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Curriculum Development in Library and Information Science Education in Nigerian Universities: Issues and Prospects

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Introduction

Library and information science 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 (Igwe, 2005 and Nzotta, 1978).

It is inarguable that developments in our society technological or otherwise have brought significant changes to library and information science (LIS) education all over the world. Among all the changes occurred in LIS education, the ones that are most visible and observable can be found in the LIS curricula. That is, the curriculum for LIS education usually mirrors what is being offered to train librarians and information professionals' knowledge and skills to become qualified personnel in the field, but also meet challenges the ever changing information society brings (Chu, 2006).

According to Igwe (2005) new trends and development worldwide emerge posing great challenge for library and information science education in Nigeria. Challenges such as inadequate infrastructure, *outdated / changing curricula*,(*italics is mine*) poor human and financial resources, lack of access to necessary information resources for learning and poor communication among key player in the library schools are some of the major issues library schools in Nigeria are contending with.

The provision of opportunities to meet the basic learning needs of information professionals is a first step towards preparing library and information science schools in Nigeria for the emerging global society. The relevance and viability of library and information science education in Nigeria requires looking at both the access to and quality in new ways to enhancing the quality of products turned out from the universities into the labour market. The survival of library and information science education in Nigeria depends largely on the quality of faculty and students.

This work therefore will want to look at the library and information science education curriculum in Nigeria as it affects the graduates of library and information science in Nigeria with respect to the labour market of this age of

digitalization.

Education

Lukeman and Njoku (2007) opined that library and information science (LIS) education can only be meaningfully discussed within the context of education generally, and vis-a-vis the cultural milieu for which it is provided.

Peretomode (2007) observed that Nigeria like other countries of the world recognises education as the major instrument for effecting national development. The formal educational system in most nations of the world has been organised into three levels, namely; primary, secondary and higher education. In this context we shall be looking at higher education.

Higher education, also referred to as or tertiary education, post secondary education or further education, is the education "given after secondary education in universities, colleges of education, polytechnics, monotechnics, including those institutions offering correspondence courses"(Peretomode, 2008 quoting NPE 2004:34).

Higher education according to Wikipedia, the free encyclopedia online (2008) refers to a level of education that is provided by universities vocational universities, community colleges, liberal arts colleges, institutes of technology and other collegiate level institution... that award academic degrees or professional certifications. The bottom line here is the "degree of intellectual capacity required at this level of education"(Peretomode, 2008 quoting OECD, The World Bank.)

The National Policy on Education (NPE, 2004, 4th edition) in section 8, specifically sub-section 59 (Peretomode, 2008:4), states that the goals of tertiary education i.e. higher education shall be to:

- contribute to the national development through high level relevant manpower training;
- develop and inculcate proper value for the survival of the individual and society;
- develop the intellectual capability of individual to understand and appreciate their local and external environments;
- acquire both physical and intellectual skills which will enable individuals to be self-reliant and useful members of the society;
- promote and encourage scholarship and community service;
- forge and cement national unity;
- promote national and international understanding and interaction.
- The above stated goals according to NPE, section 8 (60) can be achieved through:

(a) teaching

(b) search and development;

(c) generation and dissemination of knowledge, inter- institutional cooperation; and

(d) dedicated services to the community through extra mural and extension services.

Alabi (2004) noted that the most important asserts in every form of higher education are the faculty and students, and that if quality people are not put at the middle of giving and receiving knowledge, the process is bound to fail.

Peretomode (2008) highlights the purposes of tertiary education to include the following:

- the acquisition, development and inculcation of the proper value orientation

for the survival of individuals and society;
- the development of the intellectual capacities of individuals and society;
- the acquisition of both physical and intellectual skills to enable individuals to develop into useful members of the community;
- the acquisition of an objective view of local and external environment;
- the promotion and encouragement of scholarship and research; and
- the making of optimum contribution of graduates to national unity and envelopment.

He further stressed that higher education at its completion of a programme include

- teaching people to think further, broader and deeper than they have been so far brought up to do;
- give each student a training of mind to enable them think more critically that him or her could understand and be in a position to cope with all the major aspects and questions of human existence both personal and social;
- provide an ethical education - a man who is not just thinking creature but one who knows the differences between right and wrong etc.

