Rethinking E- Learning in Library and Information Science (LIS) Education in Nigeria: Developing a Model for the 21st Century

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Abstract

The increasing influence of Information and Communication Technologies (ICT) on all aspects of life, including the educational sector, has necessitated that Library and Information Science (LIS) schools in the developing world should emulate their contemporaries in the advanced countries through the adoption of e-learning into their educational systems. The paper discusses the concepts of e-learning and its application in the Library and Information Science (LIS) education. The focus of the discussion is rooted within the potential benefits of implementing e-learning in LIS education in Nigeria. Within that purview, the paper equally discusses the likely challenges that could affect e-learning in LIS education in Nigeria. Finally, the paper argues that, adopting e-learning by the LIS schools in Nigeria has become inevitable if they are to be on the global road map. **Keywords:**e-Learning, Library and Information Science, LIS education, Nigeria

Introduction

Today's Library and Information Science (LIS) educators are facing different challenges than their predecessors in the pre-Internet era, in teaching tomorrow's LIS professionals. This is, because, over the last two decades, the LIS profession is facing unprecedented challenges due to advancements in ICTs. Thus, changes in the information needs/seeking patterns of the patrons, as well as developments in ICTS have increased demands on the LIS faculty and the profession in general. The increased demands necessitated the need for changes in the curricula, as well as the methods of teaching, and delivery processes. Similarly, these developments have had a profound and positive effect on education and other sectors. In the same way, this dramatic/paradigm shift has manifested in the form of e-learning where ICTs such as the computer, the Internet and Intranet, CD-ROMs are used as instruments for teaching and learning. E -learning, today, has become essential and it is applied in every field from Space to Government. Accordingly, the new trend of communication technology has also impacted elearning in education including the Library and Information Science profession (Bhabal, 2008). Equally, Ayanda et-al (2011) noted that learning technologies have been evolving over the last two or three decades, and have gone through many phases and approaches. According to Panahon II (2007), e-learning has assumed an increasing importance in the 21st century education system within and outside school environment. Thus, according to him, new technologies such as the Internet and videoconferencing have made e-learning either as an effective complement or a substitute to conventional classroom learning processes.

It is worth noting that the practice of e-learning in this 21st century has now assumed a fundamental position in the global educational system due to its numerous advantages. In fact, Heazlewood (2013), in particular reported that, in Australia, many universities are now providing access to education through a full on-line course delivery and assessment method. Heazlewood further noted that in some cases, over 70% of students in that country have access to university higher education through the on-line delivery and assessment mode. Similarly, in the field of Library and Information Sciences Miwa (2006), cited in Huang (2010), particularly reported that universities in Asian countries such as Japan, Korea, and Singapore have been using e-learning to facilitate library and information science programmes all over the world are embracing and adopting e-learning technologies to deliver LIS education.

This paper is an attempt to discuss the need for and/or potential benefits of e-learning in Nigerian LIS education, taken into consideration the global requirements of e-learning in the rapidly changing digital environment.

Objectives of the Study

The objectives of this study are as follows:

- To explore the current situation regarding e-learning in the LIS programmes in Nigerian LIS schools.
- To identify the current happenings in the global LIS community regarding e-learning in the LIS curricula and their relevance in the LIS job market place.
- To identify the challenges that could serve as stumbling block to the adoption of e-learning by the LIS schools in the country.

