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Harnessing Information Technology for the 21st Century: Library Education in Nigeria

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Introduction

Library education in Nigeria has come a long way. Since the first library school in 1960 at the University College, Ibadan, several changes have been witnessed in the society at large and in the library profession in particular. The end of the 1980s saw the establishment of several other library schools in Nigeria awarding qualifications up to the Ph.D. level. However, at the dawn of the 1990s, new trends and developments worldwide pose great challenges for library education in Nigeria. Inadequate infrastructure, outdated curricula, poor human and financial resources, lack of access to necessary information and resources for learning, and poor communication among key players in the library schools are some of the major issues library schools in Nigeria are contending with. This is in spite of developments in information and communications technology, which have opened new doors in every profession and segment of the society. This predisposes the library schools to source for alternative ways to look at both access to and quality of library education and learning. One way of transforming the teaching-learning process is to properly harness and integrate the efficacy of information and communications technology into library education and training in Nigeria.

The advent of the electronic mail, PCs on every desk, the Internet and its application to education have produced amazing results. Hawkins (2002) notes that knowledge and information have become the most important currency for productivity, competitiveness, and increased wealth and prosperity. Nations have placed greater emphasis on developing their human capital. Governments around the world are focusing on strategies to increase access to and improve the quality of education. Methods of achieving organisational goals are changing.

Providing opportunities to meet the basic learning needs of information professionals is a first step toward preparing library schools in Nigeria for the emerging global society. The relevance and viability of library education in Nigeria requires looking at both access to and quality in new ways. Harnessing information and communications technology in library education goes a long way to enhance the quality of products turned out. Library schools in Nigeria must be connected to the information highway, to enhance their capacity to respond to new challenges to information access, processing, and dissemination. The survival of library education in Nigeria depends largely on the quality of faculty and students. Alabi (2004) writes that the most important assets in every form of university education are the faculty and students,

and notes that if quality people are not put at the centre of the process of giving and receiving knowledge, the process is bound to fail.

Basic Issues

The practice of librarianship is changing. Changes include:

- Moving from the traditional inward-looking orientation towards books to an outward-looking emphasis on information handling
- The emphasis on collecting, processing, compiling, and disseminating information in support of students and researchers both inside and outside the institution.
- Transformation of the traditional library into a new information services unit
- New outlook, structure, skills and attitudes, which some library staff cannot easily adapt to
- Removal of the line between the library and the teaching and learning and research functions
- Integration of technology into every aspect of library functions

Further change is needed in several areas:

- Educational institutions must have access to networked resources such as e-journals and databases.
- New methods of assessment are being introduced. Online tests are gradually becoming widespread and provide more information than traditional multiple choice tests.
- Information literacy is now an indispensable aspect of course programmes in many institutions (Hawkins 1998).

Children are entering a world that is changing in all spheres: scientific and technological, political, economic, social, and cultural. The emergence of the 'knowledge-based' society is changing the global economy and the status of education (Unesco 1998b). These new possibilities exist largely as the result of two converging forces. First, the quantity of information, much of it relevant to survival and basic well-being, is exponentially greater than that available only a few years ago, and the rate of its growth is accelerating. A synergistic effect occurs when important information is coupled with a second modern advance, the new capacity to communicate among people of the world. The opportunity exists to harness this force and use it positively, consciously, and with design, in order to contribute to meeting defined learning needs. This requires substantial public and private sector investments in software research and development, hardware, and refurbishing schools. Without international co-operation and assistance, the poorest countries could fall still further behind. Parents and the public at large, in the industrial countries at least, are unlikely to accept the notion that education should be less well equipped with the new technologies than other areas of social and economic activity (Hawkins 1998)

A cursory survey of library education in Nigeria reveals a catalogue of problems and gaps. These include a towering infrastructural inadequacy, seemingly insurmountable problems of

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human and financial resources, lack of access to necessary information and resources for learning, and poor communication among key players in the library schools in Nigeria. In this era of shortages of qualified teachers in universities, availability of Internet access for teachers and students would provide complementary information for their studies.