The educational system in Africa and Nigeria in particular (Haddad & Draxler, 2002) experienced stagnation in the early nineties. From the late nineties to the present time, education in Nigeria has been declining. The scramble of education alarmingly high, unemployment figures of graduates and down ward slides of every aspects of the educational system in Nigeria are enormous problem.

The world is rapidly changing as rightly observed, that different pattern of labour, new ideas and political participation and human rights, multicultural societies, and environmental problems are evolving in Nigeria as elsewhere in the Africa continent. Pressure of the contemporary age requires people and institutions to continuously acquire new knowledge and skills.

Innovations in Education

The information society demands a work force 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, synthesizing and communicating that information (Igwe, 2005).

Alabi (2004) noted that postgraduate education is essentially or has become a knowledge based process. This knowledge as a process includes knowledge acquisition, knowledge incubation, knowledge application and knowledge amplification and knowledge dissemination. It is self evident that information is a key resource, which permeates the postgraduates teaching, learning, research and publishing.

This underscores the need for effective method and means of information processing and transmission (Hawkins, 1998). Africa and Nigeria in particular requires new ways to look at both access and quality of education and learning. Unesco (1998) noted that national policies in Africa are placing 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. ICTs enhance the quality of teaching and learning and research processes in the sharing of knowledge and information (Igwe, 2005).

ICTs have potentials (Haddad & Darxler, 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 long distance learning. The introduction of ICT into higher

education 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 new pedagogical approach where students should be able to communicate, create presentations is power points, interact with colleagues and teachers using technology and so on.

As earlier observed, educational system in Nigeria in all aspects are enormously difficult. Alleviating these problems requires innovation. Governments around the globe are focusing on ways to increase access to and improve the quality of education. Ways of achieving organizational goals are now also changing.

Library and Information Science Education

According to Singh (n.d.) librarianship today has arrived at the information age where the role of information is increasingly emphasized as an economic resource, a marketable commodity and as a social wealth. In this content, the roles of librarians are of much importance. He / she will have to act as a facilitator, advisor, consultant, instructor, navigator, searcher, researcher, evaluator, organiser, preserver, promoter, communicator, technical expert, as well as a manager, leader, entrepreneur and visionary. And for the success library and information centers as effective communication system, the development of manpower to do such work is vital. One of the important aspects of manpower development in this connection is improved education system for library and information science.

Library Information Science Education in Nigeria today cannot be relevant without effective preparation of new generation of librarians to effectively use the new information and communication technology in their professional practices. For many library and information science schools as enumerated by Nwalo (2000) this doubting task requires the acquisitions of new resources, expertise and careful planning.

The education and training of LIS professionals has to be such that it empowers them to unleash their potential as they endeavour to offer relevant and efficient services within the current levels of technological sophistication (Minishi ¨Majanja,2007). Curry, (2002) observed that library and information science (LIS) academic department have witness not only this increasing globalization of higher education but also that of the LIS work place including the consequent extension of competition beyond traditional, institutional, national and regional boundaries. According to Curry, this environment has made it important for LIS education and training to strive to improve their quality of programmes. On the one hand to be able to participate in educational networks and develop innovative strategies in planning and administration of LIS education while on the other hand, to produce graduate where work place spans the whole world.

According to Mangla (1980) library and information science programmes should be so designed as to equip the student:

- with knowledge and techniques to handle the immediate job requirements in an efficient manner; and
- to develop programmes, procedures and services on modern lines in future where the use of various modern technique, computers etc, could provide better, quicker and efficient service.

The practice of librarianship is changing Alabi (2000). But the question is how fast and how well is the change? Changes include the following:

- 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 traditional library into a new information service unit;
- new outlook, structure, skills and attitudes which some library staff cannot only adapt to;
- removal of the line between the library and teaching, learning and research process;
- integration of technology into every aspect of library function / provisions.

