motivating themselves to study can be problematic until they have developed a capacity for independent learning (Winn, 2002; Prescott & Simpson, 2004). McLoughlin (2004: 149) indicates that learners need support and structured learning experiences. Much effort has been invested in identifying strategies to help students do this. One such strategies is instructional scaffolding (Harley, et al., 2007).

Scaffolding

The term scaffolding was first viewed in its educational sense as a “process that enables a child or novice to solve a problem, carry out a task or achieve a goal which would be beyond his unassisted efforts” (Wood, et al., 1976: 90). An expanded definition noted that: “In addition to helping children complete tasks they could not otherwise complete, scaffolding can aid students by helping them to better complete a task, with less stress or in less time, or to learn more fully than they would have otherwise” (Graves and Graves, 2003: 30).

Scaffolding is a temporary measure which must be used, allowing students to take all the responsibility of completing tasks (Pearson & Fielding, 1991: 815). Five different kinds of scaffolding techniques: offering explanations, inviting student participation, modeling of desired behavior, inviting students to contribute clues, and verifying and clarifying student understanding (Hogan and Pressely, 1997: 17-36). The five techniques can either be used independently or integrated. Instructional scaffolding when implemented effectively points to a number of desirable educational outcomes (Byrnes, 2001: 34).

There are two major steps involved in instructional scaffolding: (i) “development of instructional plans to lead the students from what they already know to a deep understanding of new material” and (ii) “execution of the plans, wherein the instructor provides support to the students at every step of the learning process” (Lange, 2002).

The experiment

The experiment was conducted over a period of three semesters using students enrolled in a distance education introductory computer course. It was completely voluntary and students chose to participate by submitting their cell phone numbers to the author via email. The experiment was done using the free SMS text feature in Yahoo! Text numbers were entered into the address book created in Yahoo! Participating students were from Afghanistan, Chile, Egypt, Iraq, Colombia, and Panama, broadly representative of the developing world. A total of twenty-seven students took part in the experiment over a period of three semesters.

Text messages sent to students included carefully designed messages to assist the students in organising their ideas and connecting them to related information, notification of assignment deadlines, verification of students understanding, and procedural scaffolds for clarification of specific tasks.

Text messages aimed at assisting students to organise their ideas and to connect them to related information were based on instructional plans as proposed elsewhere (Turnball, et al., 1999: 641-642). Each scaffolding plan was written carefully, so that the new information the student learns serves as a logical next step, based on what they already know. The author relied on asking questions and providing a set of queries to prompt student thinking. The goal was to support and improve student comprehension of the topic under discussion. Timing and nature of the messages were carefully planned.
Reminder messages were sent 3 days before class start date. This lead time was chosen in order to reduce the possibility of students forgetting the start dates (Downer et al., 2005: 367). A single message was sent daily, over the three-day period, to a single phone number for each student. If the student had given more than one phone number, the message was sent to the preferred number given. Notification of assignment deadlines were also sent by texting “Here” to the author at the beginning of each week. It served as a roll-call and a way to ensure that students were still actively participating in the experiment.

Table 1 Examples of text messages sent

<table>
<thead>
<tr>
<th>Ideas organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor: Let’s talk about Business Information Systems (BCIS). What is a BCIS?</td>
</tr>
<tr>
<td>Student: A type of computer information system?</td>
</tr>
<tr>
<td>Professor: What is a system? Does a system necessarily have anything to do with computers? Information? Business?</td>
</tr>
<tr>
<td>Student: Yes. Ok. I’m not sure.</td>
</tr>
<tr>
<td>Professor: All right. A system is any set of components that work together to achieve something. Can you name three systems that have absolutely nothing to do with information?</td>
</tr>
<tr>
<td>Student: Air Conditioning System, Digestive System, Cardiovascular System.</td>
</tr>
<tr>
<td>Professor: What’s an information system (I.S.)? Does an I.S. necessarily have anything to do with Computers? Business?</td>
</tr>
<tr>
<td>Student: Absolutely.</td>
</tr>
<tr>
<td>Professor: Not exactly. An Information System is a system designed to impart information. Can you name three information systems that have absolutely nothing to do with computers?</td>
</tr>
<tr>
<td>Student: Calendar, Speedometer, Thermometer</td>
</tr>
</tbody>
</table>

Class start date/assignment reminder

Professor: Reminder, you have registered for intro to computers. Class starts in 1 wk.

Professor: Reminder! chapter 1 assignment due in 3 days.

Individual contact

Professor: Frank, I haven’t received your weekly check-in message. Hope everything is fine with you.

Source: Author

Students who volunteered to take part in the experiment were asked to take part in an exit interview. Questions about the student’s experience and how they felt about the text messages experience were asked.

Available free sms platforms evaluated

To achieve the aim of the study, five free desktop text messaging applications or platforms were evaluated. They included Yahoo! text messaging, SMS, Funtonia and Texting Online. The primary consideration of the evaluation was the number of characters allowed to be “texted” at a time. Address book was a secondary consideration. The address book provided the highest number of characters that could be sent at a time and also provided an easy to use interface.
Table 2 SMS Applications

<table>
<thead>
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<th>SMS application</th>
<th>Web address</th>
<th>Number of characters</th>
<th>Available?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yahoo</td>
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<td>Yes</td>
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</tr>
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<td>110</td>
<td>No</td>
</tr>
</tbody>
</table>

Source: Author

Discussion

Handheld phones are ever-present among students in the developing world as demonstrated by participants in this experiment. The background research and the findings of experiment show that text messaging is the dominant mode of electronic communication in the developing world. The results also indicate that students are willing to engage in SMS text communication with faculty for educational purposes.

Control

It has been noted elsewhere that the user must feel they are in control of the software or technology being used or else its utility is lessened regardless of pedagogic suitability of the content and its presentation (Hoffman, 1985: 358-360). The awareness of control is very vital for the successful adoption of any system and its application or implementation. The results of the experiment show that students were particularly enthusiastic about unsolicited messages designed to explain concepts and topics they could understand on their own. This limitation was surmounted by inviting students to participate in the task at hand (Hogan and Pressley, 1997: 27). Future work could explore the feasibility of allowing students to initiate what topics they need help with.

Students had no problems with reminder and notification of assignment deadline messages. Providing administrative and notification messages aided students to complete and submit assignments on time. This was revealed by student comments during the exit interview.

Peer support and collaboration

One revelation of the study was the building of peer support and collaboration by participating students. Students who requested explanation and clarification on concepts and topics passed them on to their peers. It may have been as a result of such support and collaboration that students felt the experiment was useful as revealed by students such as:

“Professor, the weekly messages you sent about assignment submission deadlines were very helpful in letting me keep up with my homework.”

“Sir, I couldn’t keep up were it not for the weekly notification messages.”

Through this informal system of peer support, students were able to engage in interdependent learning.

Role of SMS text messaging in scaffolding

Firstly, reminder SMS text messages provide support to students. Secondly, and perhaps more importantly, the research shows that “texting” carefully designed messages to help students organise ideas and connect them to related information boosted their academic confidence. The challenge was to design short but useful messages despite the limitation of the technology. Yahoo! text messaging, like most messaging systems, has a limit of 150 characters at a time. As noted
elsewhere, designing text messages with a limited number of characters is difficult (Dickinger et al., 2004: 7). Breaking messages in chunks will help overcome this limitation.

Motivation

Issues in relation to student motivation in the use of SMS text messaging in scaffolding must be taken into consideration. Elsewhere, it was observed that the elderly are less likely to be motivated in the use of instructional technology (Myers et al., 2004: 78-86). This may indicate an uphill struggle in the implementation of SMS text-based instructional scaffolding. Students need to be motivated, otherwise generation gaps may render such innovative way of teaching less useful.

Conclusion

Despite the proliferation of mobile phones and “sms texting” in the developing world, its potential contribution to distance education has received little or no attention. The experiment was based on the assumption that most university students in the developing world already own mobile phones and engage in text messaging. A sample of student feedback indicates that instructional scaffolding using “sms texting” can be useful in improving student’ academic enrichment. Good teachers and instructors have always used scaffolding. The mobile phone and text messaging allows some uniquely new opportunities to do it differently.

Text messaging represents the first and basic way of engaging distance education student via mobile devices. In Africa and Asia where innovative uses of the mobile phone beyond simple voice communication is a reality, more complex challenges await the implementation of sms text messaging in instructional scaffolding. Cost to students need to be explored. Future studies should explore the acceptance of and attitudes towards instructional scaffolding using sms text messaging.

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INTERNET VIRTUAL CLASSROOMS IN DEVELOPING NATIONS: CHALLENGES
AND OPPORTUNITIES TOWARDS MASS LITERACY

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Abstract

Advances in information and Communication Technology (ICT) are becoming vital to the social and
economic developments of nations. ICT has offered means to transact businesses and transform citizens,
firms and countries into knowledge-based economic structures and data societies with electronically linked
interdependent global relationships. Education in the 21st Century is best positioned to utilise the
opportunities offered by ICT to lift a higher percentage of the global population out of illiteracy and
poverty. Specifically, through Internet, the international boundaries have shrunk and the movement and
transfer of ideas across nations by industries, academia and individuals sky-rocketted. For UNESCO and
other organizations focused on facilitating global literacy especially in the developing nations, Internet
Virtual Classrooms (IVC) would be pivotal to realise their objectives faster and with lesser resources.
This paper describes the challenges and opportunities in implementing and using IVC in developing
countries. A practical framework is presented based on TruSync an IVC platform optimised for freeware
computer-aided design (CAD) tools.

Key words: Education, developing nations, internet virtual classrooms, information technology,
mass literacy

Introduction

Advances in information and communication technology (ICT) are becoming central to the
social and economic developments of nations. ICT offers means to transact businesses and
transform nations and organisations into knowledge-based economic structures and data societies
with electronically linked interdependent global relationships (Neocircuit, 2008). Education in the 21st
Century is best positioned to utilise these evolving ICT opportunities to lift a higher percentage of
the global population out of illiteracy and poverty. This is important as statistics have increasingly
shown that sound education policy is correlated with high national standard of living. Through
Internet, the international boundaries have shrunk and the movement and transfer of ideas across
countries by industries, academia and individuals sky-rocketted. For UNESCO and other
organisations focused on facilitating global literacy especially in the developing nations, Internet
Virtual Classrooms (IVC) would be pivotal to realise their objectives faster and with lesser
resources.

There are different frameworks on IVC which have been proposed since Internet was identified as
potential key driver for online and virtual education. The core of these frameworks lies on
deploying multimedia and communicating systems to enable seamless connection of teachers and
students for the purpose of learning and sharing knowledge. Across the globe, many schools in the
developed nations have exploited this IVC paradigm in their off-site or satellite campuses.
Internet degree programmes and Internet-based higher education programmes have become
popular. As Internet continues to advance and information systems become more powerful, IVC
is expected to become more dominant. IVC can be used for all types of educational programs,
and can be a vital instrument towards transfer of technology from developing nations born experts
in the Diaspora to schools in their native countries.
Specifically, semiconductor technology has remained pervasive in shaping all aspects of modern commerce and industry. Being pivotal to many emerging industries in the 21st Century, it occupies a central position in the global economy. Because Internet, medicine, entertainment and many other industries cannot substantially advance without this technology, it occupies a vantage position in engineering education in many developed nations. These nations invest heavily in microelectronics education as in the United States where the MOSIS (mosis, 2008) programme enables students to fabricate and test their integrated circuits to enable full cycle design experience. On the other hand, developing nations increasingly lag behind in developing and diffusing this technology in their economies owing to many factors which include human capital, infrastructure, among others. Notwithstanding, the Internet offers opportunities to bridge this widening gap by using IVC to harness the skills of experts in the developed nations and virtually export them to the developing ones. This paper describes the IVC challenges and opportunities in the developing nations and a platform developed for IVC.

What is internet virtual classroom and lab (IVC)?

This is a ‘classroom’ on the Internet where instructors and students interact via computers (Fig.1). Besides lecture notes, VOIP (Voice over Internet Protocol) (Ekekwe, 2007, Las Vegas) phone, live-chats and online-conferencing are vital components of this classroom. It is basically a virtual learning environment where teacher and student, separated by time or space, through course management platforms, multimedia resources, the Internet, videoconferencing, etc interact bi-directionally (Kurbel, 2001, Loutchko, 2002). The motivation is to create a virtual traditional classroom on the web and educate students separated by physical distance from the instructors.

The merits/drawbacks of IVC

- IVC is not limited by distance, allowing lectures to be delivered across national and continental boundaries.
- IVC offers the platforms to harness the brightest minds to teach a larger spectrum of students globally.
- At the long-run, the benefits of IVC supersede the cost of implementation.
- The main drawback of IVC, though video conferencing is eliminating it, is the impersonal delivery method which could be challenging to some students.
- The courseware and labware could be reused over time towards saving cost in the long-term. IVC offers a good archival capability to store and disseminate materials developed by leading experts.
- Another is the investment required from poor nations to fund high speed communication systems needed for IVC.
- To the developing nations, it provides a framework through which they can tap the pool of their experts in the Diaspora which increasingly prefer to live in the developed nations.

Figure 1 IVC Network
The challenges of IVC deployment in developing nations

There are many challenges to the deployment of IVC in the developing nations. Some are:

- Electricity: many developing economies still suffer sporadic electricity supply thereby making it extremely challenging to deploy the right technology to support IVC.
- Telephone facilities: though many developing economies are deploying better telecommunication infrastructure, the telephony remains unreliable. This has a potential to derail IVC.
- Broadband telecommunications: the advent of broadband telecommunication has to be pervasive in the universities across these nations to enable seamless integration of IVC.
- Computer systems: though efforts have been made in many schools to acquire computing systems, the ratio of computers to students remains poor.
- IVC Accessories: IVC accessories or tools like video systems, cameras, speakers etc are expensive and not many schools can afford them with their low operational budgets.
- Lack of adequate manpower: the human capital is a fundamental challenge in the design and deployment of IVC. While trained experts are readily available in the cities, they remain in low numbers in some remote areas where some of the schools are situated.

Though these problems are widespread in the developing nations, some of the schools, especially the private ones which are better managed have good facilities. Consequently, they are well positioned to benefit through IVC the expertise and skills of experts across the globe. This opportunity is strategic considering the lack of enthusiasm from top global scholars in traveling to these regions owing to their transportation and safety problems.

IVC platforms

Many virtual classroom programmes use elearning platforms (learning management system – LMS) to administer and manage students and courses consequently provide learning content (wikipedia, 2008). Examples of such systems include WebCT, Moodle, and proprietary elearning platforms like Tooling University. Other major ones are (wikipedia, 2008):

- WiZiQ (www.wiziq.com): This is a free platform which provides complete freedom of learning. It is equipped with live audio-video communication, chat, content sharing, and session recording capabilities. No download is required since it works with any web browser and operating system. When combined with Moodle, it is ready for real-time online collaboration and interaction.
- Second Life (secondlife.com): This platform offers 3D visualization and has become a virtual classroom for major colleges and universities around the world, including Princeton, Rice University, University of Derby (UK), Vassar, the Open University (UK).
- WebEx (webex.com) is increasingly used as an online platform and classroom for a diverse set of education providers. It is a Cisco Web Meetings and Collaboration Solution which has become popular because of its real-time collaboration using an interactive whiteboard, chat, and VOIP technology that allows audio and video sharing. Combined with the legendary security of Cisco technology, this offers a good platform, though it is not free as WiZiQ or Moodle.

Design and deployment of IVC

The Internet offers the core platform in designing IVC. As shown in Fig 1, IVC is a network of Internet-connected computers which have been tailored for learning. These computers are equipped with audio, video, test-messaging capabilities with huge storage systems. In designing this system, quality is important to facilitate efficient transfer of ideas between the parties.

Considering the low budget of some of the schools in developing nations, thin client computing machines could be used. These computers do not have resident storage devices; rather they share a central storage system remotely. This has the potential of saving cost and making the system cheaper. Within the context of mass literacy, fundamental infrastructure are still lacking; we focus on schools with broadband telecommunications and high-speed computing systems.
As an experimental approach to test the effectiveness of IVC in teaching microelectronics in the developing nations, we developed a programme to educate a small segment of students who showed interest in our movement for quality microelectronics education in Nigeria (neocircuit, 2008). We developed an IVC platform, TrySync, engineered to drive many freeware computer-aided design (CAD) tools for the design of integrated circuits (Fig. 2) as documented in (Ekekwe, 2008 San Diego). It offers platforms for instantaneous phone, chat, text and video. This system will enable Nigerian experts in the Diaspora to make academic contributions to the schools to help mitigate the impact of African brain drain. We will seek for standardisations towards implementing a system which would facilitate and efficient diffusion of the semiconductor and microelectronics technology. A demo of TrySync will be shown during the conference.

![Figure 2 Integrated Circuit](image)

**Figure 2 Integrated Circuit**

**Conclusion**

As information and communication technology continues to shape all aspects of human endeavors, its application in education in the developing nations would be vital. These regions lack the human and institutional capabilities to drive some of the emerging concepts to their teeming student populations. IVC if properly implemented will offer a highly needed solution to access the global pool of top scholars for these nations as well as educate the citizens en masse. Though complex, appropriate IVC deployment would facilitate mass literacy, technology acquisition and diffusion into developing economies.

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M-LEARNING: AN EMERGING TREND IN E-LEARNING AND ITS APPLICATION IN NIGERIA.

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Abstract

The recent rapid development in Information and Communication Technology (ICT) evolving learner behaviours require learning institutions to assess and evaluate their approaches to pedagogy, both in physical and virtual classroom spaces. The current increasing availability of relatively cheap mobile cost (both in devices and services) has brought hitherto another set of opportunities and challenges for Nigerian educational institution, systems and their teachers and learners. The questions of what I want to learn, where I want to learn, how I want to learn, when I want to learn, from which source do I want to learn, and other germane questions are current opportunities that are being explored with new requirement not only to the technological and educational perspectives alone, but also to the social interaction that is involved. Therefore, it is true to say that technology creates new conditions for learning for all and sundry (Ibara, 2007).

Key words: M-learning, pedagogy, distance Education.

M-LEARNING: TENDANCE EMERGENTE EN E-LEARNING ET SON APPLICATION AU NIGERIA

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Résumé

Avec le rapide développement, ces derniers temps, de Technologies de l’Information et de la Communication (TIC) influant sur les comportements des apprenants, les établissements se doivent d’évaluer leurs approches pédagogiques, à la fois dans les salles de classe physiques et virtuelles. La disponibilité croissante de gadgets et de services mobiles à des coûts relativement bas a créé d’autres opportunités et d’autres défis pour les établissements et systèmes d’enseignement au Nigeria, de même que pour les enseignants et les apprenants. Les questions suivantes – que veux-je apprendre, où veux-je apprendre, comment veux-je apprendre, quand veux-je apprendre, de quelle source veux-je apprendre - et d’autres questions appropriées sont des opportunités qui sont explorées avec de nouvelles exigences en matière de perspectives technologiques et éducatives, mais aussi en matière d’interaction sociale. Par conséquent, il est vrai d’affirmer que la technologie crée de nouvelles conditions d’apprentissage pour tous (Ibara 2007).