LIS Education Context in Nigeria

The growth of LIS education in Nigeria can be traced back to the 1953 UNESCO organized seminar on the "Development of Public Libraries in Africa" held at the University of Ibadan in Nigeria. The seminar suggested that a limited number of Library schools of high caliber be established in Africa to provide full-scale professional training at the leadership level (Lawal, 2000). Before Nigeria's independence, librarians in Nigeria were trained mostly abroad, specifically, in the United Kingdom and the United States and the certificates obtained then were mostly non-graduate in nature like the British ALA Examinations. Furthermore, most of the librarians during that time were expatriates. The commencement of real education for LIS in Nigeria, started with the establishment of the first Library School in 1959 at the University College Ibadan, (as it was then called). The LIS School was founded with the assistance of the Carnegie Corporation of New York who took interest in the development of the profession, and consequently sent Harold Lancour in 1957 to review the library situation and suggests how the Corporation can assist in terms of Library development. After his two months survey, he recommended that a postgraduate-level LIS education be established, which was subsequently mounted at the Institute of Librarianship (now named the Department of Library, Archival and Information Studies) (Agada, 1995). The school commenced with a Diploma in librarianship meant for graduate students.

After the establishment of the University of Ibadan LIS School, the second school of librarianship in Nigeria was opened at the Ahmadu Bello University, Zaria which commenced with an undergraduate programme. According to Mohammed (2008) the 1963 F.A. Sharr's report on library needs in Northern Nigeria gave birth to the establishment of the second LIS School in Nigeria in 1965 to educate and train librarians at the undergraduate level as opposed to that of Ibadan's postgraduate Diploma programme. The LIS School is now known as the Department of Library and Information Science, of the Ahmadu Bello University, Zaria (Nwokocha, 1996).

Over a period of time, after the establishment of the first and second school of librarianship in Nigeria, other library schools subsequently emerged at different universities, which are: Bayero University, Kano (1977); University of Maiduguri (1978); Imo State University (1981); and University of Nigeria Nsukka (1983). Indeed, the beginning of the 1990s witnessed the proliferation of LIS schools in Nigeria (Abubakar, 2009). Presently, there are 25 LIS schools in Nigeria universities (table 1) offering different programmes at one level or the other (LRCN, 2014). Similarly, a number of Federal and State Polytechnics, as well as Colleges of Education are now offering LIS programmes at different levels.

S/No.	LIS Schools	Approved Programme
1	Abia State University, Uturu	Library & Information Science
2	Abubakar Tafawa Balewa University, Bauchi	Library & Information Science
3	Adeleke University, Ede	Library Science
4	Ahmadu Bello University, Zaria	Library & Information Science
5	Ambrose Ali University, Ekpoma	Library & Information Science
6	Bayero University, Kano	Library & Information Science
7	Baze University, Abuja	Library & Information Science
8	Benson Idahosa University, Benin City	Library & Information Science
9	Benue State University, Makurdi	Library & Information Science
10	Delta State University, Abraka	Library & Information Science
11	Federal University of Technology, Minna	Library & Information Science
12	Federal University of Technology, Yola	Library & Information Science
13	Ibrahim Badamasi Babangida University, Lapai	Library & Information Science
14	Imo State University, Owerri	Library & Information Science
15	Kwara State University, Ilorin	Library & Information Science
16	Madonna University, Okija	Library & Information Science
17	Nnamdi Azikiwe University, Awka	Library & Information Science
18	Tai Solarin University of Education, Ijebu-Ode	Library & Information Science
19	Umaru Musa Yar'adua University, Katsina	Library & Information Science
20	University of Calabar, Calabar	Library & Information Science

Table 1. List of Approved/Accredited Nigerian University LIS Programmes

Table 2. (continued)

22University of Ilorin, IlorinLibrary Science23University of Maiduguri, MaiduguriLibrary Science24University of Nigeria, NsukkaLibrary & Information Science	S/No.	LIS Schools	LIS Schools Approved Programme	
23University of Maiduguri, MaiduguriLibrary Science24University of Nigeria, NsukkaLibrary & Information Science	21	University of Ibadan, Ibadan	Library & Information Science	
24University of Nigeria, NsukkaLibrary & Information Scie	22	University of Ilorin, Ilorin	Library Science	
	23	University of Maiduguri, Maiduguri	Library Science	
	24	University of Nigeria, Nsukka	Library & Information Science	
25 University of Uyo, Uyo Library & Information Scie	25	University of Uyo, Uyo	Library & Information Science	

Source: LRCN 2014

Literature Review

A review of the literature has established the fact that global attention is now shifting towards e-learning. This is evident by the amount and considerable body of literature obtainable on the topic. The literature review in this paper is divided into two sections: (a) concept of e-learning (b) e-learning in LIS education.