Further changes include:

- educational institution gaining access to networked resources as a journal and databases, thanks to MTN and other agencies;
- new techniques of assessment are being introduced. Online tests are gradually becoming widespread and providing more information than traditional multiple choice tests; and
- information literacy is now an indispensible aspects of course programmes in many institutions (Hawkins, 1988).

Sutton (2001) observed that changes are brought in the LIS profession by ICTs. These can be grouped into two. The *natural evolutionary change,* and the *transformatory changes.* In the natural evolution, the library and information science profession has harnessed ICTs to perform old tasks better through the automation of housekeeping tasks such as reference work, bibliographic services, cataloguing, serials, circulation and acquisition, which are performed more efficiently in an ICT environment. Tranformatory changes, on the other hand include the emergence of new functions arising out of an expanded, demand ¨driven information society wider and / or interdisciplinary jurisdiction and closer focus on user need.

These transformative trends represent systematic changes that substantially alter the boundaries of the profession. For example, Fourie and Bothma (2006) observed the increased use of the World Wide Web in private, social business lives of many people and hence noted that it is a vital component of the enabling structure for school, university, career and other use for information and communication. This one platform exhibits the fact that those involved in information services need to be sufficiently prepared to handle both the users of information and the attendant technologies.

Children are entering a world that is changing in all spheres - scientific, technological, political, economic, social and cultural. The emergence of the knowledge based society is changing the global economy and the status of education (UNESCO, 1998). The new possibilities exist largely as the result of converging forces. First, the quality of information: this is relevant to the survival and basic well being of the economy. This is exponentially greater than that available only a few years, and secondly, the rate of its growth which is accelerating.

Curriculum Development

A curriculum is a fundamental part of any education or training programmes largely because it provides not only a list of courses or modules offered in a programme, but it also gives information on content, purpose, method, time / duration, trainers and location or situation of a programme or course all of which are essential in a successful dispensation of manpower training and education (Ocholla, 2003).

Library and Information Science (LIS) as a profession, is concerned with the knowledge and skill by which the records of human communication are collected, organised and utilised. A librarian is a mediator between man and the graphic records that his previous generations have produced; and the goal of the librarian is to maximise the social utility of these records for the benefit of humanity (Shara, 1972). Librarians have very important role to play in the process of communication of information in todayħ world for which he / she must be well educated, highly

qualified and professionally competent (Singh, n.d.).

Information explosion has resulted in libraries and information centres becoming a necessity. A continuous flow of information in all sectors of human activities through research and innovation has brought drastic change in the present society. Knowledge and information today is a strategic input in all walks of life, along with the traditional ones of man, money and materials. Knowledge and information will continue to play a significant role in the socio - economic development. Hence there is expansion of the employment market for library and information professionals. But despite increase in the number of jobs, the total market demand for LIS professionals at present is far from the total output. Moreover, the quality of output is not fully compatible with the requirements of the expanding job market.

LIS Curriculum

From the above, there is the need to look at the curricula of library and information globally. The formal education of information professionals (Ashcroft, 2005), has to take into account the diversity of information work in the 21st century. Thus, many education programmes are becoming increasingly generlised, by providing a range of generic and specific skills together with an understanding of the underlying principles of information management to enable LIS graduates to pursue various professional career paths (Brine & Feather, 2003).

Gorman (2004) suggests that many library educations have been enticed by the lure of modern communication technology and to concentrate on that technology and to dismiss areas of librarianship that do not fit within these technological boundaries. The "lure of modern communication technology" has taken a large role in LIS education. This assertion is been confirmed in the statement of Minishi ¨Majanja, (2007) looking at the Sub-Saharan, that the LIS schools curriculum development has shown considerable strides in infusing ICT competence as most LIS schools have developed relevant ICT modules and / or merged relevant ICT knowledge in traditional modules. However, most LIS schools teach these modules theoretically because they have inadequate quantities and quality of computers and poor Internet access.

A survey by Liu (2004) analysed course syllabi relating to education for digital libraries in North America, Europe and Asia and found that courses offered on this subject have drastically increased over the past years. Other studies have focused on e - library. For instance, Newton (2003) discussed staff attitudes to e - learning and Gregory (2003) discusses students perception of e - learning.

