

Enhancing Library and Information Management through Multimedia and Hypermedia Instructions

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Abstract

The study focused on Enhancing Library Service Management through application of multimedia and hypermedia to drive library functions of information dissemination – (diverse recorded knowledge) to users – (learners, teachers, lecturers and researchers). The ongoing digital age – era of information communication technology (ICT) which permeates fast into the quantity and quality, the range, speed of information generation, repackaging, preservation, transfer and dissemination in our lives today and world of works should be taken full advantage. This 21st century library services should adopt multimedia and hypermedia to drive its services/functions to keep abreast of the moving trend with ICT impact. Studying shows that multimedia, hypermedia, their associated equipment and technological expertise if adopted can greatly enhance library information functions by assisting the dissemination of the printed word. Multimedia resources form part of our cultural heritage. Research has confirmed that hypermedia convey huge quantum of information that could be preserved for future use. Realistically study again indicates that rich varieties of media expression in our society could be accessed, stored, and made available to library patrons. This could greatly enhanced learning and education. Study in addition shows that multimedia and electronic resources have high potential to improve learning and knowledge requisition in all ramifications. The role of multimedia and hypermedia facilitated teaching and learning is one of the widely current discussed issues in contemporary education. Conclusively, libraries of all types – (the National Public, Academic, Research, Special and School) in this 21st century should embrace multimedia and hypermedia tools to boast their information management services effectively. Multimedia combines text, data, images, animation, photograph, audio, video, which are converted into information digital media to create a platform that allows learners to manipulate, explore, and interact at their own pace and time of learning.

Keywords: Library, Information Management, Multimedia, Hypermedia

Introduction

The digital age is transforming the quantity, range, and speed of information and communication in our lives. In the 21st century, libraries have ensured that they have a place in this moving trend as library services have improved greatly as a result of the absorption of information and communication technological tools. As information providers, Librarians should be concerned with the provision of information in the formats most suited to the differing needs of various types of user, each of which must be clearly differentiated. A library exists to serve its community and consequently the needs of all members of that community must be accommodated, the old and the young, the able and the disabled, the hypermedia resources and their associated equipment are regarded as of greater importance than the printed word because the level of literacy is such that oral and visual expressions are essential for the purposes of communication.

The need for still images, films and sound on the more traditional non-electronic audiovisual carriers still exists alongside the growing possibilities of the internet. Multimedia and computer based information even visitor is a potential user of audiovisual materials in libraries. Almost every library user or as they have to deal with all sorts of material, including print, audiovisual, electronic (including internet) and multimedia. Librarians should be aware of the potential of audiovisual and multimedia formats as resource materials and include them in their collections. However, libraries contain textbooks, journals, indexes, abstracts, newspapers and magazines, reports, CD-ROM databases, internet/E-mail, video tapes/cassettes, diskettes magnetic disk, computers, micro forms etc. These items are not only for the education, enjoyment, and entertainment of library users but also serve as a fountain for researchers to do

independent work, use computers, audio-visual resources; to host special events and book clubs; research, teaching and for learning. The importance of audio-visual resources in the educational process and in a library environment is quite evident (Iyamu and Aduwa, 2004).

Swank (2011) defines a library as an institution that manages the intellectual products that learners can gain access to readily. Popoola and Haliso (2009) define library information resources as those information bearing materials. That is in both printed and electronic formats, such as textbooks, journals, indexes, abstracts, newspapers and magazines, reports, CD-ROM databases, internet/E-mail, video tapes/cassettes, diskettes magnetic disk, computers, micro forms etc. These information materials are the raw data that libraries acquire, catalogue, stock, and make available to their patrons, as well as use to provide various other services. Multimedia resources/materials are part of our cultural heritage carrying a huge amount of information that needs to be preserved for future use. The rich variety of media expressions in the society should be reflected in the services offered to users by libraries. Non-printed materials are however, often referred to as multimedia resources. They are the products of advanced technology, some of which require special equipment to operate. We also have electronic resources as part of the library collection development and preservation.