Mots clés— M-learning, gadgets mobiles, système de prestation, gadgets portables, enseignement à distance, pédagogie.
The meaning of M-learning

M-Learning, is an acronym for the term Mobile Learning. Quite a number of specialists and academics in the field of M-Learning have through their respective perspectives given meaning to this term. Quinn (2003: 3-5) defined M-Learning as learning that takes place with the help of mobile devices. M-Learning wikipedia (2008: 1) opined that it is the learning that happens across locations, or that takes advantages of learning opportunities offered by portable technologies. It also refers to any sort of learning that happens when the learner is not at a fixed predetermined location, or learning that happens when the learner takes advantage of learning opportunities offered by mobile technologies. Mobile learning applications are best viewed as mediating tools in learning. It also applies to learning with portable technologies where the focus is on the technology, learning across contexts, which brings on the mobility of the learners, interacting with portable or fixed technology, learning in a mobile society, with a focus on how the society and its institutions can accommodate and support the learning of an increasingly mobile population.

According to Traxler (2005: 3), mobile learning can be defined as educational provision where the sole or dominant technologies are handheld or palm devices. Also, they are flexible tools as that can be adapted to suit the needs of a variety of teaching and learning styles (Curtis et al 2002, 30).

Technologies in M-Learning

The school of thought that has viewed educational technology as the combination of these two terms: “Technology of education and technology education” is vindicated. The only difference in the two terms above is the use of preposition “of” and “in”. But they mean different things. The former recognises the fact that the use of systematic and scientific procedures in educational practices, while the latter, emphasises the use of equipment or hardware machine (like handheld) in teaching-learning activity.

The devices that are used in M-Learning include mobile phones, personal digital assistants (PDAs), laptops and tablet PC technologies. They are mobile devices include multi-purpose mobile phones with colour screens, web access but may also incorporate PDA functions, digital radio and interactive digital television.

Technologically assisted learning on which this concept M-Learning depends, builds on a long tradition of distance education. This mode of learning is directly related to an activity centered perspective, essentially considering new practices against the existing ones.

Mobile learning applications are best viewed as mediating tools in learning which this paper seeks to explore and consider what factors and design requirements are crucial to the M-Learning environment, and suggest how M-Learning applications can be defined with an understanding of these factors and requirements. The essence of this is to make the learning process more flexible, accessible and personalised. Emphasis should also be on two prominent importance of mobile technologies. They are personal and portable.

(a) personal – this affords individuals respective opportunities to have their own equipment, such as a mobile phone.

(b) Portable – this feature brings the opportunity to the owner/carer of such technology access to static resources (M-Learning in Education 2006).

M-Learning will achieve a great feat in Open and Distance Learning (ODL) in Nigeria because of the daily increasing access to mobile technologies and improving mobile functionality.

Typical Examples of Mobile Internet Connectivity

Multimedia Messaging System (M.M.S) – the successor to SMS, this enables subscribers to compose and send photo, audio, video.

703
Short Message service (S.M.S) – available on most digital mobile phones, a service that permits the sending of short messages or simply text between mobile phones and other handheld devices.

Instant Messaging (IM): It connects a client to a messaging service allowing a user to an instant messaging service.

General Packet Radio Service (G.P.R.S) – a mobile data service available to users of G.S.M (Global System for mobile – telephone). It also provides internet access to phones.

Personal Area Network (PAN) a network for communication among computer devices and telephones like intercom.

Third generation (3G) mobile: designed to offer a consistent set of services to mobile computer and phone users.

Public access WLAN and mobile telecommunication convergence: this access technology allows users and devices to move between telecommunication technology and public access. (Wanger, 2005).

Open and Distance Learning and Usability of M-Learning Devices in Nigeria

Bruns, A. (2006: 1) presented that the use of mobile learning potentially brings the rewards of placing institution at the pedagogical practice that addresses student needs for flexibility and ubiquity, that is, anywhere, anytime and any device the learner engages in. He further stressed that this trend makes learning highly situated, person-aborative and ideal learner-centred.

The Nigerian populace is becoming to be digitally literate, through the use of mobile phones and other handheld devices which has affected their orientation entirely. More importantly, mobile devices can significantly improve literacy and numeracy skills, encourage independent collaborative learning opportunities, identify learner' areas of need and assistance. This, therefore, promotes self-confidence in open and distance learning.

Greenberg (1998:36) defined open and distance learning (ODL) as a planned teaching learning experience that uses a wide spectrum of technologies to reach learners at a distance and is designed to encourage learner and certification of learning. To Kegan (1995: 7) ODL results from the technological separation of teacher and learner frees the student from necessity of traveling to a fixed place, at a fixed time, to meet a fixed person, in order to be trained. This definition serves as an eye opener that the use of compressed video or audiovisual like the one by MTN Nigeria to deliver DSTV Via mobile phones, as Glo mobile too is getting set to do.

However, learners have the opportunity to choose when and how they learn. The use of mobile technology will provide the tools to help learners construct knowledge throughout their daily learning. When learning occurs in context outside the classroom, whose learning importance of community becomes important. Ibita (2012) categorically stated that the demand on the conventional higher education delivery system in Nigeria is high and persistently on the increase that the system itself cannot guarantee. The level of infrastructural decay in the conventional education system is remarkable. He need for open and distance learning with the use of common tools like mobile phone to achieve this feat. M learning is out to solve the problems of admission and accessibility to education prominent example of ODL in Nigeria is National Open University of Nigeria (NOUN). This institution has not started using M-learning devices, but this is an opportunity to explore the benefits endowed in this method of learning. There are more wireless network services and devices in Nigeria now than ever. Networks like Celtel, MTN Glo mobile, starcom, and others can bring to fulfilment, the goal of distance education as entrenched in the revised National Policy on Education (Federal Republic of Nigeria) (FRN) 2004 that:

- To provide access to quality education and educational opportunity for those who otherwise would have been denied.
- To meet special needs of employers by mounting certificate courses for their employees at their work place.
- To encourage internationalisation especially of tertiary education curricula.

- To ameliorate the effect of internal and external brain drain in tertiary institutions by utilising Nigerian experts as teachers regardless of their locations or places of work.

Potentials, prospects, and problems of M-learning in Nigeria. The following potential benefits are inherent in the use of mobile devices in teaching-learning not only as good tools in administration, organisation and teaching aids for practitioners, and learning support tools for learners, other include:

- Learners can interact with each other and with practitioners instead of hiding behind large monitors.

- It is much easier to accommodate several mobile devices in a classroom than several desktop computers.

- PDAs or tablets holding notes and e-books are less bulky than bags full of files, paper and textbooks, or even laptops.

- Handwriting with a stylus pen is more intensive than using keyboard and mouse.

- It is possible to share assignments and work collaboratively; learners and practitioners can e-mail, cut, copy and paste text, pass the device around a group, or beam the work to each other using the infrared function of a PDA or wireless network such as Bluetooth.

- Mobile devices can be used anywhere, anytime, including at home, on the train in hotels. This is invaluable for work-based training.

- These devices engage learners or young people who may have lost interest in education like mobile phones, gadgets, and games devices such as game boys.

- This technology may contribute to combating the digital divide as this equipment is generally cheaper than desktop computers. (Mobile learning project 2006).

The prospects of M-learning in Nigeria are not in doubt. The percentage of Nigerians carrying various categories of mobile phones both in conventional institutions and outside is enormous. Succinctly put, mobile devices are still underutilised in Nigeria because all inherent potentials have not been fully utilised. The quest to use these devices for learning will unfold. Also, the available network suppliers have not been resting on their oars, but have been striving to render world class standard services like moving to the 3G era. The use of Nigeria satellite communication can also be a useful platform to champion this course.

Even with the recent level of development, over 70% of Nigeria has been covered with different network services. Since this idea has succeeded in other countries like Japan, Britain, USA, Denmark among others, it is unlikely to fail in Nigeria. Nevertheless, the likely problems that can arise can be viewed through these two perspectives. Namely problem with the technologies and operation of the entire system.

The following are the disadvantages of the technologies in use:

- Reduced screen size
- Limited audiovisual quality
- Virtual Keyboarding
- One way of data entry
- Limited Power
- Limited Message Length
- Cultural Context
- Limited Social Interaction
With the system problems as:
  Quality of Instruction
  Hidden Costs
  Misuse of Technology
  Role of Instructor
  Network/Equipment problem (Dong, 2002).

Expectation from mobile learners
Indiana University (2003: 1-6) identified the following as requirements from online distance learners to include:

  Time management
  Balancing responsibilities and Setting Priorities
  Managing Stress
  Know your deadlines
  Plan ahead
  Ask for help and other resources
  keep in touch with your instructor
  Understand expectation
  Become an active learner
  Develop self-discipline
  Set goals
  Ask for what you need
  Responding vs reacting

Conclusion
As the wave of technological development keeps sweeping through every facet of human endeavour through the use of mobile devices and allied equipment, in the next few years the mobile phone will be the primary source for radio and television signals as well as the link to up to the minute information.

Mobile learning is the natural evolution of e-learning which completes a missing component of the solution adding the wireless feature, or a new stage of distance and e-learning. As learning becomes more standardised, technology imposes a requirement and make accessible to all the shared knowledge base to people who are geographically or nationally divided expands. M-learning will affect the concept of culture and civilization, thus paving the way for the emergence of a unified culture in learning naturally.
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Abstract

Not only in their own branch of occupation do trainees have to be able to meet continually increasing demands – it is most likely that in the future everybody should be prepared to change occupations once or twice during their working lives. Thus completely new demands will be made with regards to qualifications like self-directed learning, flexibility, etc.

Companies increasingly tend to instruct trainees only in specific sections of their overall activities. In contrast to the past, we no longer offer a functional education that incidentally gives trainees an insight into a company’s entirety. This is why holistic vocational training is becoming the main task of vocational schools.

To meet these altered demands, outline curricula were structured as learning fields which have to be developed in connection to different working fields within an occupation. What is more, these learning fields need to include the specific educational assignment of vocational schools.

Mots clés: formation professionnelle, métier, apprentissage centré sur soi, champ d’apprentissage, enseignement fonctionnel, stagiaires
Developing the Concept of Learning Fields on the Basis of Hands-on Learning

With regards to the basic conditions for developing outline curricula for vocational teaching at vocational schools, the instructions of the Ministry of Education and the Arts in Germany are characterized as follows:

- in the dual system vocational training in acknowledged occupations takes place in the “companies that take on trainees” and in “vocational schools”;

On a closer examination one first has to point out that the outline curricula do not contain any regulations on teaching methods.

On the extended educational assignment of vocational schools, not only specialised competence – as a part of the occupational competence to make decisions and act in a responsible way – is demanded but also personal and social competence.

As stated in the outline agreements concerning vocational schools (the resolution was passed by the Ministry of Education and the Arts March, 3rd, 1991), vocational schools should:

- “convey occupational skills combining specialised competence with general human and social competence;
- develop occupational flexibility to cope with changing demands in the working world and in society, and also to cope with Europe growing closer;
- wake the students’ desire to continue their professional education
- promote the ability and willingness to act in an acceptable way when arranging one’s private and public life.”

In order to reach these goals, the instructions of the German Ministry of Education and the Arts are demanding that vocational schools have to:

- “bring their teaching into line with a pedagogy which is specific for their educational assignment and which emphasizes hands-on learning.”

The “didactic principles” (part III), serving as guideline for the outline curricula mentioned earlier, should also be in accord with altered demands on qualifications, and at the same time educational reflections should be directed towards occupational activities to a greater extent than before.

Correspondingly, learning ought to be manifested fundamentally in relation to concrete occupational activities or – whenever this is not directly possible – in relation to an imaginary comprehension of occupational activities. In any case, subject-specific classes at vocational schools ought to take specific occupational qualifications as well as general occupational qualifications into account.

Above all, such learning has to imply the reflection of occupational activities (plan and course of activities, events).

As maintained by Dubs, the altered demands on vocational schools should be taken into account:

1. Not only in their own branch of occupation do trainees have to be able to meet continually increasing demands – it is most likely that in the near future everybody should be prepared to change occupations once or twice during their working life. Thus, completely new demands will be made with regards to qualifications like self-directed learning, flexibility, etc.

2. Companies increasingly tend to instruct trainees only in specific sections of their overall activities. In contrast to the past, we no longer offer a functional education that incidentally gives trainees an insight into a company’s entirety. Therefore holistic vocational training is becoming the main task of vocational schools.

In the same breath Dubs recognizes an “atomisation” of learning contents, which increasingly characterized by an endeavor to reach completeness. As a consequence of short teaching periods, this tendency will lead to passive learning. This is also stressed by Kusch, who mentions the increasing need for qualification ever since the 80s. Kusch also hints at the necessity of interdisciplinary knowledge and skills next to social and personnel competence. Thus, teaching is suffering from continually expanding theoretical demands. In Kusch’s view the discrepancy between learning from experience within a company on the one hand and augmenting theorization of knowledge on the other hand – especially at vocational schools - will overburden students with regards to cognitive aspects. Diverse experiments on interdisciplinary learning were directed towards typical courses of occupational activities and thereby aimed at diminishing the gap between theory and praxis. Furthermore, they took the following notion into consideration: students should gain their insights within their natural general context (holistic learning).

Reetz introduced the metaphor that “inert knowledge proves to be clumsy and viscous when it comes to applying it relevantly and flexibly everyday life and work.”

On the basis of educational theories and pedagogics – and with respect to the growing theorization of learning in the course of the 70’s and 80’s – the instructions by the German Ministry of Education and the Arts present following points of reference to structure activity-oriented lessons:

- situations which are important for the pursuance of one’s occupation are considered as pedagogic points of reference (learning for pragmatic activities)
- activities, preferably carried through by students themselves or at least in their imagination, serve as the starting point of learning by doing)

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- if possible, activities have to be planned, carried through, checked, and if necessary corrected independently by the learners.
- Activities should promote the holistic comprehension of occupational reality, e.g. by including technical, safekeeping, economic, legal, and social aspects.
- Activities have to be integrated into the learners’ experiences and learners should reflect on these activities with regards to their social effects.
- Activities should also include social processes, the declaration of interest or the settlement of conflicts.

To reach all these goals, outline curricula were structured in the manner of learning fields which should be developed in accordance with occupational activity fields and incorporate the specific educational assignment of vocation schools. As a consequence of the changing working and business processes in the companies, outline curricula also take up specialist insights which are causal for the change. Bader indicates that the underlying problem is in no way new but it rather the central problem of each and every pedagogy, and especially of vocational pedagogy, to connect the teaching and learning processes to the learning experiences. Understanding should be possible through the realisation of experience relations and through categorising these insights into a preexisting conceptual system.

The pedagogical consequences, which can be described like these, are described in part III of the outline curricula, “didactic principles”. As stated in the commentary on these didactic principles, a pedagogy is in line with the changing demands on qualifications to be oriented towards occupational processes – as demanded by the Ministry of Education and the Arts.

The explanations in the work-related preface of part IV and the comments on the learning fields in part V put the teaching outline plans into concrete terms. The particularities of each occupation, however, as well as the arrangement of learning fields according to the formulation of goals, time guidelines, and content need to be worked out.

Realizing the Concept of Learning Fields

Constructing the concept of learning fields

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42 The recommendations in figure 5 already contain examples from which learning fields can be constructed and shaped.
As mentioned earlier above, the teaching outline plans are structured in the manner of learning fields, activity fields and learning situations.

Illustration 1: Learning fields in relation to activity fields and learning situations


According to Bader/Schäfer, learning fields and learning situations can only become the basis for the renewal of vocational teaching if "the reflection of these ideas is grounded on pedagogic foundations."

The German Ministry of Education and the Arts has set certain demands on learning fields and learning situations. Depending on the question one deduces from these demands, one can look at learning fields and learning situations from different perspectives.

Bader/Schäfer infer educationally relevant learning fields and learning situations from complex occupational activity fields. This process searching is based on:

- Criteria of didactic analysis as stated by Klafki;
- Describing teaching processes in line with Heimann, Otto, Schultz;
- Describing teaching processes in line with Heimann.


- Approaches derived from the theory of action in sense of complete action;
- Insights in the development of competence in sense of seeing subject, social and human competence as an integrated whole.

The guiding question in which way activity fields can be deduced is then answered by Bader/Schäfer as follows: with the help of activity fields, occupational, social and individual problems can be dealt with by way of clues from concrete situations which are given during apprenticeships and follow training regulations. In this sense learning fields are said to have interdisciplinary as well as subject-integrating qualities.

Within the framework of putting activity fields in more concrete forms the following question comes up: In which way can activity fields be transformed in pedagogically justified fields of learning? With regard to this action, Bader/Schäfer hint at Klafki's didactic analysis and its consideration of current, future and exemplary meaning.

In conclusion, Bader and Schäfer ask in which way activity structures can be constituted in learning situations. Their answer is:

“If learning situations are put into pedagogical try orienting them towards occupational problems and by representing complete, reflected activities (informing, planning, deciding, carrying out, controlling, evaluating), the conceptual learning fields can help qualifying young people to organise important occupational and social situations.”

A closer look at the wordings of these goals show they describe qualifications and skills which result from successful learning processes in schools.

The formulation of goals “expresses the pedagogical focus and the level of requirements (for example knowledge or judgment)” (instructions by the Ministry of Education and the Arts).
Considering the contents of learning fields, the German Ministry of Education and the Arts hints at the necessity to give pedagogic justifications for the choice of these contents. These justifications are required in order to fulfill educational aims within the learning fields. The following formulation is remarkable: “a systematic subject completeness, as it is characteristic of the diverse reference sciences, does not have to be achieved.” At any rate, however, one can see the demand for securing a logical structure of vocational subject contents.

With regards to the ministry’s time setting, it striking that every learning field is assigned an individual time-guideline, which makes differentiated measures possible.

An exemplary realisation of learning fields and learning situations in occupations that require training

The German Ministry of Education and the Arts already gives examples for learning fields, such as “learning field 3” within the training of car-merchants: “Running sale conversations in the area of car-accessories and parts and to consult customers”

Formulation of the goal: Students present parts and accessories to prepare the sale. In a suitable situation they speak to the customer and find out their needs. When presenting the merchandise they use their specialized knowledge of the subject to give the customer suitable arguments. They also use media sales aid and offer individual solutions. In case of objections they react appropriate to the situation, hint at supplementary articles and bring the sale conversations to an end.

If there are refunds or exchanges, students have consider the interests of the company as well as the customers’ interests and behave in an appropriate way.