Gorman (2004) also points out that the American Library Association (ALA) accredits courses based on the schools own vision rather than on national standards. Thus, a librarian at an ALA accredited school need not take any course in cataloguing and classification, which Gorman argues is of extreme importance to the profession.

To some extent (Terris, 2003; Takeuchi & Kim, 1999) endorse Gormanђ comments, arguing that the increasing dominance in electronic media has resulted in the disappearance of traditional cataloguing and classification in some UK library schools. Terris, goes to point out that the semantic web brings some recognition of the need to improve some sort of logical structure on the web, which is the field of expertly trained catalogues.

Gorman (2004) takes another step with his argument to say that "the gap between what is being taught in many LIS schools and what is being practiced in most libraries is wide and widening." Johnson et al (2001) also identified some type of mismatch between employment expectations and library schools priorities when considering results of surveys of library schools in the Caribbean and Latin America - although it was found that the library schools seemed to be meeting the

employers' key requirements.

Another angle was taken by Audunson et al (2003), who focused on the complete librarian who saw the core areas for librarians as knowledge organisation and retrieval, promotion of culture and knowledge, knowledge of literature, organisation and management of libraries and information technology. Again another angle taken by Mortezaie & Naghshineh (2002) who undertook a comparative study of graduates of LIS courses in UK, USA, India and Iran. They found diversity in the courses offered a correlation between the efficiency of the courses offered with the state of the information industry in each country and a widening chasm between LIS education in the developed and developing countries studied.

There are many factors coming into play in terms of the LIS curriculum. Whilst it could be assumed that accreditation by the professional bodies has the potentials to lead to some consistencies in core educational areas which meet employers' requirements on an international basis, this is not necessarily the case. As stated above, Gorman (2004), the ALA accreditation process is not based on national standards.

However, the Charted Institute of Library and Information Professionals (CILIP) in the UK states:

In assessing a course the professional body will be primarily concerned with its relevance to current and developing practice in librarianship and information science, rather than purely academic issues. In view of the wide range of skills and expertise now needed for the efficient provision of information and the effective management of library and information services, the professional body does not seek to stipulate precise requirements for course content. Courses submitted should however; provide students with appropriate knowledge and skills to enable them to enter the profession.

LIS Curricula in Nigerian Universities

Oparah (2006) observed that until 1999; there was no uniform or harmonised curriculum for Nigerian University Library and information science schools. Each operated its own curriculum. According to him, the newer LIS schools appear to operate modified curricula of the older schools. A review of the curricula of these schools shows that while some emphasise more library science courses, other strife to strike a balance between library science and information.

In the later case, ICT application to library and information services appears to be accorded appreciable emphasis. The library and information science schools of Abia and Delta States are good examples. Learning experience at any level of formal education is primarily determined by the contents of relevant curriculum. Perhaps, this explains why curriculum is seen as the means by which educational institutions seeks to translate the hope of the society into concrete reality (Onwuka, 1981).

At the Abia State university library and information science school (Oparah, 2006) observed that the following ICT courses are offered at the 100 level:

- LIS 104 - Basic Computer Operations I
- LIS 106 - Basic Computer Operations II

These two courses are designed to acquaint the students with the parts, functions and operation of the computer of the computer and introduction to computer software.

At the 200 level, the following courses are available;

- LIS 270 - Information Structure and System I
- LIS 271 - Information Structure and System II

These two cover electronic networks databases internet access, information systems, programming language, etc.

At the 300 level, the following ICT based courses were available:

- LIS 381 - Information System and Networks
- LIS 351 - Database Management.

At the 400 level, the following was available:

- LIS 411 - Automation of Library and Information Centres.

However, he noted that the content of the two general reference service course LIS 231 and 232 do not include the application of ICT. Same for the following subject reference sources and services:

- LIS 331 - Literature and Reference Sources for social sciences
- LIS 332 - Literature and Reference Sources in the Humanities.

The strong emphasis on ICT courses at the undergraduate level is absent at the (MLS) level. Perhaps, the designers of the master's programme forgot that some of the entrants who are not graduates of the library schools may not have acquired ICT knowledge and skills. The implication is that such students may graduate without the requisite of ICT knowledge and skill for the job performance.