The 21st century audio-visual centers can and should be the hubs for increasing students' achievement. The Resource Center is a library of audio-visual resources for all ages that cover many of the concepts of the organizational institution. It is operated by the professional librarians, resource center manager and para-professionals. Multimedia collection contains both online resources and multimedia items to borrow and use. The library also provides facilities for students to watch video and DVDs, listen to sound recording and view microfiches and microfilms.

The Concept of Library and Information Management

A library is an institution or agency/organization that supports education learning and research in all ramifications for its clients. The library is made up of a collection of information materials (books, journals, online materials), a place to house the collection (building, room or the Internet), services, (reference, circulation, cataloguing, etc.), and staff to collect, organize and provide access to the collection. There are several types of libraries; each has its own set of clients with varying reasons for exploring the library for knowledge. Despite these differences, however, all libraries have a common mission, that is, to provide equal access to information to the community that it serves. For the library to achieve this objective, certain information communication technology (ICT) equipment must be made available to facilitate ease of access to information most especially information in non-print format owing to the prevailing global trend in the information world. All libraries must therefore look into the future to be proactive to develop long-term strategies to meet increasing user needs. With technological developments now affecting the information industry, libraries must plan to be ready for change in the coming decade. No one strategy is best for all libraries. Each one must examine its own environment and resources. Each must note its own strengths, weaknesses, opportunities and threats, as well as its own mission, vision and goals of the present body.

Library management involves functions such as planning, organizing, leading, and controlling. Planning is about the library systematically making decisions about the library goals. Organizing the resources, assembling and coordinating human, financial, physical, informational, and other resources needed to achieve the ultimate library goals. Leading is about functions that involve efforts on the part of the librarian to stimulate high productivity and performance by employees, and

controlling, and monitoring various library operations and services. These four management functions are highly integrated, but libraries that excel in organizing material resources and in leading their human capital are known to provide better performance. The organization of information/knowledge is an essential preliminary to its effective exploitation and dissemination. As the quantity of knowledge expands, the need to organize it becomes more pressing. A vast number of different means of organizing information have been devised and exploited since the earliest times. With the vast output of new information and ever-increasing degree of specialization in all areas of human knowledge, heavy demands are being placed on library information storage and retrieval systems which can be scarcely met by the traditional methods except with the use of IT (information technology) devices. The improvements and changes in computing and telecommunications and the integration of the two fields have had a huge

role to play in the methods of information processing and dissemination in libraries; thus improving the quality of such libraries.

It is of no doubt that IT plays a significant role in education generally and library operations in particular as attested to by Nwizu (2008). The use of multimedia and electronic resources has broken the barriers of time, distance, and local, which impeded the growth of formal education, just as Adeyemi (2004) emphasizes that students use these resources to complete major academic assignments. Multimedia and electronic resources have the potential for enhancing student learning. The role of these resources in teaching and learning is one of the most important and widely discussed issues in contemporary education policy of today. Libraries, ICT's has tremendously changed the management of resources or house-keeping operations as well as the way services are delivered. While general IT application tools and Integrated Library Management Systems are largely used in housekeeping operations, like acquisition, cataloguing, circulation control, serials control etc; Internet has been used extensively as a resource as well as a tool to deliver the Library and Information Services.

Overview of Multimedia and Hypermedia Instructions

Libraries are embracing emerging technologies for document management. These technologies include multimedia objects. It requires new methods of all aspects of multimedia data management. Starting from the source through storage to delivery libraries have to use modern network and servers technologies in order to supply or deliver services of a high quality of which the introduction of multimedia and hypermedia resources is an important part.

What is Multimedia/Hypermedia?

Multimedia is the combination of some or all forms such as text, data, images, animations, photographs, audio, video which are converted from different formats into a uni-format digital media and is delivered by computers. Unlike the analogue media (*TV* programmes), the digital media which allows users to manipulate according to the needs, use at their pace, and interact at any point of the program. When a multimedia program is developed in a hypertext environment, the resulting product is called hypermedia. *So* multimedia would then be a part of the hypermedia. All hypermedia products are multimedia products but not vice versa. The basic difference between hypermedia and multimedia is in the organisation and linkages of the information fragments. The information chunks/fragments in multimedia are organized linearly whereas in hypermedia, these are organized non-linearly with links to each other.