Contents:

Survey of the assortment, presentation of merchandise
Aids for presentation and sale
Consulting and sale conversations
Refund and exchange

All in all, the following learning fields and time-guidelines are named within a car merchant’s training:

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<table>
<thead>
<tr>
<th></th>
<th>Learning field</th>
<th>Time-guideline (in hours.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Getting to know the company and its achievements, integration into the company and actively shaping one’s own vocational training</td>
<td>1. Year 80 2. Year 40 3. Year 80 Total 80</td>
</tr>
<tr>
<td>2</td>
<td>Realizing the tasks of human resource management and using acquired skills for one’s personal and professional development</td>
<td>40 40</td>
</tr>
<tr>
<td>3</td>
<td>Taking basic social conditions and influential magnitudes into consideration when looking at economic decisions within the motor vehicle branch</td>
<td>80 80</td>
</tr>
<tr>
<td>4</td>
<td>Comprehending and documenting stocks and flow of values</td>
<td>40 40</td>
</tr>
<tr>
<td>5</td>
<td>Collaborating on the annual accounts, investigating costs and achievements and processing these data for the company’s decisions</td>
<td>80 80</td>
</tr>
<tr>
<td>6</td>
<td>Checking on accomplishments and preparing factors for entrepreneurial decisions</td>
<td>40 40</td>
</tr>
<tr>
<td>7</td>
<td>Running sale conversations in the area of car-accessories and parts and to consult customers</td>
<td>80 80</td>
</tr>
<tr>
<td>8</td>
<td>Working on orders for parts and accessories</td>
<td>120 120</td>
</tr>
<tr>
<td>9</td>
<td>Working on orders for car servicing and reparation</td>
<td>80 80</td>
</tr>
<tr>
<td>10</td>
<td>Planning, justifying and constituting customer-related measures in the context of a marketing strategy</td>
<td>80 80</td>
</tr>
<tr>
<td>11</td>
<td>Involvement in the new and used car business, dealing with orders for new and used cars</td>
<td>40 40</td>
</tr>
<tr>
<td>12</td>
<td>Arranging and working on financial services as well as on company-specific services</td>
<td>120 120</td>
</tr>
<tr>
<td></td>
<td>SUM</td>
<td>320 280 280 880</td>
</tr>
</tbody>
</table>
Figure 3 An exemplary learning field

Learning field 6: working on orders when goods are not in stock

General Economics
- Legal basis of contracts
- Payment transactions

Business Administration
- Imbedding an acquisition into the processing of a customer’s order
- Making decisions under legal and economic viewpoints
- Orders

Accountancy
- Listing purchases and sales in main and extra books under consideration of
  - immediate discounts
  - costs of purchases
- Corresponding in letters
- Confirming customers’ orders
- Memorandum
- Telephone conversations

Politics / Religion
- Ecology
  - packaging
  - transport
  - order quantity
  - storage
  - Conduct / relations

German
- Correspondence
- Orders at the supplier
- Confirming customers’ orders
- Memorandum
- Telephone conversations

Learning situation 1:
Orders by a long-standing customer
- Files for customers, articles, orders, deliverance
- Points of intersection on the data bank
- Evaluations

Conclusion and a Critical Appreciation of Learning Fields in Vocational Education

Within the framework of the analysis of opportunities and risks involved with learning field-structured curricula, the key arguments for the corresponding structure of the outline curricula of the Cultural Ministers’ Conference should be reiterated. These are:

1. the aligning of objectives and contents with the process-oriented conditions of the trainee’s future occupational profile (with simultaneous move away from a subject-content system towards a pragmatic system);
2. the promoting of learning place cooperation between vocational school and the company providing the training;
3. the “prolonging of life” for the curricula by reducing the degree of detail;
4. the attempt to also do justice to the demands of examination requirements in accordance with a comprehensive “hands-on” approach.

Zöllner\textsuperscript{53} recognises here the arguments of the supporters of learning fields who see in the new structure a step towards the strengthening of interdisciplinary and “hands-on”-oriented teaching, contributing towards an increase in curricular flexibility in schools and containing an attempt to modernise the “dual system”.

Learning field pedagogy appears to be an attempt to pedagogically align commercial vocational training with the requirements of a process-oriented business administration, whereby justice is done to the fact that the word “process” is not only enjoying great popularity at the moment but also contributes sustainably altering companies and their operating procedures, as demonstrated, for instance, by the “lean management” field.

If this conception is subjected to a critical analysis, then it must be noted that, for many years now, vocational schools have been continuously subjected to new conceptions and requirements without, however, sufficient attention being given to the phenomenon of obsolescence and insufficient material and equipment. Stommel\textsuperscript{55} is correct when pointing out that, “Science and administration repeatedly “lays down” new terms and concepts or “forces” them onto the vocational college. In the wake of learning target-oriented teaching, science-oriented, decision making-oriented, “hands-on”-oriented, computer-oriented, values-oriented or otherwise-oriented teaching methods; in the wake of learning workshops, future workshops, pragmatic workshops and simulative learning measures and learning measures\textsuperscript{57} in the North-Rhine Westphalian Education Commission’s “House of Learning”, the vocational schools are now faced with the dernier cri, that is, the “learning fields” together with the related “learning fields”-structured outline curricula, as a new basis for their activities. Stommel then makes emphatic reference to the taxonomy of learning targets according to Möller\textsuperscript{58}, and calls the objectives within the learning fields “learning targets of the very roughest kind”.

Gieseke takes this consideration a step further, as he says, “The cultural invention “teaching” enables us to do something that would otherwise be impossible, that is, to bring an actually still quite confusing reality into well-ordered concepts and to retain these for future (...) application...”

\textsuperscript{54} Krammes, D.: Lernfelddidaktik in beruflichen Schulen, in: Wirtschaft und Gesellschaft im Beruf, I.1/2000, p. 24. The process is linked to the Japanese term “Kaizen” which calls for constant cost reduction through continuous process improvement.
\textsuperscript{57} Presumably teaching measures and learning measures.
when the situation calls for them. All of the learning processes which take place during a lifetime anyway, remain, on the contrary, bound to their topicality and serve an immediate purpose.

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Halfpap, K. Lernen lassen, Darmstadt, 1996.


718

Kusch, W. Berufliche Erstaus- und Weiterbildungslernortverbundeln: Die berufsbildende Schule, I.2/1999, p.44.


Abstract

This paper discusses technological and pedagogical issues surrounding the mass production of multimedia learning content. The technical approach taken in overcoming the complexities of delivering learning content seamlessly to a diverse group of learners (with basic Information Technology literacy) are outlined. In particular, challenges facing learning technologists in delivering fit for purpose learning solutions which conform to learning technology standards are discussed.

Over the last year, fifty (50) hours of lecture-based materials have been recorded with emphasis on capturing classroom interactions. The multimedia learning content is packaged in accessible formats; readily available through the web-based learning environment; with cross-browser/platform support for multiple access points. This face to face lecture material is divided into pedagogically sound (i.e. ensuring that learning outcomes are adhered to) and technically feasible multimedia learning objects. An hour of classroom teaching is divided into three learning object 'chunks'. Hence, over 150 learning objects were created. Furthermore, key facts contextualising the learning outcomes are summarised into a five-minute delivery accessible via audio/visual handheld devices.

Introduction

This paper discusses technological and pedagogical issues surrounding the mass production of multimedia learning solutions. When delivering fit for purpose learning solutions, learning technologists are confronted with numerous cultural, pedagogical and technical challenges. Ideally, the multimedia learning solutions should adhere to sound educational principles; be culturally viable and technically feasible while conforming to learning technology standards. The case study discussed here, designed learning objects to overcome the complexities of delivering learning content seamlessly to a diverse group of learners while maintaining relatively low production costs. The increase in reusability of learning objects facilitates return on investment, which in turn reduces the costs associated with production. The production experiences are shared with a view to making the notion of affordable, accessible, durable and reusable learning objects a reality.

Overview of learning technology

Standards initiatives

The Advanced Distributed Learning (ADL) initiative (ADL, 2007), IEEE Learning Technology Standards Committee (LTSC) (LTSC, 2002) and the IMS Global Learning Consortium (IMS, 2002) have been actively pursuing Learning Technology standards at various levels. The Shareable Content Object Reference Model (SCORM), established in 1998 by the ADL initiative, aims to provide a technical architecture for learning objects to be easily shared across multiple learning delivery environments. SCORM has multiple, integrated specifications derived from previous or ongoing work of other specification and standards bodies including the Aviation Industry CBT Committee (AICC) (AICC 2007), IMS Global Learning Consortium and IEEE LTSC.
The LTSC and IMS Global Learning Consortium worked towards unifying the terminology used to describe educational materials. Several definitions and interpretations exist to describe Learning Objects, leading to confusion and potentially hampering effective collaboration amongst stakeholders within the learning technology community, as illustrated in Error! Reference source not found. “Different definitions abound, different uses are envisaged, and different sectors have particular reasons for pursuing their development. In this environment of uncertainty and disagreement, the various stakeholders are going in all directions” (Reha et al., 2003). The LTSC defined both digital and non-digital educational resources as learning objects. Wiley (2002) narrowed the scope of learning objects to digital resources only and proposed that Learning Objects are “any digital resource that can be reused to support learning” (Wiley, 2002). Hence, digital resources would include any size object that can be delivered across the network on demand. The relevance of emerging developments and definitions within learning technology standards are recognised as important. Success of mass producing multimedia-rich learning objects should be compliant to standards.

![Figure 1 - Learning Objects – Confusion in Terminology (Barikzai, 2006)](image)

Designing learning objects with reusability in mind potentially increases stakeholder participation and reduces production costs. Smaller learning objects like pre-recorded video; animations; smaller web-delivered applications; and a Java calculator are relatively easy to exploit therefore more reusable. However, larger learning objects aiming to deliver complete learning experiences or a complete instructional event are harder to exploit and reuse. The experiences of developing learning objects over the past 15 years have helped to evaluate this approach. The developments have included large scale subject-specific learning objects; addressing learning technology standards; managing learning object repositories and embedding learning objects within collaborative learning environments.

Learning object design challenges

The cultural and pedagogical openness of learning objects with emphasis on making learning objects available ‘en masse’ to be shared amongst scholars, based on agreed scholarly protocols, is desirable. Wiley noted “Learning Objects became the technology of choice for the next generation of instructional design, development, and delivery, due to its potential for reusability, generativity, adaptability, and scalability” (Wiley, 2002). These development approaches were based on the principles of object orientation. While the learning technology community adopted standards in making interoperability and reusability possible, it was not always possible to truly ‘pick and mix’ learning objects, thus the need for further research (Polsani, 2003). A discussion of the challenges is outlined below.

Affordability: Learning Objects can only become fully exploitable if the learning effectiveness is increased significantly and the time and cost is reduced. The multimedia learning objects have
been produced that can effectively replicate classroom-based material in a cost-effective digital form. The learning experiences of the learners are considered both in terms of hardware and bandwidth have been considered.

Accessibility: Standard compliant systems and content can enable learners to use learning objects from every location simply using internet protocol (HTTP, FTP etc) via a web browser thus potentially increasing accessibility. Additionally, the learning objects are accessible using multiple devices e.g. PDAs, mobile phones and other mobile devices. Furthermore, allowing access via a managed library, the stakeholders can exploit learning objects all the time.

Durability: Achieving learning object durability is not straightforward. To be able to use legacy systems and content, when the base technology is constantly changing is a big challenge not only to the learning technology community but also within the software development community. When mass producing learning objects, forward compatibility of production tools increases durability of the development life cycle while allowing customization of content (for subject disciplines that change) enables durability of learning content.

Reusability: Learning object reusability refers to all levels of reuse, in terms of both learning content and the underpinning software building blocks. Academics, interested in exploiting learning content, should ideally be able to audit learning objects relevant to their needs through the use of educational metadata. Reusing software building blocks and development techniques is easier to achieve via in-house developments within institutions and by using the same vendor's software tools across institutions.

Interoperability: Ideally, learning objects should be accessible by different Learning Management Systems (LMSs), on different platforms independent of tools. It should be possible to ‘pick’ and ‘mix’ learning objects independent of software constraints. However, the multimedia learning objects produced are highly interactive software thus requiring some additional software plug-ins. Most of the required plug-ins are readily available for various operating systems and platforms. The multimedia learning objects are packaged in a variety of different configurations such that learning objects of varying granularity are available to be reused with the learning management system.

Embedding learning objects within learning management systems

The multimedia learning objects produced conform to metadata standards. As well as individually adding metadata for each learning object, a library catalogue approach is adopted whereby the catalogue manages the metadata. Furthermore, the learning objects reside in the centralized object repository and are readily accessible via the MOODLE Learning Management System. MOODLE (MOODLE, 2008) is a free and open source (under the GNU Public License) course management system (CMS) designed using sound pedagogical principles to help educators create effective online learning communities.

Learning styles

Addressing learning styles

The process-oriented (conversational) nature of teaching and learning (as illustrated in Error! Reference source not found.) can be supported by a variety of computer-based multimedia learning objects. Capturing the interactions and conversations during the class session is very valuable. These recordings are useful to support student learning as well as enabling teachers to reflect upon the delivery in relation to student performance.
The two-way dialogue between the learner and teacher identifies learner’s preconceptions of learning and the learning environment. It is important to identify the stakeholders involved in constructing the learning environment; the learning objects supporting the learning environment and the learning scenarios required to engage learners with the learning objects.

Stakeholders

The stakeholders, academics, learning technologists, and management, have overlapping responsibilities and interchanging roles within the learning object life cycle. The stakeholder activities include exploiting learning object development and management tools; creating new learning objects; re-engineering existing learning objects; modifying existing learning objects; auditioning and using existing learning objects and managing repositories and libraries of learning objects.

However, not all stakeholders are primarily interested in all of the activities. For example, creating new learning objects primarily involves teams of academics and learning technologists. As this activity, especially when conducted on a large scale, will tie down resources; management would no doubt become involved.
Determining levels of granularity

When producing learning objects from classroom-based material it is advantageous to determine the level of granularity of material. The classroom interactions typically are over an hour long and hence need to be broken down into learning chunks which are self-contained objects. Each self-contained object has associated learning outcomes and learning material that delivers the learning outcome.

The process of determining the level of granularity of a classroom-based lecture into segments is processed by assessing natural breaks in the material delivered that allow each object to be usable within its own right. This breaking down of the material ensures that there are designated learning outcomes and the material to achieve this. An example of how a learning object is broken down is illustrated in Figure 4.

Figure 4 – Granularity of Classroom-Based Lecture Material

Chunking the material into smaller sections allows each segment of material to be used for its initial purpose as well as being mixed for new purposes. This allows for two benefits, that of reusability and lower redevelopment time.

The learning objects are more reusable as each segment contains individual meaning outlined in the material that can be incorporated with learning objects from other lectures to create new material. The chunking into smaller objects also means that if the outcomes for any section of a lecture changes then only a small section of the distance learning material needs to be re-developed as the change will only be applicable in a small section of the lecture. This re-use and rapid re-development help to reduce the ongoing costs of producing distance learning material.

Research approach

The research approach incorporated aspects of action research and rapid prototyping (from software engineering) while developing exemplar case studies. The research was influenced by developments within the educational technology domain as well as technical developments in software engineering.

A case study approach to research typically looks in depth at particular issues with a single or small number of subjects thus enabling the researcher to conduct investigations and carry out development activities at close range (Brumfit, 1998). This approach was appropriate for conducting a number of small investigations and technical explorations related to mass producing...
the multimedia learning objects. Action research techniques were used for the development of case studies. Hence, formal and informal discourse with identified stakeholders was established using synchronous and asynchronous collaboration, face to face dialogue; observations and interview techniques.

Rapid prototyping was used for developing the case studies as this approach is useful verifying the user requirements and verifying the feasibility of designs. Prototypes refer to working models of a system and are relatively inexpensive and easy to build, ideal for keeping production costs down. Further development within the rapid development model can then ensure that any improvements to the development are incorporated into the subsequent production. This rolling change of development model ensures that the final product meets the pedagogical criteria of both learners and academics.

Case study

Project background

The case study described here was developed in association with a London-based education provider through the Knowledge Transfer Partnership. The company is an independent, not-for-profit educational charity which aims to advance the education of the public and health.

Educational Design

The multimedia learning objects produced achieved the same pedagogical standards that the classroom-based material attained. The production comprised of four components or building blocks, as depicted.

![Figure 5 – Multimedia Learning Object Building Blocks](image)

Classroom based lectures

Paper based resources

Classroom Activities and quizzes

Presentation material

Learning Objects

Figure 5 – Multimedia Learning Object Building Blocks
Once each core element of the classroom-based material had been identified, scalable solutions were identified to allow mass production of a significant amount of material. The solution identified had met a range of criteria to ensure that it was feasible for the project to run successfully. The solutions needed to be SCORM compliant to ensure interoperability, be produced on a limited budget, retain the meaning of the original material to ensure learning outcomes, and overcome technological issues such as bandwidth and cross platform/bROWSER OPERABILITY.

Development Tools

Capturing classroom interactions

The tools used to capture the material needed to be consumer-level equipment to meet the budget and operating skills of team members producing the material. All written materials, diagrams and presentation material associated with a lecture could be digitally captured through integration with software packaging tools or deliverance in forms such as PDFs that are widely accepted as a viewable object, irrespective of platform.

Two cameras were used to capture the classroom interactions. An advantage of this is that one camera can be set up to record a wide area whilst a second camera can focus on a narrow shot. This dual recording means a narrow shot captures increased intensity of facial expression that may be used to deliver meaning in a lecture and a wide angle shot negates risk of the focus point (presenting lecturer) moving out of shot or additional material not being captured.

The radio microphones used to capture spoken word from the lecturer in relation to the teaching subject also ensure that the strength of tonal expression that may be delivered from the lecturer is not lost amidst external noise such as student chatter.

Packaging the classroom interactions

To package the material into learning objects, work had to be carried out on the captured material to transform it into web deliverable learning objects. That material came as two sets of video with associated audio, electronic presentation slides, PDF documents and occasionally selected tasks and questions. This material was processed through a selection of software tools to produce each multimedia learning object, as outlined in Figure 6.

The software tools used to create the material were a mix of open source and proprietary software that allowed all development time to be concentrated on producing tools within a rapid development environment rather than developing development tools. The choice of these tools is integral to reducing the development time for each learning object.
The multimedia packaging tools were assessed on their ability to create media that could integrate easily with existing software tools such as presentation slide software, commonly used in the creation of educational material. This ensures existing work does not need to be reproduced, reducing overall development time and ensuring what is not lost through re-creation. Other key criteria were that the material produced is cross-platform / browser compliant so that the material produced has an extended reach to all computer users and is not restricted by hardware or software compliance issues.

The additional benefit of utilising existing software solutions is that they can be fully branded and incorporate a user-friendly interface to increase usability amongst a variety of user types. In addition to classroom-based lectures that can be produced using the software tools, tasks and quizzes can be integrated into the learning objects to simulate the classroom interaction between students and lecturers in a virtual learning environment. This simulated interaction allows the lecturer to reflect on classroom-based experiences and discuss future improvements with learning technologists.

The rapid production of both lectures, tasks and quizzes into single reusable learning objects increases the usability of each object as the experience is encapsulated within one section rather than a fragmented, or disjointed experience, where each object was not of a similar look and feel which may have otherwise decreased usability. The advantage of using one software tool to create many objects is that the standardization of user interfaces increases usability. The tools also offer the capability to separate each learning object into chunks that may be used for its intended subject matter. Each object may be split into many objects and re-used for separate uses for differing purposes to increase re-usability and decrease the expense of creating learning objects.

Mass Production: Challenges and Risks

Forward compatibility challenge

Creating multimedia learning objects on a mass production basis, once established, becomes an extremely effective approach for producing high quality material on a low, sustained budget. However, due to the ongoing nature of mass production it is critical that each tool’s output is compatible with subsequent tools input and that outputs from the initial tool can be quickly manipulated within the subsequent tool. This was achieved by ensuring that all captured audio/visual material was easily edited in media editing software, that the outputs of the editing software were suitable for web delivery and that learning objects produced were SCORM compliant to effectively integrate with our LMS, as depicted in Figure 7.

Figure 7 - Multimedia Learning Object Example

This protects clients from any product deemed unsafe.

- Any person who experiences damage or injury as a result of a product can seek redress from the manufacturer, producer and importer, but not from the wholesaler or retailer (unless they withhold the producer or manufacturer’s details when these are requested by the injured party).

- Any product which could potentially cause damage is open to scrutiny under this act.

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Creating multimedia learning objects on a mass production basis, once established, becomes an extremely effective approach for producing high quality material on a low, sustained budget. However, due to the ongoing nature of mass production it is critical that each tool’s output is compatible with subsequent tools input and that outputs from the initial tool can be quickly manipulated within the subsequent tool. This was achieved by ensuring that all captured audio/visual material was easily edited in media editing software, that the outputs of the editing software were suitable for web delivery and that learning objects produced were SCORM compliant to effectively integrate with our LMS, as depicted in Figure 7.

Figure 7 - Multimedia Learning Object Example

This protects clients from any product deemed unsafe.