At the Delta State University LIS School, the following ICT courses are offered at the 100, 200 and 400 levels of the undergraduate programme.

- LIS 105 - Introduction to Computer I
- LIS 115 - Introduction to Computer II
- LIS 202 - Computer Application to Library Process I
- LIS 205 - Introduction to Computer Programming I
- LIS 212 - Computer Application to Library Processes II
- LIS 218 - Introduction to Database Management System
- LIS 401 - Information Science and Modern Technology I
- LIS 411 - Information Science and Modern Technology II

Oparah (2006) however, noted that though there are library science courses offered like reference service, the contents do not provide for electronic sources or the application of ICTs to such courses.

At the premier library school in Nigeria - the University of Ibadan - has the following ICT courses in its curriculum.

- LSE 122 - Information and Development with (Introduction to information technology)
- LSE 227 - Information Technology
- LSE 415 - Computer in Libraries.

Again Oparah (2006) noted that a course likes LSE 113 - Reference Sources and Services do not provide for the application of ICT to reference services, except at the masters level. Also at master's level, there is LSE 707 - Automation in Libraries, Archives and Information centres.

The National University Commission (NUC) issued in 1999 the Approved Minimum Standard in Library and Information Science Education. The curriculum according to Oparah (2006) is for the undergraduate programme. It provides for the following ICT courses:

- LIS 210 - Computer and Data Processing.

This course among other objective is designed to enable students conduct

searches and databases.

- LIS 305 - Introduction to Information Science

The contents of this course include the role of the computer in information storage and retrieval.

- LIS 301 - Information Technologies.

This course covers contemporary information technologies in library and information centres, multimedia information system, non-book communication technology, network and networking, internet etc.

The NUC curriculum though provide general library courses and subjects, again the contents of these courses do not include the application of ICT to them e.g. Reference Services. It is thus left for wisdom of the individual of course lecturers to include ICT or not.

Though some of the library courses do not provide for ICT application, it can be said that the knowledge and skills acquired in ICT courses identified can be profitably applied. However, it will be a welcome development for the provision of ICT application to all library subject and courses in the curriculum (Zakari, 2000).

Teaching ICT in Nigerian LIS Curricula

In an address presented at the biennial conference of the National Association of Library and Information Science Educators (NALISE) at the University of Ibadan in 1999, Oparah (2006) quoting Udoh (2000) has this to say:

For the Nigerian Library Schools to face the challenge of the 21st century, the information studies programmes in the various Nigerian Library Schools should emphasise information technology both in the theory and practice. The new breed information worker needs to be well informed about the tools for practicing his or her profession. The onus of accomplishing this task lies with our library and information science schools. Further, the teachers handling the training of the students in Nigerian library schools need to be re-trained in modern theory and practice of information technologies if they are to meet with the demand of the society and the Nigerian labour market.

The Nigerian library and information science schools will have to deal with a number of obstacles to accomplish the task contained in the preceding quote. In this vein, the challenges inhibiting teaching practical application of ICT to library services in Nigerian Library and information science schools shall be highlighted.

Lack of ICT Infrastructure

Ensuring that large numbers of students acquire ICT skills requires that students have access to appropriate hardware and software. This often involves installing and maintaining many classroom workstations accommodating sets of workstations or networked PCs (Day, 1989; Zakari, 2000). However, a peep into the library and information science schools show that a good number of them do not have dedicated ICT laboratories as in the case of Delta State University. In schools where they are available, they are inadequate in terms of space and ICT facilities (Jensen, 2005; Manda, 2006).

Over-Enrollment

Day (1989) has urged library and information science schools to concentrate on giving students hands - on - experience of packages that they are likely to

encounter in their future careers. This is at present a tail dream considering the fact that most of the library schools are so over populated with students that available facilities are stretched. Over population of students also creates the problems of classroom control.

Inadequate Funding

This is at the root of all the problems facing library and information science schools in Nigeria. (Alemna, 1994; Zakari, 2000 and Minishi ¨Majanja, 2006) noted that library schools in Africa are constrained by poor funding. For as long as funding does not improve appreciably, the present unsatisfactory situation in the library and information science schools are unlikely to change for the better.