The main elements of the multimedia are:

- (a) Text: information about an object/ event, etc; notes, captions, subtitles, contents, indexes, dictionaries, and help facilities.
- (b) Data: tables, charts, graphs, spreadsheets, statistics, and raw data.
- (c) Graphics: both traditional and computer, generated (vector form) such as drawings, prints, maps, etc.
- (d) Photographic images: (raster form): negatives, slides, prints (both from digital still & video cameras and scanned photographs).
- (e) Animation: including both computer generated, video, etc.
- (f) Audio: including speech and music digitized from cassettes, tapes, CDs, etc.
- (g) Video (digital): either converted from analogue film or entirely created within a computer.

The Place of Multimedia and Hypermedia Instructions towards Enhancing Library and Information Management Services

In this technologically driven world, the use of digital contents for creating, storing, managing and sharing information has become a norm among librarians and library users. It is witnessing a transformation which allows both parties to share their experiences in a more natural and compelling form using the key elements of multimedia (pictures, audios, videos, and word processed text) in an interactive manner. Drawing from this platform, it is possible and pleasant to make learning occur through interaction with rich learning environments using online or standalone interactive multimedia and hypermedia thus making a significant progress in information management. Hypermedia is an emerging technology, which uses information and knowledge management techniques appropriate for the integration of hypertext with images, video, sounds, animation and simulations for teaching and learning purposes in the library.

Sharma and Hannafin (2007) considered it as an application that shows direction and relationships among concepts and information already integrated with multiple media elements. The application is mainly for the purpose of facilitating easy access to, and manipulation of the information encapsulated in the data bank. In addition, hypermedia systems offer the user a direct access to all information units represented in the hypertext base by means of two information retrieval modes, browsing and searching for both stand alone and World Wide Web (WWW). In line with this, Berlanga and Gracia (2005) remarked that hypermedia is particularly appropriate for library users who are already familiar with searching of information in the library and reading books and encyclopaedias thus facilitating easy access and retrieval who are familiar with internet browsing would find links and cross-references leading to the bulk of information for careful systematic search within an encompassing, up to date online networked library environment.

The potential benefits of multimedia instruction are numerous. Thus, claims ranging from reduced learning time to cost effectiveness abound. One major benefit of multimedia instruction in the library environment according to Atienza and Tai (2009) is the degree of information control by the library user. Indeed, learner-controlled instruction allows library clientele to study material at their pace and put them under less pressure to perform within certain time limits. In the same way, Chang and Yang (2010) affirmed that learners can choose a logical route through the instructional material moving between text, images and sound, pausing for a time to interpret, analyse, and explore. As such, interactive multimedia adapts well to individual differences due to its variety of learning styles and high degree of learner control. Furthermore, the importance of interactivity in the context of multimedia-based instruction, suggest that interactivity makes it easy for library users to re-visit or explore specific parts of the instructional contents to test ideas, and to receive feedback. In these and many similar claims, Evans and Gibbons (2007) noted that interactivity is presented as an attribute of learning environments that enhances the quality of information management in the library and also in an educational setting.

In addition, Mayer (2005) emphasised that studying from material made with more than one medium is usually more effective than material comprised of only one medium. This is partly due to the fact that different parts of the brain process different information. For example, Mayer (2009) observed that some parts of the brain process text while other parts process visual information. Likewise, when multimedia elements (text, pictures, video, graphics, and animations) activate more regions of the brain, there is an increase in information management resulting in learning and retention compared to materials that require fewer parts of the brain to process information. Adegoke (2011), remarked that multimedia facilities can provide an enhanced or augmented learning experience at a low cost per unit, making the process of learning more purposeful, participatory, and flexible in time and space, and modified toward individual learning styles that unleashes a long-term gain to all. Deimann and Keller (2006) added that information in form of word definitions and spoken pronunciations for new vocabulary along with pictures, animated graphics, or video clips that illustrate processes or concepts being introduced or reviewed can be delivered through the hypermedia format providing library users with new experiences related to the topic being studied.