Concept of e-Learning

The term e-learning has been used in the literature to mean learning that is delivered online. According to Ayanda et-al (2011), e-learning is the delivery of educational content through electronic media, including the Internet, intranet, extranet, satellite broadcast, audio and video tapes, interactive TV, interactive CDs and computer-based system. E-learning, is also called Web-based learning, online learning, distributed learning, computer-assisted instruction, or Internet-based learning (Ruiz et-al, 2006).

Govindasamy (2002) described e-learning as instruction that is delivered by way of all electronic media, including the Internet, intranets, extranets, satellite broadcasts, audio/video tape, interactive TV, and CD-ROM. According to Alkhattabi, Neagu and Cullen (2010), the term e-learning is used in the literature to describe many fields such as online learning, web-based training, distance learning, distributed learning, virtual learning, or technology-based training. In addition, e-learning can include synchronous or asynchronous interaction. Similarly, Hatua (2006) further added that the term e-learning entails education and training that is supported and delivered through online networks or Internet which involves the use of different tools.

In the view of Shiful Islam, Chowdhury and Anwarul Islam (2009), "e-learning is:

- a. Learning facilitated and supported through the use of information and communication technologies
- b. Education offered using electronic delivering methods such as CD-ROMS, video conferencing, websites and e-mail- often used in distance learning program
- c. Learning that is accomplished over the Internet, a computer network, via CD-ROM, interactive TV or Satellite broadcast."

e-Learning in LIS Education

The curriculum of LIS schools, globally, has undeniably changed dramatically in the last couple of years due to development in ICTs. Consequently, the role of information professionals as educators, teaching information literacy skills, either face to face or via the web, or through virtual learning has witnessed an enormous growth in the last couple of years. It is, therefore, imperative that library schools should provide their graduates with the appropriate skills to carry out this responsibility (Secker, 2004). According to Ravi, Mohan and Srinivasaragavan (2005), over the years, there has been a fundamental shift in the approach to LIS education due to advancement in IT. Therefore, according to them, there is the need for re-defining the LIS education to accommodate certain issues relating to web technology-based learning, online learning etc. to further strengthen the traditional mode of teaching.

Kumbhar (2009) presented an array of interesting reasons on why e-learning should be adopted in the LIS education. Some of the reasons according to him were management of change, increased expectations from the employers and the users, as well as changing learning trends. Similarly, Bhabal (2008) addressed the issue of e-learning in the LIS, paying attention to the question of syllabus, teaching and assessment methods used in training the LIS students.

From another direction, Hatua (2006) discussed the design of e-learning in LIS programmes in India. He identified the existence of e-learning in many open universities in that country, and, emphasized the need for designing a model online course for LIS programmes. On the other hand, Abubakar and Hassan (2013) discussed the benefits of e-learning, strategies for developing an e-learning curriculum, and a proposed framework for developing an e-learning curriculum for LIS schools in the Muslim World.

E-learning can be provided in one of the following two modes (Chowdhury & Chowdhury, 2006): (i) Synchronous e-learning: this is a computer assisted e-learning environment where the instructor and the participants are involved in the course, class or lesson at the same time, through Web conferencing. While; (ii) Asynchronous e-learning, is a computer assisted training where the instructor and the participants are involved in the course, class or lesson at the same time, through Web conferencing. While; (ii) Asynchronous e-learning, is a computer assisted training where the instructor and the participants are involved in the course, class or lesson at different times. For example, through Web-based training (WBT), e-mail, blogs and electronic bulletin boards. This method allows participants to access training materials at any particular time. For that reason, LIS schools in Nigeria need to choose from any of the two approaches. Kumbhar (2009) further added that, apart from the Internet, and other network tools and techniques, the e-learning community extensively uses certain tools, such as course management systems (CMS), blogs, wikis, e-mails, messenger, and e-learning 2.0 which the LIS schools are increasingly choosing from.