Inadequate Staff and Expertise

Some of the library schools do not have the full complement of teaching staff. In order to fill the gap, they resort to hiring part - time lecturers whose commitment and devotion to duty may not be guaranteed. Furthermore, available staff in some library and information science schools, do not have the opportunity for training in form of short term courses in the area of ICT application to library services. This is despite the rapid changes that are taking place in this area (Minishi ¨Majanja, 2004; Manda, 2006; Zakari; 2000, Oparah, 2006).

Ikoja ¨Odongo (2006) decries the problem of brain drain i.e. that staff sent overseas for training either do not return to their posts or taken up by other organizations that are able to offer them higher remuneration. This suggests that in so far as re- skilling academic staff is concerned, opportunities are available but there is still no guarantee that the problems of skills short age at macro- national levels.

Thereћ still a serious need for technical support staff with high level expertise in the maintenance aspects of ICTs. Because of poor maintenance and insufficient skills to diagnose system problems and swaps parts, there are many out ¨of commission machines which could easily be re-activated and used. The problem of technical expertise is two faced. In the first place, there are not enough people qualified or attaining ICT specialist skills at the speed at which the technologies are adopted. Secondly, the problems of brain-drain where by the few experts opt for better pay jobs overseas

Many students join the university without any computer skills and hence much time is taken trying to make them computer literate. However, it seem that the problem of students¨ICT skills may short lived because on the one hand computer literacy has now been introduced at many school and colleges, while on the hand, the Ω¨and ╡ ¨generations are becoming age.

Unreliable Power Supply

The strength of local infrastructure in fact has implications for library and information science education. For instance, ICTs are electricity driven. Irregular public power supply means that ICT facilities cannot be used for instruction whenever there is power failure. Cost of generating electric power by individual parent institution has become so high that they are unable to cope.

Changing Nature of ICT

The changing nature of ICT poses a problem. Developments in technology means that there is continuing demand for resources to upgrade existing facilities and them also place a burden on staff development.

Job Market Vs. Curriculum Change

There is a gap between the competencies that LIS education provides and those required by the job market today (Ikoja ¨Odongo, 2006).It is challenge for current LIS curricula to meet the expectations of stakeholders(Beukes ¨Amissi, 2006). Even though some consultation is usually taken by LIS schools when they re-curriculate, it is often difficult for employers clearly visualize how their needs can be translated into the curriculum and vise versa. Producing job specific graduates is a tall order considering the diversity of employers. LIS schools are trying to provide for everybody often end up providing for one.

Conclusion and Recommendations

From the various literature searches, it is obvious that there are serious concerns for the curricula of library and information science education to meet the present digital society with respect to library and information service. In this vein, the library and information science curricula in Nigeria has been revisited and reviewed by the various bodies concern.

It has been found that the curricula of Nigeria University Library and information science schools are reasonably adequate in the provision of ICT courses. However, the contents of library and information science curricula are generally lacking in the application of ICT (Oparah, 2006).

Also the curricula have been found to be good but there are a number of constraints as observed to the implementation to make the curriculum meaningful and produce the needed result (zakari, 2000). The content of each course should include the application of ICT to its peculiar services. This must be given both theoretical and practical emphasis. This way library and information science education can be considered adequate for effective professional performance on the job after qualification and sustained effective performance on the part of the professional for some time before a need for retraining arises.

ICT application is a key factor to relevance in the scheme of things in the 21st century. For Nigeria to fit properly in the digital age the library and information science schools whose principle is to produce the right caliber of professionals must revisited (Zakari, 2000).

Our curricula must be overhauled drastically if we want to retain our identity in a rapidly developing information society. A good number of posts of LIS professionals are already in the catch hold of technological experts. Along with the development of LIS curricula the faculty should also be developed. The existing faculty members should be trained to cope up with the new requirements of LIS schools. The Government of Nigeria should come forward through her agents to provide financial help to the LIS schools for developing essential infrastructures to provide hands on experience to the students.

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