- Any person who experiences damage or injury as a result of a product can seek redress from the manufacturer, producer and importer, but not from the wholesaler or retailer (unless they withhold the producer or manufacturer’s details when these are requested by the injured party).

- Any product which could potentially cause damage is open to scrutiny under this act.

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Learning object delivery challenge

The classroom-based lectures, in this case study, are one-hour long and for web delivery are broken down into three natural segments that contain all of the learning outcomes the original material did. This inclusion of all the original material ensures that the intended learning outcomes are preserved.

The web-based material can be further contextualised into five minute-bite size sections that cover the fundamental learning outcomes of each section. These smaller chunks are more suited to mobile delivery due to current technical limitations of mobile delivery. This mobile learning is useful for summarising and recapping learning outcomes already undertaken in either a classroom or through the web delivery.

Production risk management

The process of capturing audio/video material, editing the material into learning objects and ensuring that the material is both technically and pedagogically sound was modeled using a workflow diagram. Documenting the workflow process is useful to assess and ensure value in each section of work undertaken. For example, a key stakeholder leaving a project is difficult to negate, especially within a project with limited budgets. This risk is overcome by having all tasks fully documented and all stakeholders cross-trained to undertake various roles to ensure future success of the project.

Pedagogical risk management

Pedagogical risks include material produced not being fit for purpose. These are absolved by ensuring that each prototype produced is substantially evaluated to ensure that it meets the learning outcomes expected in the original classroom-based lecture. The key stakeholders that assess this information are the original students and the presenting lecturer. To engage students in this review, the material is provided as an additional resource for the course, providing a basis for the students to be sufficiently interested in using the material and providing feedback. Initial evaluations of the learning objects were positive, and this needs to be extended to formalise the learning objects by engaging with stakeholders to assess the true value of the learning content.

Conclusion

Within this paper, we have focused on the mass production of learning objects. The experience of producing learning objects with the use of existing software tools has demonstrated, as in the case study, to be a sustainable method for producing effective reusable learning objects.

Future work will look at formalising the learning objects by engaging with stakeholders to assess the true value of the learning content. The next stage will also focus on widening participation by enabling community-based learning, specifically targeting learners from less affluent neighbourhoods. In addition, the development effort will focus on affordability and adaptability of learning objects. Affordable learning objects will help in widening participation by enabling community-based learning, specifically targeting learners from less affluent neighbourhoods.
use of learning standards makes it easier for learning object providers to offer adaptable learning by enabling learning objects to be adaptable and to change. Metadata, when used appropriately, can aid personalised learning by allowing learners to customise their learning according to the metadata descriptions provided. However, it is envisaged that in the future, learners will be able to engage with the learning object to personalise and customise the learning experience.

References


TEACHING TECHNICAL COURSES THROUGH DISTANCE LEARNING IN NIGERIAN UNIVERSITIES: PROBLEMS AND PROSPECTS

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Abstract
This paper addresses the peculiar problem of non-adaptability as distance learning some technical courses like Engineering, Architecture and Urban Planning. This is due to their highly technical and practical nature as well as daily studio and workshop tutelage and interactions needed to master them. While the synchronous traditional teaching can no more cope with the educational needs of the country, e-learning aspect of distance learning could have been a solution. However, candidates for technical courses are at a disadvantage as the courses are not adaptable as distance learning yet. Comparisons between online data on applications and admissions of the “Joint Admission and Matriculation Board” (JAMB, 1998–2005) indicates a high divergence in the applications and admissions for these technical courses. Thus, a high percentage of qualified candidates seeking admission into Nigerian universities for such courses are turned back yearly. At the same time, online data from the graduates of few universities running distance learning in the south-western part of the country shows that they are yet to adopt modern teaching techniques/technologies and elearning to deliver their courses. The paper discusses some of the tools for adapting such technical courses as e-learning and concludes that they can be successfully taught at distance, just like any other course of training. This is, however, if appropriate elearning facilities and skills are made available. It finally recommends at tripartite levels of higher education management, the ways to achieve same.

Key words: Asynchronous learning, collaborative learning, distance learning, elearning, interactive learning, synchronous learning.

L'ENSEIGNEMENT DE FORMATIONS TECHNIQUES EN ENSEIGNEMENT À DISTANCE DANS LES UNIVERSITÉS NIGERIANNES: PROBLEMÈS ET PERSPECTIVES

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Résumé
Cet exposé se penche sur le problème particulier de la non-adaptabilité des programmes d’enseignement à distance à certaines formations techniques comme Ingénierie, Architecture et l’Urbanisme à cause de leur caractère très technique et pratique et du suivi quotidien en studio nécessaire pour les comprendre. Alors que l’enseignement traditionnel sychron est plus en mesure de répondre aux besoins du pays en matière d’education, l’aspect e-learning de l’enseignement à distance aurait pu être une solution. Néanmoins, les candidates de ces formations techniques sont désavantagées parce que le dites formations ne sont pas encore adaptables à l’enseignement en distance. Les comparaisons entre les données de la “Joint Admission and Matriculation Board” (JAMB, 1998–2005) sur les demandes et les admissions révèlent une très grande différence entre les demandes et les admissions pour ces formations techniques. Ainsi, un grand nombre de candidates après qui font des demandes d’admission dans les universités nigérianes pour ces formations sont refusés chaque année. En même temps, les données en provenance du nombre peu élevé d’universités opérant en enseignement à distance dans le sud-ouest du pays révèlent que les formations techniques sont encore non adaptées par l’enseignement/technologies modernes et l’learning pour ces formations. Cet exposé examine certains outils d’adaptation de ces formations techniques sous form e-learning et conclut que l’on peut les enseigner à distance, tout comme les autres formations. Néanmoins, ceci n’est possible que si les facilites et compétences appropriées d’e-learning. Il recommande finalement, à trois niveaux de gestion de l’enseignement supérieur, les moyens d’y arriver.

Mots Clés: apprentissage asynchrone, apprentissage en collaboration, apprentissage à distance, e-learning, apprentissage interactif, apprentissage synchrone.
Introduction

Events in the world educational scenes are taking dramatic turns. The age old traditional methods of teaching and learning are fast becoming archaic. Educational needs and events are moving faster than what such traditional methods can cope with. The world is looking for ways of educating more people efficiently and effectively at a shorter period than before, but the developing world still battles with the traditional methods as their yearly educational needs grow geometrically. In most advanced countries, distance education system has become e-education and technologically advanced students are taught from remote places efficiently as if the teacher and students are together. Apart from this, modern teaching and learning techniques are becoming worldwide that in a short time, any part of the world that does not adopt this system will be left behind.

The communiqué of the World Conference on Education for All (WCEFA) of 1990 states among other things that “Every person – child, youth and adult – shall be able to benefit from educational opportunities designed to meet their basic learning needs....(Article 1).” The assumption of this study is that this declaration is far from being achieved in Nigeria as the current explosion in the students’ intake in most of the country’s institutions has become a point of concern to all lovers of educational advancement and mass literacy. Thousands of qualified candidates are struggling to enter colleges that have very little spaces for them. This invariably always results into all forms of complex and dubious admission processes which have led universities to conduct parallel admission examinations and those admitted are congested in large classrooms benefiting little from their lectures. As a result, many universities are now over tasked to perform duties that are unachievable with the meagre resources at their disposal due to such over population in classrooms. The summary of these is that a minimal percent of Nigerian youths now have access to adequate education that can give them careers.

The peculiar nature of technical courses

Technical courses like engineering, architecture, urban planning, cartography, building technology, and fine-arts are peculiarly practical-oriented. Their training calls for patience, interaction, feedback and collaboration from lecturers and other students more than in other courses to get the best out of the students. In these courses, one needs to be both artistic as well as scientific to develop the necessary skills. The artistic aspect has to be patiently developed in each student at his/her own pace. These courses call for precision, in that, tiny and painstaking detailing is involved in their mastery. Time is needed for both the teacher and the students to transfer and absorb knowledge. Because of their practical nature, the courses require hands-on-tools approach which has to be demonstrated by the teacher. All these have confined the courses to the traditional realm which has become the major impediment to their adaptation as distance learning. There must be interaction between students and their lecturers on one hand, and between the students themselves for collaborative learning.

According to (Galusha, 1997: 6-14) an area of concern for the distance student is the perceived lack of feedback or contact with the teacher. A frequent criticism of distance learning is that its disembodied nature restricts feedback leaving the student feeling abandoned (Baker, 2003, vol2). Because of this, students may have trouble with self-assessment. The separation of student and teachers imposed by distance removes a vital form of communication between these two parties. The link must be restored through overt institutional efforts so that the teaching-learning transaction may be “reintegrated.” Citing Tinto, ed (1995ED389931) hypothesised that distance students who did not receive adequate reintegration measures such as electronic or telephone communication, would be less likely to experience complete academic and social integration into institutional life. Consequently, such students would be more likely to drop out. Out of about 450 candidates that participated in the Nigerian Universities Commission Virtual Higher Education Pedagogy (NUCVIHEP) between 2003 and 2004, less than a dozen completed the nine modules in record time of nine months. Technical courses are, however, more demanding when feedback, interaction, supervision and collaboration between students and their lecturers are concerned.
It is worthy of note here that while it is possible for candidates in Management and Literary courses to have opportunities of open learning or get admission into universities outreach centers and informal schools or enroll for external professional examinations, candidates in Engineering and Environmental related courses can not do so. It is particularly impossible for these courses to be studied externally because of this peculiar nature. If they are therefore to be taught through distance learning, the above impediments of interaction, collaboration, tutelage and feedback have to be adequately addressed. This has never been easy to handle. However, with the modern applications of computing and the new horizon of multimedia projection, teleconferencing, videoconferencing, instructional television, wiki, and many other modern teaching techniques, and tools through internet, in real time; the end problem seems appearing. When some or all of the above facilities are combined using computers, the necessary feedback, interactions and collaborations which are not possible with the conventional correspondence courses will be achievable and technical courses will be able to others as distance learning. In the same vein, teachers in these courses are skeptical and do not believe it is possible.

Inadequacy of the synchronous teaching method resulting in overpopulation in Nigerian universities

Overpopulation in most Nigerian higher institutions become an eye sore, especially in the southern part. It is now common seeing students sitting on windows, and many others standing, peeping behind them to see and hear the lectures. Success especially in literary courses. In most cases, there are no large halls to accommodate such a number, and where they exist, they are long, narrow, dark, and have headroom that students from the middle of the class hardly see the lecturers, talk-less of those far behind. This at times is compounded by failure in electricity that causes black-out. On many occasions the students are unruly, disorderly and uncooperative because of the class size.

Examinations are no longer what they used to be. Malpractices abound, formalised and students no more fear being caught and when caught, resolve into violence, or threaten their lecturers with cultism. The problem has not only resulted in low academic performance in the students, it has turned many lecturers into over-night handout salesmen (especially for the literary courses) and has bred most of the numerous social ills and menace bedevilling most of our campuses and cities today. In many schools of engineering and architecture and planning, students do not have drafting tables to themselves, and so, do their works from home, at times contract them out to their so called ‘mercenaries’.

Table 1 shows the latest data from JAMB the divergence in the number of applications into Nigerian universities compared to the total numbers admitted with reference to applications and admissions of the technical courses. Figure 1 shows that from 1998 to 2003 the gap got wider on yearly basis showing a rapid increase in applications and a gentle decrease in the percentage admitted. This must be what created the known rowdiness, bottlenecks and corrupt practices at the JAMB and different universities’ admission offices that resulted in the universities conducting parallel entrance examinations.

<table>
<thead>
<tr>
<th>Academic Sessions (A)</th>
<th>Total Applications (B)</th>
<th>Engineering and Env. Applications (C)</th>
<th>% of Engr/Env. Applications on Total Application. D=(C/B)100</th>
<th>Total No Admitted (E)</th>
<th>% of Total Admitted on Total Applications F=(E/B)100</th>
<th>No of Engr/Env. Admitted (G)</th>
<th>% of Engr/Env. Admitted on Engr/Env. Applications H=(G/C)100</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998/99</td>
<td>417,773</td>
<td>70,940</td>
<td>16.97</td>
<td>78550</td>
<td>18.80</td>
<td>11786</td>
<td>016.6</td>
</tr>
<tr>
<td>1999/00</td>
<td>461,548</td>
<td>82,221</td>
<td>17.81</td>
<td>45766</td>
<td>9.90</td>
<td>4769</td>
<td>5.80</td>
</tr>
<tr>
<td>2000/01</td>
<td>775,900</td>
<td>129,857</td>
<td>16.73</td>
<td>90769</td>
<td>11.70</td>
<td>15836</td>
<td>2012.</td>
</tr>
<tr>
<td>2001/02</td>
<td>994380</td>
<td>162219</td>
<td>16.31</td>
<td>51845</td>
<td>5.20</td>
<td>8311</td>
<td>5.10</td>
</tr>
<tr>
<td>2002/03</td>
<td>1046950</td>
<td>175670</td>
<td>16.78</td>
<td>105157</td>
<td>10.0</td>
<td>16352</td>
<td>9.30</td>
</tr>
<tr>
<td>2003/04</td>
<td>841878</td>
<td>135980</td>
<td>16.15</td>
<td>122492</td>
<td>14.50</td>
<td>15951</td>
<td>011.7</td>
</tr>
<tr>
<td>2004/05</td>
<td>916371</td>
<td>142743</td>
<td>15.57</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>
Figure 2 also shows that though the number of JAMB applications increases yearly, an average of 16.61% of the total JAMB applications for UME always choose Engineering / Environmental Technology courses, and at the same time, the percentage of intake (admitted) drops sharply from 16.6% to 5.1% between 1998 to 2001.

Figure 3 is a simple comparison between Engineering / Environmental applications and their admissions. The percentage admitted fluctuates year on year ranging from the 5.10 as the lowest to 16.60 as the highest which translates into an average of 10.11% per year. The difference of 89.89% is the average annual non-admitted candidates among those who applied for Engineering and Environmental Science courses. This does not in any way suggest that all these left-over candidates are not qualified to enter for these courses.
This percentage of the left-over is a big concern for mass educators and indicates a big problem for the country in that many dreams of the youth cannot be fulfilled. E-learning could have been the solution to this. But since these courses are not adaptable for elearning, this means that candidates in this category are disadvantaged.

Table 2 is the findings on the teaching delivery media of five distance learning programmes of five universities in the south-western Nigeria. Even though the establishment of these programmes dates far more than ten years, the table shows a total non-adoption of e-learning in delivering the distance learning lectures of the universities. The most modern lecture delivery medium in these universities is the sale and distribution of audio cassettes and VCDs. The major delivery means are the print medium in form of textbooks, handouts, and lecture notes. Till now none of them has started teaching through the internet less of employing teleconferencing or videoconferencing.

Source: Survey data

Table 2 Teaching Modes for distance learning programmes in five South Western Nigerian universities

Challenges facing elearning in Nigeria

<table>
<thead>
<tr>
<th>TEACHING MODES</th>
<th>SYNCHRONOUS (HOLIDAY COACHINGS)</th>
<th>ASYNCHRONOUS TEACHING</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIVERSITY</td>
<td>Print Audio Cassette/CD/VCD</td>
<td>Internet/E-Mail</td>
</tr>
<tr>
<td>University of Lagos</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>University of Ibadan</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Lagos State University</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Obafemi Awolowo University</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Olabisi Onabanjo University</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Fig. 3: Comparing Engr/Envr Applications with Engr/Envr Admissions.
Source: Adapted from JAMI Statistics (1998-2005)
While elearning has a lot of opportunities and advantages over traditional methods and even the conventional distance learning methods, certain impediments can hamper its successful delivery, if not adequately planned for. These include:

Lack of e-teachers

To teach through elearning is basically different from any form of traditional methods. eteaching demands for eteachers. To have been trained to teach does not imply that you can teach in e-learning. Just because teachers have teacher qualifications, does not necessarily prepare them to be e-teachers... (N G. Campbell, 1997, pers. comm).

The summary of it is that effective application of education can only take place in schools with:

- Teachers who understand what it is like to learn in an e-environment,
- Teachers who are confident working in synchronous and asynchronous environments interacting with communities of students and people they may never see,
- Teachers who are able to locate and publish in a web-based environment, (Healy, 1999: 294-298),
- Teachers who are technically skilled in the modern educational technologies of elearning.

Lack of e-facilities

These are computers, (soft and hardware), Internet, Broadband, Satellites, Cabling, digital phones and any other information technology facilities. According to Higgins (2002: 1), underpinning the e-education strategies is the assumption that the infrastructural backbone of communication technologies such as cabling, satellites and bandwidth is available to users. E-education strategic planners need to take into account these structural issues when designing flexibly delivered teaching and learning packages. Since most of these facilities are very expensive, the major part of the foundation for elearning should be laid by the governments by providing facilities to engender easy take-off of such projects.

Lack of political will

This has been a serious impediment to development. The government will be the last hope in the provision of elearning facilities, making friendly policies on elearning, will be an essential factor in its success. The lack of political will to do the above is a sign that elearning will result in failure. Whether elearning will succeed in a city or country or not depends on the political will of its citizens especially those in authority. In line with this, is the digital level of those in authority. If the people in authority are still non-digital in their thinking or can not appreciate the goodies in such a venture, they may not have the political will to embark on such a gigantic expensive project.

Getting candidates e-studentship ready

Even when facilities are available but the students are not prepared for elearning, the result will also be a failure. The computer awareness and technical operability of the students in information technology is a crucial determinant of the success of e-learning. One can imagine what may happen if non-computer literate candidates are admitted for elearning programmes. Computer application knowledge must definitely be a subject requirement for entering into elearning and the students must be e-studentship compliant. As at now, this has not been so as a high percentage of the youth and would-be candidates are not computer literate talk-less of being e-student compliant. Youths in the rural areas that form the majority are the most affected.

Digital Divides

Elearning is an expensive education system. Without a conducive environment to reduce the cost of acquiring computer and other modern educational facilities, many would-be students will be left out. The economically disadvantaged, including those with unstable or inadequate incomes, or who rely on fixed incomes may not be able to afford elearning if nothing is done to assist in this.
E-education, in the personalised western form requires ownership of expensive computing hardware and access to telecommunication systems. The only source of access is through either public provision, community arrangements, or corporate sponsorship.

Energy problem

Computers and information technology equipment run on energy. Without electricity, they will not work. This invariably means that the success of such a programme will be hampered with epileptic power supply as is the case in Nigeria. Poor energy supply will definitely frustrate both the e-teachers and e-students. Efforts should be made to make power supply more adequate and special emphasis should be directed at making electricity available to the rural areas as well. One way out of this is renewable energy e.g. solar, wind etc.

Adapting curricula for e-learning

The curriculum that works with the traditional synchronous courses may never work with elearning. There is a need to know how to write e-curriculum and know what e-learning curriculum is like. Without a specially written e-learning curriculum, the normal curriculum will fall short of any achievement. For example, to adopt normal architectural design studio curriculum for e-studio will make a mess of the results; the first is more of person to person tutelage while the other is more technology-intensive. E-curriculum needs skill and knowledge of how to write them.

Possibilities of technical courses as distance learning in Nigeria

Though the peculiarity of non-adaptability of most technical courses for distance learning remains a big problem in Nigeria, developments in Mass Communication, mainly the radio and television, have, however, had much impact on education, making distance learning possible; Telecommunication has produced the remote teleprocessing satellite systems which have turned the world into an open learning classroom. A corollary of all these technologies has resulted in limitless opportunities for the educational system (Okebukola & Shabani, 2004). The hope is therefore rising on trying even technical courses like engineering and architecture as a distance teaching and learning. The most relevant techniques that are more appropriate for practical courses like these courses include Teleconferencing, Videoconferencing and ITV all transmitted through telecommunications and enhanced by Multimedia system. With the above techniques in place, complex exercises can be simulated for practice and understanding.