Several studies relating to e-learning in the LIS education have been carried out. For instance, Chowdhury and Chowdhury (2006) examined the scenario of e-learning facilities and the support provided to LIS departments in the United Kingdom. Their study found that, all the concerned LIS departments have adopted ICT for offering e-learning, and also a number of the departments used virtual learning environments (VLEs) for e-learning; while others used in-house intranet systems, as well as specially built in-house system. In another similar study, the American Library Association (ALA) as quoted in Marek (2009) accounted that within the 62 ALA-accredited LIS graduate schools, 41 LIS schools (66%) presented some of their programmes online, while 14 (23%) LIS schools offered their complete programmes online. This indicates that 89% of ALA-accredited LIS programmes were provided online.

Islam et al. (2011) employed an online survey to investigate the global situation of e-learning in Library and Information Science programmes. Their study which examined 370 LIS programmes, found that 85 LIS programmes were providing degrees and other related certificates that comprises of certificate courses, diplomas, Bachelor's, Master's and Doctoral programmes. Furthermore, Blackboard or Blackboard vista was the most regularly used e-learning tool in the LIS schools. Their study found the following geographic distribution of e-learning in the LIS programmes across the globe.

Geographic Location	Number of Programmes
Africa	66
Asia	204
Europe	22
America62	62
Oceania	16
Total	370

Table 2: Geographic	Location of LIS	Programmes	Offering e	-Learning Globally
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Source: Islam et al 2011

While in Nigeria, Eke (2011), conducted a study aimed at examining the factors affecting LIS student's intentions towards accepting e-learning at the University of Nigeria Nsukka (UNN) LIS school. She reported that, although e-learning in Africa was still at an infancy level, the result of her investigation indicated that many of the LIS students had the intention of adopting e-learning, which according to them has become essential for their successful learning process.

Methodology

The study used an online survey, as well as content analysis of information as the research approach for this study. Data were gathered from the Website of the Librarians' Registration Council of Nigeria (LRCN), as well as some of the documents provided by the LIS schools.

Proposed Model for Developing an e-Learning Curriculum for LIS Schools in Nigeria

Efforts to develop a curriculum can be both exciting and challenging. This is, because, appropriate curriculum development exercise requires the involvement of all relevant stakeholders. Similarly, the curriculum is expected to mirror the local situation, as well as the current global trends in a particular profession. Consequently, in order to develop an appropriate e-learning curriculum for the LIS schools in Nigeria, the following ways are recommended:

• The need for organized workshops by the LIS schools in Nigeria, aimed at addressing and at the same time identify the prospective learners, what they are expected to learn, the objectives of the e-learning programmes, market demands, as well as how the programmes would be delivered. Also, to determine the various levels of such programmes, the assessment methods, and the expected learning outcomes.

These processes would ensure the establishment of solid and robust curriculum for any e-learning programme. Govindasamy (2002) observed that for any e-learning implementation exercise to succeed, it must be rooted in strong teaching methods.