Information and communications technology is a powerful tool that would link Nigerian library schools with library schools in the west and facilitate the ongoing revitalization of the educational process. We need to provide people with information and knowledge, especially in rural areas. One thing we are looking at is the development of telecenters, where people can discuss and share ideas.

Innovations in Education

The information society demands a workforce that can use technology as a tool to increase productivity and creativity. This involves identifying reliable sources of information, effectively accessing these sources of information, synthesising and communicating that information to colleagues and associates. Alabi (2004) notes that postgraduate education is essentially a knowledge-based process. This knowledge-based process includes knowledge-acquisition, knowledge-incubation, knowledge-amplification ,and knowledge dissemination. It is self-evident that information is a key resource, which permeates postgraduate teaching, learning, research and publishing. This underscores the need for effective methods and means of information processing and transmission. (Hawkins 1998).

Africa requires "new ways to look at both access and quality of education and learning". Unesco (1998b) notes that national policies in Africa are placing a high priority on improving education through bodies that become a test bed for innovation in teaching and learning. Advances in information and communication technologies (ICT) facilitate advancement and improvement in education (Hawkins 1998). ICTs enhance the quality of teaching and learning, the sharing of knowledge and information. They have the potential, according to Haddad and Draxler (2002), to contribute to effective learning through expanding access, promoting efficiency, improving the quality of learning, enhancing the quality of teaching, and improving management systems. ICTs also offer possibilities for lifelong learning. The introduction of ICT into universities clearly changes the way education is conducted. Not only is it possible to work with distance learning and achieve a closer collaboration between different universities, ICT is also paving the way for a new pedagogical approach where students are expected to play a more active role than before. Using ICT as a tool in education students should be able to communicate, create presentations in PowerPoint, interact with colleagues and teachers using technology, and so on. For countries to benefit from technological developments, a cadre of professionals has to be educated with sound ICT backgrounds, with various computer platforms and software environments.

The educational system in Africa experienced stagnation in the early nineties. From the late nineties to the present time, education in Africa has been declining. The scramble for education, alarmingly high unemployment figures of graduates and a downward slide of every aspect of the educational system in Africa are enormous problems. Alleviating these problems requires innovation. The world is rapidly changing as UNESCO (1998b) notes that different

patterns of labour, new ideas on political participation and human rights, multi-cultural societies, and environmental problems are evolving in Africa, as elsewhere. Pressures of the contemporary age require people and institutions to continuously acquire new knowledge and skills (Haddad & Draxler 2002).

Globalization has made education a crucial element of socio-economic development. Learning is no longer an initial activity preparing one for a productive life, but rather a continuous necessity to cope with societies' changing demands. This increased need for lifelong learning opportunities takes on a special meaning in the African context, presenting not only a challenge to the limited effectiveness of the traditional school systems in meeting basic learning needs, but also a historic opportunity to leap-frog into the information age to participate and compete as equal partners in our global society (Haddad & Draxler 2002).

Library education in Nigeria today cannot be relevant without effective preparation of new generation of librarians to effectively use the new information and communication technologies in their professional practices. For many library schools in Nigeria, this daunting task requires the acquisition of new resources, expertise and careful planning. In approaching and implementing the new technologies, it is imperative to recognize:

- the impact the new technology is having on the global society and the implications for the teaching/learning process;
- the extensive knowledge that has been generated about how people learn and what this means for creating more effective and engaging student-centred learning environments;
- the stages of the development of library education in Nigeria and the levels of adoption of ICTs by various library schools;
- the importance of planning and proper integration of information and communications technology into library education and the value of context and culture in the application of technology;
- the essential conditions for successful integration of ICTs into library education and the competencies required to fully cope with the new technology.