In practical works, the use of materials, equipment and specimens are simulated and demonstrated through multimedia while assignments be based on learners' place of work to allow their applications. For instance, while undertaking architecture or engineering as a distance course, students can be attached (as in Industrial Training attaché) to architectural or engineering firms where they are supervised, corrected and aided by qualified professionals and on special occasions attend outreach centres of the school of Architecture /Engineering to meet other e-students and outreach tutors. Apart from this, graduate or post-professional examinations can be conducted after a course of training as elegance by the professional bodies.

Tools for teaching technical courses as distance learning

A. Computer and distance education

Used in combination with any of the other techniques, the computer provides limitless possibilities in information processing and information generation. When new information technologies are discussed, much attention is always focused on the computer because of its versatility. The computer has also gained the attention because it is regarded as the main changing agent for the future. It is envisaged that a great deal of work in the very near future will be done through computers. This has made the computer technology an important subject for the educational system. Since most of the technical courses can now be digitized, using computers
in carrying out technical assignments and projects no more be a problem in distance education.

B. The indispensability of the internet in distance learning.

Internet is a computer-based global information system. The Internet involves interconnecting many computers in a network. Such network may be tens, hundreds, or even thousands of computers, enabling them to share database of information. The Internet has made it possible for people all over the world to effectively and inexpensively communicate with one another. Unlike traditional broadcasting media such as radio and television, the Internet does not have a centralised distribution system. Instead, an individual who has Internet access can communicate directly with anyone else on the Internet, make information available to others, find information provided by others, or sell products with a minimum overhead cost.

In a plain man’s language, the internet can be regarded the world storehouse of knowledge. It is a virtual world brain, virtual library, virtual conference room, virtual market and virtual classroom. Since internet can be accessed by anyone anywhere so far the facility exists, it makes distance learning, even in engineering, architecture, planning and fine arts (which has not been possible as correspondence course) possible.

In Olabisi Onabanjo University Department of Architecture, information, instructions, lecture notes, assignments and projects are given through Internet as attachments to the students’ e-mail messages. A centrally maintained web page is opened which the students can log on to. And within the web page will be “E- Portfolio” that will include some of the following features: A gallery of good portfolios of architectural works, tutorials, tests and self-assessments on how to carry out works, online discussions and interactions as well as online project allocation, supervision, critiquing and presentation.

C. Multimedia System

Multimedia is the presentation of information using the combination of text, sound, pictures, animation, and video with the aid of a computer. Carefully presented, multimedia can enhance the scope of presentation in ways that are similar to the roving associations made by the human mind. Connectivity provided by hyperlinks transform multimedia from static presentations with pictures and sound into an endlessly varying and informative interactive experience. Multimedia has had an enormous impact on education. Because of the visual appeal, students are motivated to learn more and therefore assimilate better. Through multimedia presentations and programming, lectures can be made more interesting. For example, in Olabisi Onabanjo University, we discovered that students are motivated, learn, contribute and interact better in multimedia lectures. Even seminars presented using multimedia are known to attract more attention and interests.

D. Teleconferencing

Teleconferencing is a discussion through telephone between two or more people in different locations who can hear but can not see one another. A lecturer of architecture can teleconference his/her students who are in their hostels or homes to share with them the common mistakes found students making during the usual lectures. Our GSM phone can be used for teleconferencing; however this can be done with only three people, i.e. between the teacher and two students. Better teleconferencing through internet can connect more people than GMSs.

E. Videoconferencing
According to (Michael 2002, 1993-2001) videoconferencing can be adopted as a computer-based teaching technology in which moving (video) or television pictures can be transmitted synchronously in two directions through high speed digital lines so that the students from one side can see and hear their lecturer in another place and vice versa. Videoconferencing is the most real modern teaching technology that can be adopted to teaching practical-oriented courses. With videoconferencing, perfect interaction in oral, visual, graphics and letters are possible as if you are physically present in class in ‘Real Time’. This makes it interesting, motivating and enjoyable for the students. Various learning styles can be adopted e.g. the use of video clips, animation, audio, and graphics. This is very good for practical teaching because of its visual appeal.

F. Instructional Television (ITV)

Instructional television (ITV) is an effective distance education delivery system through television or video sets. ITV may be either passive or interactive. Passive ITV typically involves pre-produced programs which are distributed by video cassette or by video-based technologies such as broadcast, cable, or satellite. In contrast, interactive ITV provides opportunities for viewers’ interaction, either with a live instructor or a participating student site. For example, two-way television with two-way audio allows all students to view and interact with the teacher (Lochte, 1993). At the same time, cameras at remote sites allow the teacher to view all participating students. It is also possible to configure the system so that all students’ sites may view one another.

In ITV, motion and visuals are combined in a single format so that complex or abstract concepts can be illustrated through visual simulation. Instructional television is an effective way to take students to new environments (the moon, a foreign country, or through the lens of a microscope). Events are captured and relayed in real time so that time and space are collapsed. It is very effective for introducing, summarising, and reviewing concepts. It can be used effectively as a motivational tool.

However, because teachers and students are physically separated by distance, the teacher’s challenge is to psychologically reduce this, not only through the appropriate use of technology but also through the use of effective teaching practice.

Conclusion and recommendations

This paper has looked into how the age-old traditional methods of teaching and learning are fast becoming archaic and outmoded and how this has particularly affected the training of technical professionals in Nigeria. Conditions in Nigerian institutions are now becoming pathetic as a high percentage of prospective students are turned yearly and those admitted are congested in large classrooms benefiting little or nothing from their lectures. Data from the JAMB office clearly shows that Nigerian universities can no longer cope with the number of intakes. And since the trend in the world education is to educate more persons within a short time so that nobody is denied qualitative education, e-education is the answer left. But the problem of adaptability of such courses for elearning makes it impossible. Moreover, while it is possible for candidates in management and literary courses to have admission opportunities into Open-learning, universities’ outreach centres or enroll for external professional examinations, candidates in the technical courses can not do the same. Computer-based educational technologies is seen to offer solutions to several of these perennial problems. In the above view, some of these computer/internet-based technologies, have been found to be appropriate for teaching these courses at distance in the advanced countries and have been briefly discussed in this paper. Therefore, in order to fully achieve success in teaching technical courses as distance learning in Nigeria, the following recommendations in three hierarchies of education management levels are necessary.

Departmental level

Departments should assist in producing e-teaching resources for the lecturers who should be trained to improve their skill in computing and other new educational technologies. Computer application should be made a prerequisite for all departmental courses. Special computer training in specific software areas should be offered for lecturers.

738
Institutional Level

All higher institutions should invest in IT, Internet, broadband, cabling and fiber optic facilities etc. Higher institutions can have outreach centres or cyber cafés where online students receive lectures. Computer literacy should be a condition for employing staff into all higher institutions. Computerisation of every office, departments and every activity should be a must. Make computer facilities available to all lecturers. Computer literacy should be one of the admission requirements for candidates entering higher institutions. Nigerian professional institutes should take a lead by re-training their members through e-learning. An advanced post graduate course can be introduced by the institutes through e-learning. Higher institutions should endeavor to produce e-teachers.

National Level

The government should provide all the impetus to make online studies easy for interested candidates. They should provide computer facilities in all secondary schools so that those in the remote parts of the country who are mostly affected also enjoy such preparation from their school certificate level. Government should encourage proliferation of computer assembly in the country to make it cheap. Tariffs on educational facilities should be removed for affordability. Government should assist universities to develop to their full capacity and potentials on distance e-learning. The government should fund education adequately for these facilities. And finally, since energy is of paramount importance to run remote schools that are outside the national power grids should be assisted with appropriate renewable energy e.g. solar, wind, tidal, biogas etc.

Notes All figures were produced with Microsoft Excel spreadsheets (2003)

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VIDEOCONFERENCING AS A VERITABLE INSTRUMENT FOR EFFECTIVE OPEN AND DISTANCE LEARNING (ODL) SYSTEM—THE NATIONAL OPEN UNIVERSITY OF NIGERIA (NOUN) PERSPECTIVE

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Abstract

Response time has always been a common denominator when it comes to transmission of information from one source to another. It is arguable to say that the level of distortion is directly proportional to the degree of delay encountered during the modulation and demodulation process of information transfer protocol. So concert concern towards effective information dissemination medium tends to channel more efforts towards elimination of such down time. Today, ICT tools – Videoconferencing is directed towards the realisation of online, real time information coverage across a very wide geographical spread with the obvious desire to put to an end such slack time associated with information transfer. This certainly will play a pivotal role for NOUN based on its peculiar role knowledge transfer and dissemination of information to her teeming users and clientele.

LA VIDEO CONFERENCE COMME VERITABLE INSTRUMENT DU SYSTEME D’ENSEIGNEMENT À DISTANCE – LE CHOIX DE LA NATIONAL OPEN UNIVERSITY OF NIGERIA (NOUN)

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Résumé

Le temps de réaction a toujours été un dénominateur commun quant à la transmission de l’information d’une source à une autre. On peut affirmer que le niveau de déformation est directement proportionnel au degré de retard rencontré au cours du processus de modulation et de démodulation du protocole de transfert de l’information. Ainsi, les efforts, concentrés sur le support de dissémination réussie de l’information tendent à consacrer davantage d’efforts à l’élimination de ce temps mort. Aujourd’hui, le principal outil de la Technologie de l’Information et de la Communication (TIC) – la vidéo conference – vise à la réalisation d’une couverture de l’information en ligne, en temps réel sur une aire géographique très étendue qui transcende toutes les barrières en vue de mettre fin à ce décalage associé au transfert de l’information. Il va sans dire que ceci va jouer un rôle clé au niveau de NOUN, au vu de son rôle particulier en matière de transmission et de dissémination de la connaissance auprès de la multitude de clientele.
Introduction

The concept of videoconferencing is a communication technology that integrates video and audio systems to connect remote users with each other as if they were in the same room. In other words, videoconferencing is a medium where individuals or groups can meet face to face in real time online to interact. Thus, users see and hear each other instantly, allowing natural conversations not possible with voice-only communications technology. Videoconferencing is a technology that allows a person sitting at a computer equipped with a personal video camera and a microphone to transmit video and audio across the internet (Evans et al., 2005). It can be as simple as a computer setup enhanced with a camera on top of a monitor, a microphone and a speaker or as complex as a multimedia audio/video studio with a soundproof wall and powerful lighting system.

According to Intellinet, an MCS videoconferencing solutions company based in the US, communications companies have been dabbling in video conferencing technology since as early as the late 50s, but it took the advent of broadband internet and affordable web cameras (late 90s) for videoconferencing to really take off. Good bandwidth is necessary for high-fidelity streaming video and voice. Videoconferencing took a serious step into mass use with the release of Microsoft Net Meeting 3.0 in 1999. Now there are dozens of software vendors marketing videoconferencing software and a number of investors interested in bringing videoconferencing to mobile devices (this is one aspect that will soon transform the GSM world).

At this stage let’s define these three terms: teleconferencing, data-conferencing and videoconferencing in order to avoid misrepresentation often encountered by users.

Teleconferencing refers to the ability to confer with a group of people simultaneously using telephone or electronic-mail group communication software; whilst data conferencing connotes a form of teleconferencing in which two or more users can edit and modify data files (document) simultaneously; Videoconferencing constitutes a unique form of teleconferencing in which participants see each other on a video screen (Laudon et al., 2001).

Videoconferencing, also known as video-teleconferencing (VTC) is all about connecting people and collaboration usually associated with education and learning environment. Thus, people can meet or interact with each other electronically, though they are hundreds or thousands of miles apart. For example, using videoconferencing, students from the National Open University of Nigeria can communicate at their best with fellow students, tutors and facilitators alike regardless of their geographical locations.

Objective

This paper presents a strategic modality for overcoming the perennial issue of information dissemination to NOUN’s ever-increasing student population on one hand, and the NOUN staff on the other.

Methodology

This paper gives an insight to the efficacy of Information & Communication Technology tools and deployment as a problem-solving medium for effective teaching and learning in an open and distance learning platform using the National Open University of Nigeria as an example. Some of the documents made available in relation to this paper were carefully selected from the author’s experience through participation and observation of ICT deployment and utilisation in different NOUN locations in Nigeria and other videoconferencing deployment within the country.
Project Goals/Objectives

The primary objectives of this paper are:

* To showcase ICT tools as the best cost-effective means for information dissemination across NOUN operation locations
* To address the associated short fall in using ICT in teaching and learning under the ODL system in NOUN

Constraints

One of the major constraints experienced by a developing country like Nigeria seeking to take advantage of current ICT infrastructural installation and deployment is the issue of power (electricity). Unstable electricity in the country remains a worrisome issue for Nigerians (even NOUN) to contend with (Adenikinju, 2003). Where generators are being provided as an alternative, the cost of fueling becomes another hurdle.

Yet another constraint is what Prof. Yakubu Oche considered to be “bandwidth colonialism in Africa”. The price of internet access is indeed outrageous even when the bandwidth is shared among many subscribers. Videoconferencing requires considerable amount of bandwidth (due to video streaming) for optimum performance.

Benefits of Videoconferencing to ODL

In the developed world, the use of videoconferencing is increasingly very appealing to the educational and scientific sectors. Many prominent universities in the developed countries have adopted videoconferencing as an educational tool in conjunction with online courses. That is, Internet videoconferencing enhances educational experience, allowing a more immediate, more interactive form of contact than e-mail. Business leaders around the world use videoconferencing to keep in touch with important contacts while on the move in their various locations. Furthermore, videoconferencing allows save time and money on traveling and housing costs by bringing people face to face virtually (Anon, 2008a).

Present day applications of videoconferencing technology are just the beginning. As video and voice capture technology, software and display technologies continue to improve, the experience of videoconferencing will become increasingly natural and intuitive to a wider range of users. Eventually, videoconferencing and similar technologies will allow the creation of “virtual cities” online spaces where people work together without constraint of geographic proximity. Certainly, this will decrease urban congestion and the environment by making it possible for skilled workers living in the suburbs to acquire high-paying jobs without commuting. Students and staff across the nation will be able to interact much more on a real time online basis. The issue of global collaboration among students world over that is now a current trend in higher institutions will be greatly enhanced.

From the fore-going it is obvious that videoconferencing technology has unique advantage as it allows geographically disparate parties to see and hear each other across campus or around the globe usually through satellite or telephone communication systems. Although conventional videoconferencing involves costly equipment and usage fees, developing new technology is now bringing videoconferencing within the reach of faculty, students and practitioners. Free or inexpensive software programmes are available allowing videoconferencing online over the Internet, with only this software and a small, relatively inexpensive personal camera plugged directly into a personal computer, individuals can video conference through their computer screen with other similarly equipped users worldwide (Gibson et al., 2002).

Internet videoconferencing is used to communicate colleagues on campus and throughout the world, to consult and to teach (Kirk and Frazer, 2005). Teachers in the developed nations have introduced it to their students and use it in classroom, as well as between classes, to facilitate communication. Office hours are now possible from distance, when the teacher is traveling or the students are in distant locations. Teachers plan experiment with this tool in the new
evaluation program at higher institutions, to supple- ment classroom activities, regular office hours, and seminars. They also plan to use it in evaluation projects to conduct follow-up interviews and observations at remote sites. It may also be used for consulting as well. This interactive medium enables tutors to maintain their campus schedules and appointments and avoid time lost to travel. Again, facilitators at one location can easily reach out to virtually all students across the nation in a single transmission (Tham, 2005).

Internet videoconferencing also has other much less tangible benefits. Electronic communication is more personal and much more effective when you can hear the nuances of tone and see non-verbal "language" such as gestures and the expressions you normally depend on in face to face interactions (Daly-Jones et al., 1998; Anon, 2008b). Videoconferencing also enhance collegial communication, particularly in preparation for professional association meetings and during multi-site research projects. Illustrations, maps, book covers, and physical settings can be shared instantaneously. The implications for international cooperation are considerable.

Bringing the world into the classroom through the use of this technology is becoming increasingly popular. The concept of videoconferencing in West Africa is relatively new, with videoconferencing centers in only three out of fifteen countries in the region. Thus, the region is obviously far behind in the acquisition of advance technologies.

Conclusion
Beyond the numerous benefits of videoconferencing discussed above; one can further justify its essence in NOUN for open and distance learning under cost-benefit analysis. As earlier stated, videoconferencing seeks to optimise the concepts of audio and video tools that hitherto existed as mutually exclusive media into a single entity that much more enriched for service delivery and cost effectiveness.

References


Abstract

Knowledge is recently observed by many as steadily supplanting the conventional agents of production; namely, land, labour and capital, and hence becoming the most important new corporate and competitive resource. Thus, it was once claimed that more United States workers produce and distribute knowledge than make physical goods. This shift requires that institutions and companies develop capacity in the capture, integration and use of expertise, know-how, and lessons learned during various forms of activities. Open and Distance Learning (ODL) institutions therefore have the challenge of managing the generation and cultivation of applicable knowledge to real-world situations since most distance students are professionals whose quest for knowledge is mainly aimed at enhancing their professional practice.

Whereas conventional educational institutions design and develop curricula and research projects mostly within the confines of explicit knowledge, open and distance learning institutions are rather more positioned to extend the frontiers of explicit knowledge into the domain of tacit knowledge.

The rapid spread of open educational resources on various eLearning platforms has initiated knowledge visibility issues which should be more strategically researched into for the purpose of enriching relevant educational experience through open and distance learning offerings. The paper therefore explores the features of the two major knowledge categories, namely explicit and tacit knowledge with proposals for the extraction and codification strategies of the latter for the purpose of making such visible and hence accessible as rich open educational resources (OER) for distance learners.

Tacit Knowledge versus Explicit Knowledge

Knowledge being broadly perceived as an intellectual asset has been categorised into two; namely, Explicit Knowledge and Tacit Knowledge.

The concept of tacit knowledge comes from scientist and philosopher Michael Polanyi whose one famous aphorism is: We know more than we can tell. By definition, tacit knowledge is knowledge that people carry in their minds and therefore, difficult to access. Often, people are not aware of the knowledge they possess or how it can be valuable to others. Tacit knowledge is considered more valuable because it provides context for people, places, ideas, and experiences. Effective transfer of tacit knowledge generally requires extensive personal contact and trust.

Tacit knowledge consists often of habits and culture that we do not recognise in ourselves. In the field of knowledge management, the concept of tacit knowledge refers to a knowledge embedded in human capital, which is only known by an individual and that is difficult to communicate to the
rest of an organisation. Precisely, tacit knowledge is rooted in how things are done; commonly shared in conversation rather than in written form.

On the other hand, knowledge that is easy to communicate is called explicit knowledge. The process of transforming tacit knowledge into explicit knowledge is known as codification or articulation. Explicit knowledge is the recorded knowledge, stored in books, manuals, databases, reports, libraries, policies and procedures. Explicit knowledge is easy to identify, capture and share.

With the above distinguishing features of tacit and explicit knowledge, a major focus of this paper is an exploration of the competitive advantage open and distance learning (ODL) institutions have to leverage their operational philosophy of flexibility and accessibility to exploit tacit knowledge environments inaccessible to traditional institutions. Every Open and Distance Learning (ODL) institution provides a very vast interactive platform of varied experiences of students, staff, consultants and partner institutions within which valuable and relevant expertise can be captured and made explicit to the larger society. An immediate example is the mature student clientele groups that constitute a good percentage of many ODL institutions' enrollments, whose tacit professional experiences and skills could be identified and articulated for institutional rich content visibility for other learners and institutions' staff.