Interestingly, experts in educational technology have advocated the use of hypermedia instruction in educational settings to include: non-linear access to vast amounts of information; in-depth exploration of information on demand (Robberecht, 2007); interaction with the instructional material in a self-paced manner with attention- capturing or engaging capabilities (Dunser and Jirasko, 2005). The high value and potential of hypermedia as an educational technology tool cannot be obtained without paying attention to the hypermedia development tools.

Conclusion

The concepts of interactive multimedia and hypermedia have been elaborated and the discussion portrayed that multimedia and hypermedia instructions have the potential to improve information management in a library and educational setting, improve the general quality of instructional delivery and improve collaboration between researchers, developers and library end users.

The major attribute of interactive multimedia and hypermedia as noted by Sharma, Oliver and Hannafin (2007) is the degree of learner control which involves delegating instructional decisions to learners so

they can determine what help they need, what difficulty level or content density they wish to study, in what sequence they wish to learn material, and how much they want to learn using interactive multimedia, simulations, hypermedia, animated concepts and online databases. These attributes suggested that learners have control over the learning material increases, which leads to instructional effectiveness and efficiency, as well as learner independence, mental effort, and motivation.

Recommendation

The study identified potential benefits accruing to multimedia as indispensable tool for knowledge and information study and retrieval purposes. In addition, there is reduced learning time and cost effectiveness. One other major benefits of multimedia instruction in the library environment is that library user(s) could control instruction at their own pace under less pressure within time limits. Learners too can choose logical route through instructional materials, moving between text, images and sound; could even stop for a time to interpret, analyse, explore, and interact with the documents which facilitate learning and educational interpretation amongst other benefits.

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Emerging Technologies and the Future of Libraries: Issues and Challenges in LIS Education and Training in Nigeria

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Abstract

The dynamic nature of the world demands that all human endeavours and fields of knowledge should follow suit. With the emerging technologies in particular, various activities have been transformed for effective service delivery. It is fundamental for libraries to also adequately embrace the technology for sustainability and relevance. The survival of libraries in this modern period revolves on issues and challenges for the stakeholders to address especially the Library and Information Science Training Institutions. This paper therefore, focuses on the emerging technologies and the future of libraries: issues and challenges in LIS education and training in Nigeria. LIS curriculum, ICT facilities, non ICT compliance by some library educators and faculty placement of LIS department are identified as the issues and challenges in LIS education in Nigeria. The paper recommends a macro nature of LIS curriculum

Introduction

The year 1959 marked the watershed of library education in Nigeria. That was when the Institute of Librarianship was established at the University College, Ibadan, and the first set of students were admitted in 1960. The institute started professional training with post graduate programmes where graduates in other disciplines were admitted for postgraduate diploma programmes or Master of Library Science programme. The establishment of the Department of Library Science at the Ahmadu Bello University, Zaria, in 1968 brought about a revolution in library education in Nigeria. It started a four year degree programme in library science which became attractive to other Universities that also introduced the programme after ABU namely Bayero University, Kano (1977) and University of Maiduguri, Maiduguri (1978) to mention a few. According to Alhassan (2004) "the two library schools followed the pattern of Ahmadu Bello University with a four-year degree programme for professional training and diploma programme for para-professionals". In the year 1986, the University of Nigeria, Nsukka established a library school in line with the other three established after Ibadan, that is, running a degree programme and since then many other universities that established library schools also ran four year degree programmes. The 1990s was a turning point in library education in Nigeria as many library schools sprang up and running a four year degree programme.