Value of the Internet

Two critical issues, illiteracy and inadequate educational opportunities, confront the Nigerian educational system. The Internet offers promise for improving education worldwide. In a survey of the role of the Internet on education, innovation, and global living standards carried out by Princeton Survey Research Associates (PSRA) (2001), 74% of the subjects studied believe that educating students via a virtual classroom will provide more students with greater opportunities to learn, 87% say that the Internet will have a positive effect on improving education, 69% say that the Internet will play a sizeable role in improving educational systems so that children and adults can get the best education regardless of their economic background or geographic location, and 93% say that the Internet will be valuable in providing students with greater access to libraries, information, and teachers around the world. Overall, the research findings of PSRA affirm that universal access to the Internet would bring about enormous

benefits and improvements to the educational system because of the Internet's unparalleled ability to spread knowledge and disseminate information:

- "It would allow getting points of view that are not imposed on them by their country. It would help education of countries where education is poor."
- " It would open up new fields for everyone, as well as ideas and thoughts not normally available."
- "It would mean an enormous advance in education has taken place and will speed up the process of disseminating information to people.
- "Knowledge is the most powerful device to solve problems (Princeton Survey Research Associates 2001)"

All the library schools in Nigeria are located in cities and towns where Internet connectivity and access have relatively been successful; although Internet access and connectivity in these cities are mainly dial-up which are hardly efficient because of the poor communication infrastructure provided by the dying giant national communication carrier, NITEL. An appropriate hybrid of teaching and learning methods would provide meaningful learning environment in library schools in Nigeria. This would be achieved by steady connection to the information superhighway which would enhance the schools capacity to respond to the new challenges in information processing and dissemination. The rapid exchange of ideas and greater accessibility to data, which the Internet provides, will dramatically change and improve educational outputs in Nigeria.

Global access to the Internet would open doors to improved quality of life by lowering the cost of information and providing a global forum for the open discussion of ideas and information. PSRA affirms that:

- Lowering the cost of information can improve the standard of living for people all over the world.
- The Internet would level the playing field and not just wealthy people would have access to knowledge and information.
- The Internet will allow ordinary citizens who are responsible to their government to have access to the information needed to make informed opinions and to act on those opinions.
- The Internet has made a huge political impact; much harder to deceive citizens Princeton Survey Research Associates (2001).

Efforts to improve Internet access in Africa have been hampered by a number of factors as identified by Unesco (1998):

- the small number of potential users having both the skills and equipment to benefit from access to electronic information networks;
- the scarcity and high costs of equipment, software and information compared to situations in other countries;
- lack of reliable and accessible physical telecommunications infrastructure;
- telecommunications monopoly, associated with overly restrictive regulations and high costs, and

- lack of interregional networking and cooperation.

The makeshift Nigerian democratic government of Olusegun Obasanjo is five years old, and has been liberalizing the communication sector and easing the flow of information. However, the cost of connectivity is still prohibitive. ICT products such as interactive radio and television, video conferencing, teletext, Internet based virtual communities, and web publishing are available to less than 2% of the population. Governments around the world are focusing on strategies to increase access to and improve the quality of education. Harnessing the power of information technology is not really about acquiring the latest equipment and software. It is about thorough evaluation of needs and process improvement opportunities. UNESCO (1998b) observes that to effectively harness the power of the new information and communication technologies (ICTs) to improve library education in Nigeria, the following essential conditions must be met:

- Students and teachers must have sufficient access to digital technologies and the Internet in their classrooms, laboratories and workshops;
- High quality, meaningful, and culturally responsive digital content must be available for teachers and learners;
- Teachers must have the knowledge and skills to use the new digital tools and resources to help all students achieve high academic standards (Unesco 1998).

Technological developments lead to changes in work and changes in the organization of work, and required competencies are therefore changing.

Conclusion

It is imperative for Nigerian Library Schools to link up with other library schools in other countries that are well ahead in harnessing the new technology in library education and training. Learning from the experiences of others who are advanced in technological application would provide resources for skills and knowledge acquisition necessary for the advancement of library education in Nigeria in the 21st century.

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