Tacit Knowledge Visibility Implementation Strategies

Open Educational Resources (OER) have gained much advocacy within the few years of their introduction into the knowledge material delivery methodologies. The Logic model for OER is depicted below:

![Logic Model for OER](http://www.hewlett.org/programs/education/oer)

The terminology "Open Educational Resources" was adopted at UNESCO's 2002 Forum on the Impact of Open Courseware for Higher Education in Developing Countries funded by the William and Flora Hewlett Foundation, remains exclusive to the explicit knowledge domains. These (i.e. OER) are educational materials and resources offered freely and openly for anyone to use, and under open licenses to re-mix, improve and redistribute. The resources include:

**Learning Content:** These include full courses, course materials, modules, learning objects, and journals.

**Design and Development Tools:** These are software to support the creation, delivery and improvement of open learning content including the search and organisation of content, content and learning management systems, content development, and online learning communities.
Implementation Resources: These are intellectual property licenses to promote the open publishing of materials, design-principles, and localization of content.

A more precise definition of Open Educational Resources (OER) below is worth noting:

OER are teaching, learning and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use or re-purposing by others. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials or techniques used to support access to knowledge.

(http://www.hewlett.org/programs/education/oer)

Combining the above various definitive aspects of OER, it is crystal obvious that OER offer great avenues for visibility of tacit knowledge resources.

Conduits to some knowledge often lead to individual-like pathways to information that often lead to a database. Moreover, knowledge and information are distinct, while data or information does not carry the rich content of human interpretation. Most efforts today to make knowledge visible aim to get people socialize with other people and it is an accepted fact that the richest knowledge takes place through human dialogue.

The following are some models of the tacit knowledge strategic extraction and visibility implementation.

Specialised Short Course (SSC) Model

As a strategic model, tacit knowledge extraction could be done through a formal process of course development for well-packaged, short, specialized courses. In this model, a need assessment should be carried out towards the design of the knowledge areas that could serve some particular professional or practical training needs, among others. Identified experts in such related areas could be contacted to provide content based on proven experiences and practices. Then such thematic areas could be developed as codification focus areas for various tacit knowledge contents, and aggregates of common codified contents could be further developed into rich curricula for more advanced courses worth considering for inclusion in structured academic programmes in educational institutions.

A very close example that readily comes to mind is a rich resource book: Wisdom of the CEO – a collection of business experiences of twenty-nine global leaders that focus on pressing business challenges, edited by Dauphiné et al. (2000). From serious objective observations, the contents of such a book could pass for tacit knowledge resources prior to their collation for publication: as they were in-depth case studies of executive insight from various global business organisations that provide windows into successes of the selected companies. With open license agreements, various contributions of tacit best practices from these Chief Executive Officers (CEO) could be redesigned as open educational resources for students in business and management related courses.

Below is a proposed simple codification procedure for SSC model:
Figure 2.2 SSC Model Codification Procedure

The procedure above assumes a number of intermediate steps such as identification of individual candidate tacit knowledge experts. The “OR” flowchart symbol between the last two document boxes indicates the possibility of multi-disciplinary usability of the codified knowledge. The purpose of alternative content arises from the possibility of deploying another platform for the same content or resourcing a very similar tacit content worth articulating.

Case Study Learning Assessment (CSLA) Model

What is meant here is an institutional deliberate policy and arrangement to include as parts of distance student’s learning assessments-related topics that require students to interact with potential tacit knowledge human resources, to provide solutions or responses to such special assignments. Such assignment responses could be as codified or articulated case studies in specific knowledge areas to enrich the ODL institutional educational offerings.

A Codification Procedure for this model is suggested below:
A very peculiar learning support environment in ODL setting which is not structurally common to traditional institutions is the peer support among distance learners. Most distance students bring into their learning transactions very rich prior professional experiences that could be of immense benefits to other students. Some of these experiences could fall within tacit knowledge domains which could be institutionally harnessed and strategically made accessible to other learners.

A Codification Procedure for this model is suggested below:

- **Identify Tacit Knowledge**
- **Consult Tacit Solution Expert(s)**
- **Extract**
- **Collate Content**
- **Format Content**
- **Format Alternative content**
- **Articulate content for open access**
- **Articulate content for Multi-discipline open access**

Figure 2.3 CSLA Model Codification Procedure

Peer Support Facilitation (PSF) Model
Students' Projects Supervision (SPS) Model

Without sacrificing quality on the altar of flexibility and openness, ODL institutions stand to enrich their students' learning experiences by engaging some professionally qualified experts to supervise or co-supervise some students' projects. Subject areas that require expert inputs to ascertain results where such expertise is lacking among the institution's academic staff. Common examples are courses in financial or management areas. However, since the purpose is to partly extract relevant tacit knowledge from such arrangements, there is the need for a clear institution-designed template for such knowledge extraction in the course of the supervision. There must be an open policy and agreement between the institution and the potential supervisors to encourage freedom of contribution of relevant tacit contents that go beyond mere comments on students' works.

Suggested Codification Procedure for this model follows:
Technology enables experts to share both explicit and tacit information. Moreover, institutional intranets facilitate exchange through email, working plans and real-time communications, which could be properly managed to serve as good tools for extraction of tacit knowledge where appropriate. In recent times, social software has become interactive platforms a number of institutions are trying to explore for use to enhance educational interactions especially among distance learners, though with some reservations from most experts.

For this model, while a specific codification is not being proposed in this paper, however, social software technology offers great promise if well customised within an institution to provide visibility features for extraction of tacit knowledge.

Conclusion

According to Venkataraman and Henderson (Sloan Management Review, 1998), companies are becoming virtual in three main dimensions: in the experience offered to customers, in sourcing relationships of all kinds, and in building up expertise. Thus, ‘rather than focusing on doing a better job of capturing internal information and internally distributing it, companies with leading knowledge management strategies have identified an integrated approach through which tacit and explicit knowledge are combined with knowledge from other vendors, suppliers and customers’ (Dauphinais, G. et al, 2000). Adapting the above authors’ opinions to Open and Distance Learning institutions which are by their operations more inherently virtual than many organisations, there is the need to deploy a more integrated strategy to provide comprehensive...
knowledge of both tacit and explicit contents to enhance offerings to varied distance clientele groups.

Current models of conventional strategy and structure in most ODL institutions of providing only explicit knowledge peculiar to traditional institutions fail to meet the challenges of today’s knowledge society, and especially the visibility attribute of OER. Since ‘knowledge leverage is concerned with opportunities for leveraging diverse sources of expertise within and across organisational boundaries’, ODL institutions stand to gain more attractions as integrated knowledge hubs when there is an institutional culture that encourages and rewards sharing of both tacit and explicit knowledge.

References


http://en.wikipedia.org/wiki/Tacit_knowledge
http://www.hewlett.org/programs/education/oer
Abstract

The education policy of any nation dictates the direction in which the delivery of educational services in that particular country should be carried out. More importantly, it is the nation’s way of achieving the national goals. The document contains the main thrust of education input and output.

In Nigeria, education is seen as an instrument for promoting national development, which is premised on the philosophy of the nation. Over the years, issues bordering on access to education have been widely discussed with a view to enacting a workable policy. This has brought about the government’s desire for Open and Distance Learning (ODL) in the country to cater for those who desire to update their knowledge. The National Policy on Education (2004) recognises the value of open and distance learning, hence, it listed the objectives of distance learning in Nigeria, regarding alternative access to education, qualification and goals.

As laudable as the goals of open and distance learning is, evaluation of the implementation process reveals some gaps, which negates the goals and objectives of Open and Distance Learning (ODL). Thus the point needs to be made that the implementation of the policy must go beyond rhetoric in order to deliver enduring benefits to the nation.

This paper examines the implementation of the policy on open and distance learning in Nigeria in terms of stated objectives in view of the globalisation of Open and Distance Learning. It also considers questions that Education Planners and Policy Makers in Open and Distance Learning need to address.

In conclusion, the paper proposes systematic strategies that could be adopted to ensure better outcomes in the implementation of open and distance learning in Nigeria.

Key words: Policy, open and distance learning, education input, evaluation.

Résumé

La politique éducative d’un pays détermine le sens dans lequel s’effectue la prestation de services d’enseignement dans le pays en question. De manière plus importante, il détermine la manière dont le pays va réaliser ses objectifs nationaux. Ce document comporte la portée principale des efforts consentis et des résultats obtenus dans le domaine de l’éducation.


Bien que les visées de l’enseignement à distance soient louables, l’évaluation du processus de mise en œuvre révèle des insuffisances ; ce qui influe négativement sur les buts et objectifs de l’Enseignement à Distance. Aussi, il convient de préciser que la mise en œuvre de la politique doit dépasser la rhétorique pour que le pays puisse en bénéficier longtemps.

Ce papier se penche sur la mise en œuvre de la politique de l’enseignement à distance au Nigeria en termes d’objectifs définis au vu de la mondialisation de l’Enseignement à Distance. Il examine également les questions sur lesquelles doivent se pencher les responsables de la planification de l’éducation et les décideurs en matière d’enseignement à distance.

En conclusion, le papier suggère des stratégies systématiques qu’on pourrait adopter pour arriver à de meilleurs résultats dans la mise en œuvre de l’enseignement à distance au Nigeria.

Mots clés: politique, enseignement à distance, efforts consentis dans le domaine de l’éducation, évaluation.
Introduction

Education Policy in any nation gives the direction in which the delivery of educational services in that particular country should be carried out. More importantly, it is the way of achieving the national goal. The document contains the main thrust of educational input and output and provides direction to managers of educational businesses in the country.

All over the world, education continues to be an important tool for national development and wealth creation. Psacharopoulos (1995) asserted that education can contribute to economic development and raise income. This viewpoint is enunciated in the Nigeria National Policy on Education (2004).

It is therefore desirable that a country's educational goals are clearly spelt out in terms of its relevance to the needs of the citizenry. It is in this light that Marope (2005) acquiesced that education is crucial to national development and educated and trained population will contribute meaningfully to the socio-economic development of the country.

Nwadiani (1997) concurred that a good educational policy should be to meet the:

- demand of individuals and groups for their own development; and
- changing needs of the society or the political system.

In view of this assertion, the NPE (2004) stated that one of the objectives of education is to give equal access and opportunities to all citizens at different levels of education.

Over the years, issues bordering on access to education have been widely discussed with a view to enacting a workable policy. The increase in the numbers of those seeking access to education, especially into the higher institutions of learning, the formal sector has also given rise for alternative routes to education.

This development has brought about the government's desire for open and distance learning in Nigeria to address the problem of access to education.

The general perception about the importance of Open and Distance Learning was that it contributes meaningfully to the socio-economic transformation of the country. It is in view of this that Open and Distance Learning has been identified as a veritable tool for solving the problem of access to education so as to give equal opportunity to every citizen.

Nigeria is currently undergoing some form of reform in the educational sector with a view to making it available to all its citizens. Hence, Open and Distance Learning has been identified as an avenue of opportunity for those who are interested in acquiring basic education to update their knowledge.

Today, many are asking whether the ODL can improve access to education, ensure quality education, utilise Nigerian experts as teachers and importantly meet the needs of employers of labour.

Therefore, this presentation will attempt to carry out an ex-post facto analysis of the implementation of the policy on ODL in Nigeria in terms of achieving the stated objectives in line with the globalisation of ODL. Also recommendations shall be made for improvement in policy implementation.

ODL in Nigeria

Open and Distance Learning are two learning concepts that are similar in nature but are quite different in scope and functions.
Consequently, open learning on one hand is seen as totally open and flexible learning, which can be undertaken by anyone, anywhere at anytime and anyplace. Perraton, Robinson and Creed (2001) defined “Open Learning as an organised educational activity, based on the use of teaching materials, in which the constraint on study are minimised on terms of access, entry or time and place, pace, method of study or any combination of these.”

In other words, open learning is that aspect of learning that can be undertaken without the limitation of time and space. On the other hand, distance learning is the process of learning in which learners are at a distance from facilitators which also involves the use of prepared and packaged learning materials. Perraton (2001) see distance education as an educational process in which a significant proportion of the teaching is conducted by someone, far removed in space and or time from the learners.

This shows that learners are separated from facilitators in time and space, but are still able to be guided by the facilitators through supporting arrangements.

However, UNESCO (2002) sees open and distance learning as representing approaches that focus on opening access to education and training provisions freeing learners from the constraints of time and place, offering flexible learning opportunities to individuals and group of learners.

All these conceptualisations are in agreement with the thinking of NPE (2004). From the foregoing, it is clear that open and distance learning are for different modes of learning that suggests educational approaches designed to open access to learners in their places of abode, and work, for them to attain their educational desires and aspirations without attending formal lectures in a classroom setting.

Historically, distance learning started in Nigeria in the late 1940s through correspondence studies offered by some colleges and examination bodies in Great Britain. Although, it was not a popular mode of learning in Nigeria, but due to acute shortage in schools especially higher institutions of learning, the learning mode soon became an alternative to higher education.

As a matter of fact, Open and Distance Learning is cater for those who could not avail themselves of the opportunity to go to school but are still interested in acquisition of knowledge that would enable them contribute to the manpower needs of the nation for economic growth and development. Majority of these people are workers and courses offered included Business, Economics, Law and Accounting.

Later development brought some universities to offer open and distance learning and in essence, the creation of study centers in some major towns across Nigeria, while contact periods were fixed during the long vacation.

As a follow-up to this development and to improve the gains of the Open and Distance Learning, the National Open University was conceived and established initially on July 22, 1983, with a view to serving as spring board for Open Distance Learning in Nigeria.

Unfortunately, due to extraneous and pecuniary factors, the Federal Government of Nigeria at the time suspended further action on the establishment of National Open University.

In view of low access to higher education, it became imperative that the only alternative to solving the problem of access and equity is the resuscitation of the Open and Distance Learning. Therefore, on April 12, 2001, Open and Distance Learning was resuscitated with the official launching of the National Open University of Nigeria (NOUN).

Prior to the formalisation of NOUN, many universities in Nigeria started what is popularly known as “outreach” centers, where higher education was provided to people who were mainly employees of various organisations, but who could not leave their jobs to pursue higher education.
Therefore, in consonance with the NPE (2004), Open Distance Learning is aimed at increasing access to formal and non-formal education also to provide opportunities for professionals to update their knowledge. Further, to avail those who did not go to school but are still interested in acquiring basic education, the opportunity to achieve their aims.

In spite of being the largest higher education in Sub-Saharan Africa, comprising of thirty (30) Federal, thirty-two (32) state, twenty-four (24) private Universities, as well as ninety-four (94) Polytechnics and monotechnics and fifty (50) Colleges of Education, access rate to higher education remains very low. Tables 1 and 2 are details of applications and admission into higher education in Nigeria.

Table 1 Application and admission into Universities in Nigeria (2001-2005)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>APPLICATIONS</th>
<th>ADMISSIONS</th>
<th>ADMISSION AS % OF APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>749,419</td>
<td>90,769</td>
<td>12.12</td>
</tr>
<tr>
<td>2002</td>
<td>994,380</td>
<td>51,845</td>
<td>5.22</td>
</tr>
<tr>
<td>2003</td>
<td>1,046,950</td>
<td>105,157</td>
<td>10.05</td>
</tr>
<tr>
<td>2004</td>
<td>841,878</td>
<td>122,492</td>
<td>14.55</td>
</tr>
<tr>
<td>2005</td>
<td>916,371</td>
<td>65,609</td>
<td>7.16</td>
</tr>
</tbody>
</table>

Source: Statistics of Education in Nigeria 1999-2005

Table 2 Enrolment into higher education in Nigeria

<table>
<thead>
<tr>
<th>YEAR</th>
<th>UNIVERSITY</th>
<th>POLYTECHNICS</th>
<th>COLLEGES OF EDUCATION</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>90,769</td>
<td>190,565</td>
<td>144,163</td>
<td>425,497</td>
</tr>
<tr>
<td>2002</td>
<td>51,845</td>
<td>302,820</td>
<td>238,442</td>
<td>593,107</td>
</tr>
<tr>
<td>2003</td>
<td>105,157</td>
<td>247,028</td>
<td>306,274</td>
<td>658,459</td>
</tr>
<tr>
<td>2004</td>
<td>122,492</td>
<td>330,971</td>
<td>337,206</td>
<td>790,669</td>
</tr>
<tr>
<td>2005</td>
<td>65,609</td>
<td>332,444</td>
<td>351,255</td>
<td>749,308</td>
</tr>
</tbody>
</table>

Source: (1) FME, Statistics of Education in Nigeria 1999-2001
(2) Author's calculation

From tables 1 and 2 in spite of the increase in the number of students that gain admission to higher education, the percentage of access to higher education is still low.

In this light, many countries have come to recognize open and distance learning as a veritable tool for providing alternative route to education, as an instrument for economic development.

Goals of Open and Distance Learning and Policy Implementation

In education, policy implementation is the translation of stated goals and aspirations into actions or achievements, taking cognizance all activities that are geared towards achievement of the objectives.

According to NPE (2004:45), the goals of open and distance education shall be to:

- provide access to quality education and equity;
- meet special needs of employers by mounting special certificate courses for their employees at their work place;
- encourage internationalisation especially of tertiary education curricular;
- ameliorate the effect of internal and external brain drain in tertiary institutions by utilising Nigerian experts as teachers regardless of their locations or places of work.
To achieve the objectives, the policy states that:

Open and Distance Learning (ODL) shall be made equivalent in structure and status to those offered in the regular higher institutions of learning; there is need in creating an awareness and appreciation of the importance of ODL and collaboration at all levels of governance; there is need to encourage private initiatives in the provision of ODL and strengthen the capacity of institutions providing ODL in the country.

However, it has been observed that the major problem confronting developing countries is policy implementation. This has reflected in the haphazard manner at which education policies and laws are implemented. Nwadiani (1997) asserted that policy implementation has been a neglected area and there is a wide gap between policy formulation and implementation.

Osindeinde (2004) observed that the aim of an educational policy is to give direction to managers in the system. In other words, the policy dictates the manner at which education business should be administered in the country.

Van Horn and Van Meter (1975) identified six factors which are germane to policy implementation. These are:

- Standards and objectives
- Resources
- Intergovernmental communication and enforcement
- Characteristics of implementing agencies
- Economic, social and political conditions
- Disposition of implementers.

**Figure I – Policy Implementation Model**

Figure I depicts a policy implementation model. Each sector (PIT, PF, PI, and PF) inter-relates with one another. This is depicted by the double arrowhead, which connotes that at each level of the policy model, there is the need for evaluation and assessment of the intended outcomes. This is explained as follows:
- Policy Ideas and Thoughts (PIT) – includes, thoughts, ideas, philosophy and other considerations based on the objectives, visions, goals of the project;
- Policy Formulation – translation of ideas, goals and intended outcomes achievable targets and format;
- Policy Implementation – turning the ideas into measurable format through the involvement of various interfaces including economic and political disposition of the implementers.
- Policy Evaluation – this is to gauge the performance of the project, the final stage of the project.

Empirical studies have shown that ODL is highly effective considering the purpose for which it was created within the policy framework (Terhemba Non Ambe-Uva 2007, Aderinoye and Ojekheta, 2003).

It is known fact that many stakeholders are interested in ODL mainly because it opens up access to higher education. Such access has brought succour to parents and students who have waited endlessly for higher education admission and employees whose job schedules made it impossible for them to update their knowledge.