- The e-learning curriculum should be jointly designed by the respective faculties, and all other relevant stakeholders', most especially, the employers' of the LIS graduates. The input of stakeholders' in curriculum development is very critical. In fact, various professional associations' like the IFLA, ALA, and ALIA have for long recommended for the involvement of stakeholders in LIS curriculum development.
- Similarly, it is necessary to ensure that the interest of the local condition where the LIS schools operate is aggressively addressed in their curricular content.
- Ensuring compliance with the requirements of the established standards for e-learning programmes, such as the ones recommended by the IFLA, ALA, ALISE, and other relevant bodies. This was also suggested by Panahon II (2007), who recommended for the benchmarking of the proposed e-learning curriculum in European Studies against established quality standards. The LIS schools in Nigeria should in addition develop their own standard that will serve the interest of the country from the existing standards.
- In order to ensure quality, concrete decision needs to be taken regarding the modalities of curriculum review and revision period. In this regard, LIS schools in Nigeria are expected to keep abreast of the latest happenings in the LIS field, as well as in the new e-learning world.
- For the curriculum to be successful, all the LIS schools in Nigeria are expected to make sufficient arrangement/installation of state-of-the art e-learning technologies, infrastructures, and all other necessary teaching aids. These guarantee proper curricular implementation.
- Identifying the methods of delivery of the e-learning programmes. E-learning can be delivered in one of the following two modes (Chowdhury & Chowdhury, 2006): (i) Synchronous e-learning: this is a computer assisted e-learning environment where the instructor and the participants are involved in the course, class or lesson at the same time, through Web conferencing. While; (ii) Asynchronous e-learning, is a computer assisted training where the instructor and the participants are involved in the course, class or lesson at different times. For example, through Web-based training (WBT), e-mail, blogs and electronic bulletin boards. This method allows participants to access training materials at any particular time. Therefore, LIS schools in Nigeria need to choose from any of the two modes.
- Networking among the LIS schools in the country for joint cooperation. Furthermore, the networking among them would equally ensure consultation, and also advice may be sought from each other concerning the experiences of the LIS schools about the e-learning programmes. It is also anticipated that such networking would bring about exchange of resources and technology in the LIS schools.
- Another very important strategy is the need for training and re-training of the LIS faculty in Nigeria, particularly in relation to new ICTs and other emerging areas in the profession such as Knowledge Management (KM), Information Literacy, Information Architecture (IA) and Digital Libraries (DL). Enriching academic staff knowledge is very significant to the success of the e-learning programmes.
- An additional strategy may involve the need for academic staff exchange among the LIS schools in Nigeria. This could bring exchange of ideas from the experiences of the academic staff in relations to the running of the e-learning programmes. Furthermore, those LIS schools that are advanced technologically may be required to provide a helping hand to those that are not so fortunate.

To this end, this paper is motivated by the need to propose a framework that takes into consideration the vital aspects in curriculum development. The diagram in Fig. 1 specifies the proposed framework for developing the e-Learning curriculum for LIS schools in Nigeria.



Figure 1: A Proposed Framework for Developing an e-Learning Curriculum for LIS schools in Nigeria (Model adapted from Abubakar and Hassan 2013, p 169; Framework for developing e-Learning Programmes. Lewis and Whitlock, 2003, p. 2)

Benefits of Adopting e-Learning in Nigerian LIS Schools

Like many universities in the world, LIS schools in Nigeria can also think of on-line course system for the LIS education. This is because adopting e-learning by the LIS schools in Nigeria will help improve the accessibility of LIS programmes to prospective students irrespective of location or time.

Catherall (2005) positioned that the practice of e-learning offers enormous benefits to students because of its convenience, flexibility, accessibility and cost effectiveness. Other writers also emphasized the benefits of e-learning. For instance, Islam, Chowdhury, and Islam (2009) recognized the benefits of e-learning to LIS professionals to include:

- Offering new opportunities for LIS professionals to develop their knowledge and skills in a wide variety of areas.
- e-Learning makes the LIS professionals more confident and capable in the area of ICT usage.
- Offering the information professionals the opportunity to develop new roles and responsibilities both within and outside the information environment.
- Providing opportunities for professional collaboration in a wide variety of areas, because of its flexibility and cost effectiveness.

E-learning is learner-controlled, in which case the individual has authority over the learning environment; it is self-faced giving chance for students to work with their own time table and learners can access training when it is convenient for them, at home or in the office (Eke, 2011). Furthermore, e-learning also offers opportunities for intending part-time students who may not have the chance to attend a formalized LIS programme in the LIS schools. Considering that situation, Huang (2010) asserted that e-learning can be viewed as an alternative to traditional instruction for students who want to pursue a part-time postgraduate programme, but who are hindered because of job responsibilities and time factor.