However, lofty the policy on ODL might be, it is fraught with partial or non-implementation of the policy. This is attributable to the various unexpected factors that have come into play in the process of implementation. These factors have posed some challenges for ODL in Nigeria. These are in the following areas:

- Capacity building of existing institutions providing distance education;
- Collaboration with education regulatory bodies and institutions offering open and distance learning;
- Establishment of an open and distance learning advisory body;
- Meeting the needs of employers of labour by mounting courses at the workplace.

Craig (1990) opines that lack of due attention to policy implementation is regrettable. It is in this light that Psacharopolous (1990) identified three variables that negates policy implementation. There are:

- Non-implementation of the intended policy;
- Failure of the policy to achieve intended end and
- Failure of the policy to have intended effect.

From the foregoing, it suffices to say that policies are made without effective implementation.

Policy implementation issues in Open and Distance Learning in Nigeria

Open and Distance Learning (ODL) like in many other nations of the world is not peculiar to Nigeria. Hence, there is the need for a more concerted effort regarding policy implementation especially in ODL.

Issues in implementation processes in ODL in Nigeria discussed below:

Capacity Building of Existing Institutions for ODL

It should be noted that adequate capacity building is non-negotiable for effective implementation of open and distance learning. Manpower needed for the project must be engaged in the right quantity.
Table 3 Distribution of Students’ Counsellors by Qualification

<table>
<thead>
<tr>
<th>Geo-Political Zone</th>
<th>Ph.D and Above</th>
<th>Below Ph.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW</td>
<td>04</td>
<td>06</td>
</tr>
<tr>
<td>SE</td>
<td>02</td>
<td>03</td>
</tr>
<tr>
<td>SS</td>
<td>01</td>
<td>03</td>
</tr>
<tr>
<td>NN</td>
<td>01</td>
<td>03</td>
</tr>
<tr>
<td>NE</td>
<td>-</td>
<td>07</td>
</tr>
<tr>
<td>NC</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>TOTAL</td>
<td>08</td>
<td>025</td>
</tr>
</tbody>
</table>

Source: NOUN, Students Handbook

Table 3 shows the distribution of the students counsellors for the National Open University of Nigeria. The table reveals a dearth of required manpower. This is compounded by the minimum qualification for lectureship in the conventional universities. This contradicts the intention of the NPE (2004) on open and distance learning to ameliorate the effect of brain drain by utilising qualified Nigerians.

Collaboration with Education Regulatory Institutions

For an effective implementation of the policy in ODL in Nigeria coupled with the size of the country, there is need for more robust and holistic collaboration. It has been observed that there is little or no collaboration between providers of ODL in Nigeria with regulatory bodies such as National Universities Commission, National Board for Technical Education (NBTE), National Commission for Colleges of Education (NCCE) and Universal Basic Education Commission (UBEC). Absence of this no doubt has impacted negatively on the recognition accorded ODL by stakeholders in the education sector.

Establishment of a Regulatory Body for Open and Distance Education

From every indication, there is no regulatory body to streamline the activities of ODL providers, especially the quality of courses being offered. The present arrangement regards most of the institutions offering ODL as parastatal or an agency of the Federal Ministry of Education. No doubt, they will be subjected to the dictates of the supervisory ministry or agency. In other words, the implementation of the policy to make ODL equivalent in structure and status to those offered in the conventional schools is unrealisable.

The NPE (2004) stipulates the establishment of an advisory body for ODL. This is yet to be established.

Meeting the needs of Employers of Labour

In spite of the opportunity of having ODL, employers of labour are yet to grasp the benefits offered by ODL. There is an observable apathy on the part of employers of labour towards distance education. Many employees are covertly denied opportunities to take up courses through ODL. The unsavoury effect is that workers are reluctant to sacrifice their jobs for enhancement of their knowledge. Empirical studies expressed by the participants at ODL that their jobs cannot allow them to go back to school on full-time basis, while some expressed failure in getting study leave from their employers. The alternative effect is the reluctance of any employee to leave his job for further studies.

Creation of Awareness for Open and Distance Learning

National Policy on Education (2004) states “awareness would be created among media houses, ICT providers and other relevant bodies in enhancing ODL in Nigeria.” However, observations
reveal that a wide gap exist in this regard. The level of awareness for ODL leaves much to be desired especially the public acceptability of the certificates issued.

Many people are of the opinion that certificates issued by institutions offering ODL are sub-standard and its products cannot compare favourably with their counterparts from the conventional universities. UNESCO (2002) rightly observed that this was due to the lack of government intervention, which emanated from the negative attitudes to distance education.

All these issues have impacted on the implementation of the policy on Open and Distance Learning in Nigeria to the extent that there is a need for the reshaping and re-focusing of the policy on distance and open education in view of the failure of the conventional universities to absorb qualified candidates and the desire to achieve the Vision 2020 of the Federal government.

Recommendations

From a policy evaluation perspective, there is the need to redress the issues and challenges that have impacted on the effective implementation of the policy on open and distance learning in Nigeria. The dire consequences of policy somersaults may render Open and Distance Learning in Nigeria ineffective and incapable of addressing issues of access, equity in educational opportunities, acceptability and capacity building.

Therefore, the following recommendations are made with a view to achieving the intended purposes of ODL.

1. Adequate and qualified personnel is germane to the success of the policy. Also, ODL should be expanded to include basic, secondary and technical education levels. This no doubt will be a boost to realising the goals of education as enunciated in the vision 2020 policy. Government at the various levels should use ODL to improve access to education.

2. The existing capacity of ODL should be expanded to provide quality education capable of competing with the conventional education systems. This will make the output from the system to contribute meaningfully to economic development of the country.

3. Concerted efforts must be made by providers of open and distance education to collaborate with the various regulatory bodies to ensure acceptability of the certificates issued from this system of education. Bilateral agreements should also be established or signed with relevant international agencies and organisations.

4. The Federal Government of Nigeria should establish a Commission for Open and Distance Education to be gazetted with a virile policy on the provision of ODL by the various institutions.

5. ODL in Nigeria should be made more affordable and effective policy feedback should be built into the system with a view to getting the best practices.

6. Institutions offering ODL should mount courses that would meet the needs of employers especially courses that would encourage entrepreneurship, thereby improving the economic development of the country.

7. There is an urgent need to create awareness. This will improve the perception of the public on the acceptability of ODL and the certificates issued.

Conclusion

In this paper, we explained the development of ODL in Nigeria. We drew attention to the goals of ODL and the concept of policy implementation. The paper also discussed issues and challenges to ODL in Nigeria and made some recommendations. It should, however, be noted
that for ODL to have its place as embedded in the policies of governments, agencies and institutions providing ODL must collaborate in order to address problems of access to education which is germane to both the economic and social development of the country. Further, ODL institutions still need to improve on their services by providing quality education comparable to what is given by conventional education.

Needless to conclude that effective implementation of policy is pivotal to achieving intended goals for ODL.

References


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Nwadiani, Mon (1996). Education in Foreign Countries: Lessons for Policy Planning and Practice, Benin City, Monose Amalgamates.


BARRIERS TO THE USE OF INFORMATION COMMUNICATION TECHNOLOGIES (ICTS) AMONG DISTANCE LEARNERS: A CASE STUDY OF NIGERIA

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Abstract

The use of ICT to bridge the communication gap between teacher and learner has been identified as a major characteristic of Open and Distance Learning (ODL). In many developing countries, including Nigeria, several barriers prevent OD learners from maximizing the potentials of ICTs to enhance their learning. This study seeks to identify these barriers and consequently, strategies to overcome them within the Nigerian context. Subjects of the research are OD learners in three selected distance learning institutions in Nigeria. Responses from administered questionnaires and interviews constitute the data which were analysed using appropriate statistical instruments. The findings of this study form part of an ongoing regional research on the use of ICTs by distance learners.

Keywords: ICT, ODL, barriers, OD learners, communication.

Introduction

The use of ICTs to bridge the communication gap between teacher and learner has been identified as one of the most significant features of Open and Distance Learning (ODL) delivery systems. The ICTs which are used for learning can be viewed as a continuum from low end to high end technologies and they include the following: radio, television, audio, video, telephone, computer, Internet, mobile telephony, videoconferencing, and teleconferencing. The digital divide between many developing countries, Nigeria inclusive, and the rest of the world constitutes the background to identifying the several barriers which prevent ODL learners from maximizing the potentials of ICTs to enhance their learning.

The digital divide between developing and developed countries in the use of ICTs is evidenced by the statistics showing the number of Internet users. Africa at 3.4% compared with 41.2% for Asia, 24.6% for Europe, and 15.7% for North America. The rate of penetration also follows a similar trend as Africa has the lowest penetration of 5.6% compared with the highest at 74.4% in North America. In contrast however, Africa has the second highest growth rate in the number of users with 1,100% as shown in table 1:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>975,330,899</td>
<td>4,514,400</td>
<td>54,171,500</td>
<td>5.6 %</td>
<td>1,100.0 %</td>
<td>3.4 %</td>
</tr>
<tr>
<td>Asia</td>
<td>3,780,819,792</td>
<td>114,304,000</td>
<td>657,170,816</td>
<td>17.4 %</td>
<td>474.9 %</td>
<td>41.2 %</td>
</tr>
<tr>
<td>Europe</td>
<td>803,903,540</td>
<td>105,096,093</td>
<td>393,373,398</td>
<td>48.9 %</td>
<td>274.3 %</td>
<td>24.6 %</td>
</tr>
</tbody>
</table>
This study examines and identifies these barriers as well as strategies to overcome them within the Nigerian context. With a population of over 140,000,000, Nigeria is reported to have had about only 200,000 Internet users in 2000 but now currently has over 10,000,000 users. In relation to the rest of Africa, Nigeria has the second largest number of Internet users (10,000,000) following Egypt (Internet World Statistics, 2008) and represents 18.5% of Internet users in Africa. The phenomenal growth of Internet users over a short period illustrates the potential of ICTs in Nigeria. The story of growth in the use of ICTs like mobile telephony is even more phenomenal. From less than 1,000,000 fixed and mobile lines in 1999 to 25,000,000 lines in circulation in 2006 since inception in 2001, and a projected growth rate of 25% per annum, mobile telephony has the potential of not only closing the developmental gap (2006:1), but also for providing access to learning for development. With teledensity ratios that stood at 1:165 at inception, present growth rates for 2006 estimated at 1:10. There has also been appreciable growth in the spread and rural penetration of mobile telephony with 58% coverage of the population (World Bank 2006). This wide margin is unrelated to the fact that it costs five times more to access the Internet compared to the mobile phone. In a comprehensive report on mobile telephony in Nigeria (2006) this ICT tool has proven to be successful and sustainable among the rural Nigerian population. However, according to the report, low levels of education and illiteracy reinforced by poverty are among factors limiting access to ICT infrastructure in developing countries and especially among women (2006:24). Also, while the above shows an appreciable growth for Nigeria in comparison with Africa, the pace is relatively slow in comparison with the rest of the world.

One of the major catalysts that have been identified to address barriers to the use of ICTs is a national policy on ICT. A National Information Technology (IT) policy was approved for Nigeria in 2001. The National Information Technology Development Agency (NITDA) and the Nigerian National ICT for Development (ICT4D) Strategic Action Plan committee were also established to drive the implementation of the policy. Encouraging the use of ICTs in education is one of the objectives of the policy. One of the objectives of a ten-year plan for rejuvenating open and distance learning in Nigeria was to enhance technological literacy (Jegede, 2008). The digital divide remains a major threat to achieving education through ODL because ICTs increase access to learning as well as enable learning in formal and non-formal environments (Jegede, 2008; Khan, 2008). This study is a survey on how much has been achieved in encouraging the use of ICTs through ODL, and the barriers that militate against achieving this objective. It will also bring to the fore other ‘non-traditional’ barriers which are often not mentioned in literature on use of ICTs, particularly as it affects distance learning.

<table>
<thead>
<tr>
<th>Region</th>
<th>Population (2009)</th>
<th>Internet Users</th>
<th>Internet Penetration Rate</th>
<th>Growth Rate (%)</th>
<th>World Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle East</td>
<td>196,767,614</td>
<td>45,861,346</td>
<td>23.3 %</td>
<td>1296.2 %</td>
<td>2.9 %</td>
</tr>
<tr>
<td>North America</td>
<td>337,572,949</td>
<td>251,290,489</td>
<td>74.4 %</td>
<td>132.5 %</td>
<td>15.7 %</td>
</tr>
<tr>
<td>Latin America/Caribbean</td>
<td>581,249,892</td>
<td>173,619,140</td>
<td>29.9 %</td>
<td>860.9 %</td>
<td>10.9 %</td>
</tr>
<tr>
<td>Oceania / Australia</td>
<td>34,384,384</td>
<td>20,783,419</td>
<td>60.4 %</td>
<td>172.7 %</td>
<td>1.3 %</td>
</tr>
<tr>
<td>WORLD TOTAL</td>
<td>6,710,029,070</td>
<td>1,596,270,108</td>
<td>23.8 %</td>
<td>342.2 %</td>
<td>100.0 %</td>
</tr>
</tbody>
</table>

Source: Internet World Statistics (2008)


**Literature Review**

John Daniel (2006) highlights two main advantages Africa has over industrialized countries in exploiting the use of ICTs for education and which also serve as opportunities to bridge the digital divide. They are “its ability to provide higher quality learning to increasing numbers at lower costs..." and “the habit of leapfrogging into new technologies”. The actualization of these opportunities is however determined by the ability to overcome identified barriers. The amount of available information on barriers to the use of ICTs varies from country to country (COL 2000, COL 2002, Thorpe 2005, PHEA 2007). In higher education where the use of ICT is currently being introduced, the problems are similar across the continent. ICT infrastructure is still being developed in Africa but has also experienced significant growth over the last decade. In East Africa, higher education institutions in Kenya and Tanzania for example, are introducing distance learning programmes to meet the increased need for access and lifelong learning. Distance education is being offered by Open University of Tanzania and African Virtual University from its Kenyan headquarters. However, the use of ICT to facilitate learning is restricted by various problems including weak ICT infrastructure particularly in rural areas, availability of electricity, computer illiteracy, access to computers outside university campuses, and high capital costs of implementing e-learning programmes (PHEA 2007). South Africa has a similar experience with the rest of Africa with regard to the need for increased access which is one of the main reasons distance education remains an attractive option. At the same time and in contrast to the rest of the continent, South Africa has had a relatively longer history in the use of distance education and in varying degrees across institutions, the use of ICTs in higher education. Even though ICTs have been an integral part of South African’s higher education for longer than in other African countries, the literature suggests that access is more provided through the use of ICTs in the same ways as is done in developed countries (PHEA 2007). The challenges include adequate deployment of infrastructure, skills access. Even so, South Africa is ahead of the rest of Africa in the types of ICTs it is currently exploring such as open source software, m-learning resources.

Research on the use of ICTs in distance education in the Nigerian context is relatively new and limited for the simple reason that ICT in distance education in the country is a relatively recent phenomenon. In three separate workshops organized by COL on the use of ICTs in Commonwealth countries, Nigeria did not feature as one of the countries (2000, 2002, 2003). A brief country report is provided below as a background for the present study.

**Brief Country Report**

Nigeria, the most populous country in Africa, is located in West Africa between two francophone countries, Benin and Cameroon. Nigeria has a population of 140,003,542 (2006); 51.2% are male and 48.8% are female. The population is distributed between rural and urban as 51.7% and 48.3% respectively while 42.3% are under the age of 15. 68% of the population is literate with higher rates for males 75.7% than for females 60.6%.

The government provides free education at the primary level. Secondary school attendance rate is only 29% (32% for males and 27% for females). The number of tertiary institutions has multiplied significantly over 100 higher education institutions. However, the proliferation has not solved the problem of access as less than 20% of eligible candidates gain placements into these institutions yearly. Gross primary, secondary and tertiary enrollment is 56% of the population (World Bank, 2006). Distance education in Nigeria dates back to early 1960s when it was in the form of correspondence education. Today, there are a number of dual mode institutions that includes Distance Learning Institute (DLI) of the University of Lagos. Although the institute started producing its course materials in print format, it currently runs face to face lectures for students for specified periods in the year. Others are Centre for Distance Learning and Continuing Education (CDLCE) of the University of Abuja; Distance Learning Centre (DLC) of University of Ibadan; and Distance Learning Centre of the Obafemi Awolowo University. The National Teachers’ Institute (NTI) is a single mode institution which was established to provide training and upgrading for primary and secondary...
school teachers. The institute produces course materials in print format and plans to broadcast them via the radio as well.

The National Open University of Nigeria (NOUN), which was established in 2002 to resolve the problem of access to higher education in the country, is the only single mode distance education tertiary institution in West Africa. Although its course materials have print as the basic format, they are also being produced in other digital formats including CDs, web-based, and audio formats. Key aspects of its operations have been digitalized such as admissions, registration, and information dissemination. The university also plans to digitalize the administration of its examinations.

Nigeria is classified as an emerging market and one of the fastest growing telecommunications markets in the world with a concentration of major players like MTN, Glo, Zain, Etisalat and Vodafone. The telecommunications industry has witnessed phenomenal growth over the last decade. The growth is evidenced by an increase in fixed and mobile lines in 1999 to 25,000,000 lines in 2006 since inception in 2001, and a projected growth rate of 25% per annum. There has also been appreciable growth in rural penetration of mobile telephony from 38% coverage in 2000 to 58% in 2006 (World Bank 2006). On the average, mobile telephony has overtaken use of the Internet with 6.75 users per 100 people (ITU, 2007). This wide margin is not unrelated to the fact that it costs five times more to access the Internet compared to the mobile phone. Access to computers is dismally low and has not increased significantly with 0.8 users per 100 people (ITU, 2007). Older ICTs like the television are available only to 32% of the population (World Bank 2006). Table 2 shows statistics for ICT use in comparison to average statistics for Sub-Saharan Africa:

<table>
<thead>
<tr>
<th>ICT</th>
<th>Indicator</th>
<th>Nigeria 2000</th>
<th>Nigeria 2007</th>
<th>Sub-Saharan Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Phone lines</td>
<td>Number of users per 100</td>
<td>0.4</td>
<td>1.07</td>
<td>1.0</td>
</tr>
<tr>
<td>Mobile telephony</td>
<td>Number of subscribers per 100</td>
<td>0.0</td>
<td>27.8</td>
<td>13.5</td>
</tr>
<tr>
<td>Internet</td>
<td>Number of users per 100</td>
<td>0.1</td>
<td>6.75</td>
<td>3.8</td>
</tr>
<tr>
<td>Computer</td>
<td>PCs per 100</td>
<td>0.6</td>
<td>0.8</td>
<td>1.8</td>
</tr>
<tr>
<td>Television</td>
<td>% of Households with television</td>
<td>26</td>
<td>32</td>
<td>14</td>
</tr>
</tbody>
</table>


As mentioned earlier, Nigeria has an IT policy that aligns with the use of ICTs in education as one of its objectives. In this regard, individual institutions are engaging in partnerships to improve their ICT infrastructural base. For example, several universities receive support in this regard, from the Partnership for Higher Education in Africa initiative funded by seven major foundations in the United States. Other institutions, like the University of Lagos, have received support from major telecommunication service providers like MTN in providing networked computer laboratories for students.

Access to ICTs remains a major challenge to the growth of distance education in the country as it is solely dependent on the efforts of government to provide infrastructure. Available research often cite what has now come to be known as traditional problems or barriers to the integration of ICTs which are namely, erratic power supply, inadequate provision and very high cost of ICT infrastructure, and low ICT and Internet access among the population (2007:82). The objectives of this study are to identify the barriers affecting learners within the context of distance education in Nigeria, their coping strategies, and suggest strategies to overcome them.
Methodology
The subjects for the research were selected from among learners in three Open and Distance learning institutions in Nigeria. The institutions comprising 2 single, and 1 dual mode respectively are (1) National Open University of Nigeria (NOUN), (2) The National Teachers' Institute (NTI), and (3) Distance learning Institute (DLI), University of Lagos. A total sample size of 215 distance learners from a total population size of about 66,000 learners was selected using random sampling.

The survey research method was used for the study. The main research tool used was a structured questionnaire which was administered on the subjects of the study. The questionnaire comprised three sections, A: respondent's profile; B: access to ICTs; and C: open ended questions. Responses from the administered questionnaires were subjected to analysis using simple percentage distribution to determine the most accessible ICTs, factors affecting access, learners' needs to facilitate access, the extent to which distance education has motivated the use of ICTs among its learners.

Data Interpretation and Analysis
The data was analyzed and the results are presented in tables 3 – 9. Questions 1- 8 of the questionnaire elicited responses on the profile of respondents. Their responses are tabulated in table 3 below:

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 20 years</td>
<td>10</td>
<td>4.7</td>
</tr>
<tr>
<td>20 – 29 years</td>
<td>60</td>
<td>29.3</td>
</tr>
<tr>
<td>30-39</td>
<td>79</td>
<td>36.7</td>
</tr>
<tr>
<td>40-49</td>
<td>54</td>
<td>25.1</td>
</tr>
<tr>
<td>50 and above</td>
<td>6</td>
<td>2.8</td>
</tr>
<tr>
<td>Null</td>
<td>6</td>
<td>2.8</td>
</tr>
<tr>
<td>Total</td>
<td>215</td>
<td>100</td>
</tr>
<tr>
<td>Gender</td>
<td>Frequency</td>
<td>%</td>
</tr>
<tr>
<td>Male</td>
<td>118</td>
<td>54.9</td>
</tr>
<tr>
<td>Female</td>
<td>97</td>
<td>45.1</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>96</td>
<td>44.7</td>
</tr>
<tr>
<td>Married</td>
<td>84</td>
<td>39.1</td>
</tr>
<tr>
<td>Divorced</td>
<td>35</td>
<td>16.3</td>
</tr>
<tr>
<td>Highest educational Qualification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary School leaving Certificate</td>
<td>38</td>
<td>17.7</td>
</tr>
<tr>
<td>Diploma</td>
<td>55</td>
<td>25.6</td>
</tr>
<tr>
<td>First Degree</td>
<td>72</td>
<td>33.5</td>
</tr>
<tr>
<td>Postgraduate, Masters</td>
<td>16</td>
<td>7.4</td>
</tr>
<tr>
<td>Other</td>
<td>34</td>
<td>15.8</td>
</tr>
<tr>
<td>Occupational Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>115</td>
<td>53.5</td>
</tr>
<tr>
<td>Self Employed</td>
<td>20</td>
<td>9.3</td>
</tr>
<tr>
<td>Employer</td>
<td>49</td>
<td>22.8</td>
</tr>
<tr>
<td>Student</td>
<td>8</td>
<td>3.7</td>
</tr>
<tr>
<td>Other</td>
<td>23</td>
<td>10.7</td>
</tr>
</tbody>
</table>

In table 3, the highest percentage of respondents, 36.7% are in the 30-49 years range followed by 29.3% in the 20 –29 years age range, and 25.1% in 40-49 years range. 54.9% of the respondents were male and 45.1% were female; 44.7% single and 39.1% are married. Respondents with a first degree as their highest qualification have the highest percentage of 33.5%, followed by 25.6% with diploma, and 17.7% with secondary school leaving certificate. A greater majority are employed 53.5% followed by 22.8% who are employers, and 9.3% who are self-employed.
Question 9 sought to know the kinds of facilities including ICT enabling facilities that are available in the respondents’ area of residence. Responses are shown in Table 4.

Table 4: ICT facilities available in respondents' area of residence

<table>
<thead>
<tr>
<th>ICT Facilities</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>152</td>
<td>70.7</td>
</tr>
<tr>
<td>Mobile phone connectivity</td>
<td>123</td>
<td>57.2</td>
</tr>
<tr>
<td>Radio service</td>
<td>112</td>
<td>52.1</td>
</tr>
<tr>
<td>Television service</td>
<td>117</td>
<td>54.4</td>
</tr>
</tbody>
</table>

Survey: 2008

Table 4 shows the ICT profile of respondents’ area of residence. All respondents indicated the availability of one or all four ICT related facilities, 70.7% claim they have electricity, 57.2% have mobile connectivity, 52.1% have radio service, and 54.4% have television service.

Section B of the questionnaire elicits responses on the ICT profile of respondents and their institutions. Respondents were asked to tick as many of the options that were available. Table 5 shows the responses to question 10 on ICTs that are available or used by their respective institutions.

Table 5: ICT facilities available at Respondents' institution

<table>
<thead>
<tr>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radio</td>
<td>80</td>
</tr>
<tr>
<td>Television</td>
<td>66</td>
</tr>
<tr>
<td>Telephone</td>
<td>64</td>
</tr>
<tr>
<td>Email</td>
<td>57</td>
</tr>
<tr>
<td>Video conferencing</td>
<td>16</td>
</tr>
<tr>
<td>Internet</td>
<td>65</td>
</tr>
<tr>
<td>Audio conferencing</td>
<td>9</td>
</tr>
<tr>
<td>Online learning</td>
<td>20</td>
</tr>
<tr>
<td>Web access</td>
<td>19</td>
</tr>
<tr>
<td>Fax</td>
<td>20</td>
</tr>
<tr>
<td>Sms/text messaging</td>
<td>28</td>
</tr>
<tr>
<td>Other</td>
<td>15</td>
</tr>
</tbody>
</table>

Survey: 2008

Respondents claim that the following ICT services are available at their institutions: Radio 37.2%, Internet 30.2%, television 30.7%, telephone 29.8%, email 26.5%, and text messaging 13%. Other ICT services indicated include fax, online learning, web access, video conferencing, and audio conferencing.

In question 11, respondents were about the channels they use to access information from their institution. Table 6 shows their responses:

Table 6: ICTs used to access Information

<table>
<thead>
<tr>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print</td>
<td>131</td>
</tr>
<tr>
<td>Radio</td>
<td>28</td>
</tr>
<tr>
<td>Television</td>
<td>14</td>
</tr>
<tr>
<td>Telephone</td>
<td>37</td>
</tr>
<tr>
<td>Email</td>
<td>22</td>
</tr>
<tr>
<td>Internet</td>
<td>47</td>
</tr>
<tr>
<td>Teleconferencing</td>
<td>8</td>
</tr>
<tr>
<td>Online learning</td>
<td>10</td>
</tr>
<tr>
<td>Web access</td>
<td>14</td>
</tr>
<tr>
<td>Fax</td>
<td>8</td>
</tr>
<tr>
<td>Sms/text messaging</td>
<td>26</td>
</tr>
<tr>
<td>Other</td>
<td>13</td>
</tr>
</tbody>
</table>

Survey: 2008
In table 6, respondents identify the following ICT services they use to access information from their institutions: Print 60.9%, Internet 21.9%, telephone 17.2%, radio 13%, text messaging 12.1%, and email 10.2%. Other ICT services used include web access, television, online learning, teleconferencing, and fax.

Respondents were asked in question 12 about how they receive instructional learning from their institution. The result of their responses is shown in table 7.

Table 7: ICTs used to access Instructional learning

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print</td>
<td>130</td>
<td>60.5</td>
</tr>
<tr>
<td>Radio</td>
<td>28</td>
<td>13</td>
</tr>
<tr>
<td>Television</td>
<td>14</td>
<td>6.5</td>
</tr>
<tr>
<td>Email</td>
<td>22</td>
<td>10.2</td>
</tr>
<tr>
<td>Video conferencing</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Teleconferencing</td>
<td>8</td>
<td>3.7</td>
</tr>
<tr>
<td>Online learning</td>
<td>10</td>
<td>4.7</td>
</tr>
<tr>
<td>Text messaging</td>
<td>18</td>
<td>8.4</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Survey: 2008

In table 7, respondents identified print materials as the most accessible means of instructional learning with 60.5%; and are followed by radio and email at 13% and 10.2%, respectively. Other ICTs indicated are text messaging, television, online learning, and teleconferencing.

In question 13, respondents were asked why they did not have access or regularly use the other ICTs they did not select. Their responses are shown in table 8.

Table 8: Lack of access and regular use of ICTs

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial constraints</td>
<td>68</td>
<td>31.6</td>
</tr>
<tr>
<td>Equipment</td>
<td>77</td>
<td>35.8</td>
</tr>
<tr>
<td>Electricity</td>
<td>56</td>
<td>26</td>
</tr>
<tr>
<td>Internet</td>
<td>43</td>
<td>20</td>
</tr>
<tr>
<td>Communication network</td>
<td>41</td>
<td>19</td>
</tr>
<tr>
<td>Technical support</td>
<td>36</td>
<td>16.7</td>
</tr>
<tr>
<td>Technical infrastructure</td>
<td>33</td>
<td>15.4</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>3.7</td>
</tr>
</tbody>
</table>

Survey: 2008

In table 8, 35.8% of respondents identify lack of access to ICT equipment as the most critical factor, followed by financial constraints with 31.6%, lack of access to electricity with 26%, lack of communication network with 19%, lack of access to the Internet with 20%, lack of technical support with 16.7%, lack of technical infrastructure with 15.4%.

Respondents were asked in questions 14 a-d to identify the degree to which socio-cultural, socio-economic, and environmental factors hinder their use of ICT for learning at a distance. Table 8 shows their responses.
<table>
<thead>
<tr>
<th>Socio-cultural factors</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequenc y</td>
<td>%</td>
<td>Freque ncy</td>
<td>%</td>
</tr>
<tr>
<td>I have heavy domestic chores, I don’t have time</td>
<td>16</td>
<td>7.4</td>
<td>51</td>
<td>23.7</td>
</tr>
<tr>
<td>My husband or father discourages me</td>
<td>3</td>
<td>1.4</td>
<td>7</td>
<td>3.3</td>
</tr>
<tr>
<td>My religion does not encourage learning skills like ICT</td>
<td>6</td>
<td>2.8</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>I have heavy marital obligations</td>
<td>10</td>
<td>4.7</td>
<td>28</td>
<td>13</td>
</tr>
<tr>
<td>I am busy looking after my children</td>
<td>5</td>
<td>2.3</td>
<td>20</td>
<td>9.3</td>
</tr>
<tr>
<td>I am discouraged by incessant arrests by security operators</td>
<td>9</td>
<td>4.2</td>
<td>19</td>
<td>8.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Socio-economic factors</th>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequenc y</td>
<td>%</td>
<td>Freque ncy</td>
<td>%</td>
<td>Frequenc y</td>
</tr>
<tr>
<td>I am not able to pay for the cost of the programme/course</td>
<td>29</td>
<td>13.5</td>
<td>48</td>
<td>22.3</td>
<td>99</td>
</tr>
<tr>
<td>I cannot afford the cost of using the Internet</td>
<td>34</td>
<td>15.8</td>
<td>53</td>
<td>24.7</td>
<td>89</td>
</tr>
<tr>
<td>I cannot afford to buy a personal computer</td>
<td>37</td>
<td>17.2</td>
<td>67</td>
<td>31</td>
<td>73</td>
</tr>
<tr>
<td>I cannot afford to buy a mobile phone</td>
<td>11</td>
<td>5.1</td>
<td>23</td>
<td>10.7</td>
<td>136</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental factors</th>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric ity is not stable, affects use of the Internet</td>
<td>80</td>
<td>37.2</td>
<td>72</td>
<td>33.5</td>
<td>30</td>
</tr>
<tr>
<td>The nearest cyber café my house/office is far</td>
<td>26</td>
<td>12.1</td>
<td>79</td>
<td>36.7</td>
<td>78</td>
</tr>
<tr>
<td>I do not have access to computer</td>
<td>29</td>
<td>13.5</td>
<td>65</td>
<td>30</td>
<td>83</td>
</tr>
<tr>
<td>My study centre does not have computer facilities</td>
<td>48</td>
<td>22.3</td>
<td>64</td>
<td>29.8</td>
<td>66</td>
</tr>
<tr>
<td>I do not have a mobile phone</td>
<td>12</td>
<td>16</td>
<td>17</td>
<td>8</td>
<td>132</td>
</tr>
<tr>
<td>I do not have access to the Internet</td>
<td>27</td>
<td>12.6</td>
<td>51</td>
<td>23.7</td>
<td>92</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other factors</th>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I do not know how to use the computer</td>
<td>16</td>
<td>7.4</td>
<td>38</td>
<td>17.7</td>
<td>110</td>
</tr>
<tr>
<td>The Internet access is slow</td>
<td>25</td>
<td>11.6</td>
<td>59</td>
<td>27.4</td>
<td>80</td>
</tr>
</tbody>
</table>

Survey: 2008

For socio-cultural factors, the average of a great majority of respondents disagreed (62.7%) and strongly disagreed (13.8%) that any of the identified factors hinders their use of ICTs. Among socioeconomic factors, 52.5% (46% and 6.5%) of respondents disagreed and strongly disagreed that cost of programmes was a barrier; 48.4% (41% and 7%) for cost of using the Internet;
73.1% (63.3% and 9.8%) for cost of owning a mobile phone while 48.2% (41.4% and 7%) of respondents agreed and strongly agreed that they could not afford the cost of a personal computer. Among environmental factors, 70.7% (37.2% and 33.5%) of respondents agreed and strongly agreed that electricity is a barrier; 48.8% (12.1% and 36.7%) agreed and strongly agreed that the distance of a cyber café to their house or office is a barrier; only a slightly greater percentage of respondents (44.6%) disagreed and strongly disagreed that they do not have access to a computer; 37.2% (30.7% and 6.7%) disagreed and strongly disagreed that their study centres lack of computer facilities; only 24% (16% and 8%) agreed strongly agreed that they did not own a mobile phone; and a greater percentage of respondents (48.8%) and 6% disagreed and strongly disagreed that they have internet access. Only 7.4% and 17.7% of the respondents indicated that they lack of computer skills while only 11.6% and 4.7% indicated slow internet access as a barrier.

In section C, questions 16-19 of the questionnaire were open ended to elicit respondents' perceptions with regard to what they see as the best channels for information and instructional learning. Table 10 is a summary of their responses:

<table>
<thead>
<tr>
<th>Q.16 I prefer to receive or access information from my institution through</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet</td>
<td>62</td>
<td>28.8</td>
</tr>
<tr>
<td>Print material</td>
<td>47</td>
<td>21.9</td>
</tr>
<tr>
<td>Telephone/text messaging</td>
<td>21</td>
<td>9.8</td>
</tr>
<tr>
<td>Computer/online</td>
<td>18</td>
<td>8.4</td>
</tr>
<tr>
<td>Video conferencing</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>Email</td>
<td>10</td>
<td>4.7</td>
</tr>
<tr>
<td>Television/Radio</td>
<td>31</td>
<td>14.4</td>
</tr>
<tr>
<td>Q.17 I consider these ICTs facilities most effective for learning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet</td>
<td>68</td>
<td>31.6</td>
</tr>
<tr>
<td>Print material</td>
<td>38</td>
<td>17.7</td>
</tr>
<tr>
<td>Tutorials</td>
<td>10</td>
<td>4.7</td>
</tr>
<tr>
<td>Computer/online</td>
<td>31</td>
<td>14.4</td>
</tr>
<tr>
<td>Video conferencing</td>
<td>22</td>
<td>10.2</td>
</tr>
<tr>
<td>Television/radio</td>
<td>18</td>
<td>8.4</td>
</tr>
<tr>
<td>Q.18 Do you think it is compulsory to know how to use any of the ICTs for learning at a distance? Why?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>155</td>
<td>72.1</td>
</tr>
<tr>
<td>No</td>
<td>10</td>
<td>4.7</td>
</tr>
<tr>
<td>Q.19 How have you been able to overcome the barriers that hinder learning at a distance?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. By reading course materials and attending tutorials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. By participating in peer group discussions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. By sourcing for information from other materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. By organizing my time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. By personal determination and effort</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. By using ICTs at cyber cafes and at work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. By maintaining contact and obtaining information through the mobile phone</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Survey: 2008

For question 16, 28.8% of respondents preferred to receive or access information through the Internet, followed by 21.9% for print, and 14.4% television and radio. Other ICTs indicated are telephone and text messaging, computer and online, videoconferencing and email. Similarly, for question 17 the Internet was also the most preferred medium by 31.6% of respondents to receive instructional learning, followed by 17.7% for print, 14.4% for computer and online, and
10.2% for video conferencing. The only other preferred ICTs for learning are television and radio. A greater majority of respondents, 72.1% felt that ICTs were compulsory for learning at a distance. The most common reasons for their response include i) facilitates learning ii) because it’s the computer age iii) offers flexible and easy access to information iv) its efficient, saves time and money, and v) bridges distance. For the 4.7% who said no, their reasons include cost and computer literacy. When asked about their coping strategies in question 19, about 7 major responses were given with the most common being responses 1-4.

Discussion

In spite of the fact that most respondents showed a fairly high level of education with a higher percentage having a first degree as their highest qualification, their responses in tables 6 and 7 show that print remains the most accessible means of learning among the OD learners in Nigeria. At the institutional level, there is still a heavy dependence on print. However, the results show that the Internet and email, and text messaging as traditional ICTs are also being increasingly used, albeit more for accessing information than learning. The increasing use of these ICTs among distance learners vis a vis conventional learners can perhaps be viewed as ODL's contribution in encouraging their use. In spite of the phenomenal growth and deployment of mobile telephony in Nigeria however, text messaging still records very low percentages as a tool for learning.

From the results, respondents did not identify significant socio-cultural factors as barriers. Socioeconomic factors are a significant barrier to ICT use among distance learners in Nigeria. Access to ICTs is largely determined by the ability to afford them. Interestingly, a lack of computer skills is not a significant barrier as a low percentage of respondents indicated lack of computer skills as a barrier. Public availability and adequate deployment of these facilities is also a crucial factor. However, with a greater percentage of respondents indicating possession of mobile phones and thus greater access to this ICT, mobile telephony should be explored and utilized more as a tool for learning as is also the case in South Africa. Information on admission, registration, classes, assignments, feedback, and exam results are some academic activities which could be transacted via the mobile phone. Learners’ coping strategies indicate that contact through communication and motivation are very crucial for learning experience, hence the need to overcome barriers that discourage these factors.

Recommendations and Conclusion

The data shows that, although much of ODL instructional delivery is print based, some significant progress has been made especially with regard to encouraging the use of some non traditional ICTs through ODL. However, while Nigeria has embarked on implementing computer literacy at all levels, the issue of cost remains a barrier, as shown in the data most are unable to have continuous access to the equipment. Farrell and Shafika (2007) in a survey of ICT and education in Africa highlight some current trends. Countries like Nigeria have adopted the use of second hand computers through SchoolNet, Nigeria in partnership with the Education Trust Fund (ETF) to support computer literacy efforts. Another initiative is the One Laptop per Child (OLPC), a non-profit organization established to promote access to technology to support children’s learning experience. Electricity is usually supplied by using generators, albeit expensive. The data shows that most can afford mobile phones providing a unique opportunity to maximize them as tools for learning as has been reported for South Africa and Kenya (2007:21).

References


Daniel, John, Paul West and Wayne Mackintosh (2006) Exploring the role of ICTs in addressing educational needs: identifying the myths and the facts. Presented at MADEOSA 10th