Hatua (2006) presented a number of e-learning benefits which include the following:

- Augmenting traditional textbook materials with online resources and content portals.
- Enhancing customary "chalk-and-talk" lectures through the use of rich multimedia and interactive content.
- Providing students with Web-based tutoring on demand.
- Allowing learners to access their course work from multiple locations, including the home, rather than solely on school grounds.

In a nutshell, e-learning provides a tremendous alternative to traditional form of teaching that has been in existence for so many decades. The benefits of e-learning to LIS education can be summarized in the following manner.

- Cost effectiveness
- Flexibility
- Convenience
- Faster delivery
- Greater collaboration
- opportunities for part-time studies

Challenges of e-Learning in Nigerian LIS Education

The successful establishment and implementation of any e-learning programme depends upon the adequate provision of ICTs, as well as ICT skilled personnel. However, in the case of Nigeria, despite the potential benefits of e-learning, Nigerian higher institutions still face many challenges. Some of the challenges include:

- Technology Challenges: Technology is a fundamental requirement for the development of any potential e-learning programme. Consequently, in order to ensure the overall success of the e-learning programmes in the Nigerian LIS schools, proper hardware and software must be provided, in addition to sufficient number of computers, Internet access, audio/video, as well as a dynamic LMS system. However, Nigerian institutions face a number of challenges on the technological facet. Many institutions lack technological infrastructure and computer laboratories, as well as inadequacy of Internet access. There is also the issue of lack of ICT integration into the learning process in Nigeria (Diso, 2007).
- Personnel Challenges: A further critical challenge is the need for highly skilled staff that will be expected to be keeping in touch with new skills and knowledge, especially technology. Therefore, it is worth stating that e-learning programmes cannot prosper if the institutions running them lacked expertise. However, in the case of Nigeria, many information professionals and faculty lack adequate ICT skills that will make them effective in the digital age (Gbaje and Kotso, 2011).
- LIS School's curriculum: The successful mounting and implementation of any e-learning programme no doubt rest on having a proper curriculum development. Since the curriculum is expected to be dynamic rather than being static. In view of the fact that e-learning is different from the traditional learning, the curriculum and pedagogical methods need to be modified and developed to employ ICT application effectively and they should be specifically designed to fit the e-learning landscape (Andersson & Gronlund, 2009 as cited by Rhema & Miliszewska, 2010). Accordingly, curricula developers must be able and qualified to redesign courses according to the specific requirement of ICT and e-learning (Rhema & Miliszewska, 2010).
- Management and Financial Challenges: The accomplishment of every e-learning programme depends on proper managerial and financial support, without which no any significant development can be recorded in that aspect. Hence, in order to make certain the successful implementation of the e-learning programmes in the LIS schools in Nigeria, adequate managerial and financial assistance must be provided by the respective governments and other sponsoring bodies of the LIS schools in Nigeria.

Prospects of e-Learning in Nigerian LIS Education

The prospects of e-learning in the LIS education in Nigeria are many. Some of these prospects include:

- Extensive opportunities for LIS education in the country.
- Assisting technology and knowledge transfer among LIS schools in Nigeria.
- Ensuring collaboration among the LIS schools in the country.
- Meeting the changing needs/students' expectations.
- Supporting change and advancements in LIS education in the country.

Conclusion

The paper has reflected on the importance and benefits of adopting e-learning in Nigerian LIS education. It also discussed the possible challenges and prospects of e-learning programmes in the Nigerian LIS education. The

paper concludes by stressing that, adopting e-learning by the LIS schools in Nigeria has become a critical necessity if they are to be part of global educational system. Thus, it is therefore, important that LIS schools should comply with this very important requirement.

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