These library schools were situated in the faculties of education and thus some education courses were included in their curriculum but the degree awarded is Bachelor of Library Science except Bayero University, Kano which awards B.A/B.Sc. (Library Sc.) and Delta State University which awarded B.Ed. However, the Delta State University in the late 90s floated another library school in the faculty of social sciences leading to the award of B.Sc. in Library and Information Science as a protest against the award of B.Ed in the faculty of education. Thus, two parallel library schools ran for some years in the same university until the issue was resolved and the two schools harmonized into one to award BLIS in the Faculty of Education. In 2001/2002 session the Federal University Technology, Minna admitted students for a five year degree programme leading to the award of Bachelor of Technology in Library and Information Technology situated in the School of Science and Science Education but with the creation of School of Information and Communication Technology, the department was moved to the School of ICT. The University of Ilorin followed the pattern of FUT Minna by establishing the Department of Library and Information Science in the Faculty of Communication and Information Sciences in 2010 making it one of the youngest library schools in Nigeria.

Abioye (2013) reported the following list of 25 university based library schools in Nigeria:

Table 3: List of Accredited LIS Schools in Nigeria

S/No	Universities	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, Markurdi	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 Badamosi 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, Akwa	Library & Information Science
18	Tai Solarin University of Education, Ijebu-Ode	Library & Information Science
19	Umaru Musa Ya'adua University, Kastina	Library & Information Science
20	University of Calabar, Calabar	Library & Information Science
21	University of Ibadan, Ibadan	Library & Information Science
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 Science

(Abioye, 2013-p.4)

Some of these universities, for example, Ibrahim Babangida University, Lapai are yet to commence the programme even though it has been accredited. In view of the large number of library schools in Nigeria, there is bound to be some variations in the curricula of the various schools. However, the National Universities Commission which is the regulatory body for all universities in Nigeria has provided a benchmark for all programmes in Nigerian universities. This is to provide minimum standards for the curricula of courses.

Emerging Technologies and the Future of Libraries

Libraries had played significant role at the different period of man's existence be it, ancient, medieval, renaissance and in modern life. These libraries have continued to champion the provision of information to the diverse users. Presently, the need for information has increased tremendously considering its importance in effective decision making. Various sectors of the nation strive to access and utilize relevant information for significant development thus, there is a high competition for it.

With different stages of development in the world, different ideas, methods or techniques of rendering services also manifested. This implies that the technique or technology of doing certain things may not be relevant at certain period hence the need for a more appropriate technology and technique. The nature of library services rendered some decades back cannot satisfy modern users. The future of any library can be endangered if it fails to make positive transformation in its service delivery but instead persists in the traditional method of service provision. Kwatra (2008) believed that the rapid transformation development due to the advent of information and communication technology demands for innovations in generation, collection, storage, processing and dissemination of information and knowledge.

In Nigeria, it is evident that most libraries still discharge their services traditionally. Considering the impact of information and communication technology in various sectors where it has been adopted, Ahmed, Oyedum and Babalola (2003) posited that libraries which are yet to utilize ICT in their routines may lose relevance as users may not be satisfied with the manual system of information service delivery.

To cope with the needs of users in this modern period, the acceptability and effective application of the emerging technologies in Nigeria libraries has become inevitable. To Aina (2013), libraries in some parts of the world have transformed from physical to virtual libraries where collections are not provided within walls but within computers using digital resources. He further postulated that libraries have evolved from ancient times when they contained mainly clay tablets and papyrus rolls to a situation where they provide public facilities for access to their electronic resources including the internet.

The nature of information resources and services has drastically changed to the extent that most patrons of this modern world cannot appreciate significantly the non-electronic resources and services. A library that is only strong in a non-electronic resources and services are losing value and experiencing non-satisfaction from users. In developed and some developing countries there has been a shift from the manual system of information service provision to the modern or technological device. In Nigeria, many libraries and information centers including library and information science training institutions have been adopting ICTs, but the impact has not been significantly felt as expected. For library educators and Librarians in Nigeria to adequately complete with their colleagues in the other nations, they need a significant transformation of their professional activities from the traditional to the electronic system (Ahmed, Oyedum and Babalola; 2013). In the same vein, Dike (2000) had previously postulated that if Nigerian libraries and Librarians are to be relevant in the new information age, they need to join the information technology revolution and fully incorporate IT into both practice and training. Since the future prospects of the libraries and library schools depend to a great extent on the adoption of emerging technologies, the following issues and challenges are worthy of mentioning:

1. **Library and Information Science Curriculum**

With emerging technologies, the future of libraries in Nigeria can be determined by the degree of information and communication courses incorporated in the curricula of the library training schools. No library school can produce complete and skillful products if its curriculum is weak and micro in nature. Since knowledge is dynamic, and change is constant, the curricula of various programmes and particularly library and information science education should reflect a high level of dynamism. Lawal (2003) postulated that education for librarianship is essentially concerned with transmitting knowledge and skills which are necessary for successful performance in the profession. This function, according to the author, places library schools at the vortex of the profession, and whatever change is necessary naturally originates from curriculum renewal.

The curriculum of library and information science in Nigeria has gone through a series of developments from 1960s to date. Usually, curriculum in any discipline is determined by societal needs which incidentally include the needs of employers of labour. As a result of this, curriculum changes are dictated by culture and technology.

The National Universities Commission (NUC) has the responsibility to set standards of the curriculum of academic programmes in Nigeria. In September, 2014 new minimum standards were published for all programmes in Nigeria universities. The minimum bench mark for library and Information Science provides for the following as core/compulsory courses:

i.	Libraries in its social and cultural settings	3
ii.	Introduction to libraries and Information resources	3
iii.	Bibliography	2
iv.	Organization of knowledge I	3
v.	Historical development of libraries in Nigeria	2
vi.	Organizational of knowledge II	3
vii.	Collection Development	2
viii.	Reference and Information Sources and Services	2
ix.	Technical Services in libraries	2
x.	Introduction to Information Science	2
xi.	Management of Libraries and Information Centres	2
xii.	Indexing and Abstracting	2
xiii.	Information and Communication Technologies in Libraries	3
xiv.	Library and Information Services to Rural Communities	2

xv.	Knowledge management	2
xvi.	Indigenous knowledge	2
xvii.	Infopreneurship	2
xviii.	Research and Statistical Methods	3
xix.	Research project	4
xx.	Field experience (SIWES)	6
	Total	52

(NUC, 2014 Pp7-8)

The total units based on the above are 52. However, the document stipulates that the minimum graduation units for LIS programmes are 150 out of which 60 must come from LIS. Even though the NUC prescribes the minimum benchmark for the curriculum, the various universities are at liberty to incorporate courses found necessary to meet the needs of the society. However, in contemporary time, the volume of information of information generated across the world now is so enormous that manual handling of them becomes difficult. This therefore, necessitates the incorporation of information and Communication Technology (ICT). As a result of the imperativeness of ICT in handling information, the training of librarians in ICT becomes inevitable. Therefore the curriculum of LIS had to be enriched with courses in Information Technology (IT) to produce manpower that are capable in meeting the needs of using ICT to power information handling. According to Aina (2007) apart from ICT and LIS core courses, the most important component of any LIS curriculum in Nigeria is the rural community information, given the fact that majority of the people live in rural areas.

He further proposed the following proportion of distribution of courses in LIS curriculum

Library and Information Science -	50%
ICT -	25%
Rural Community Information Services -	7.5%
Archives and Records Management -	6%
Publishing -	4%
Public relations/Advocacy -	2.5%
Basic Statistics -	2.5%
Communication and Writing Skills -	2.5%

(Aina, 2007 P.9)

Based on the minimum bench mark by the NUC and the aforementioned proposal made by Aina (2007), it is observed that many library schools in Nigeria have not incorporated significant number of ICT courses in their curricula. This has a serious implications as LIS products in Nigeria will find it difficult to compete universally nor will they be capable of providing effective services that can satisfy the needs of modern users.

2. ICT Facilities

For effective teaching and learning, the library and information science educators are expected to embark on several practical sessions as a means of providing expository knowledge and skills to the students. The skills acquisition can only be possible where there are adequate ICT facilities available. Presently, some library schools in Nigeria do not have adequate laboratories nor the ICT facilities adequate for an effective training.

In addition, accessibility to online resources has always been difficult both the library educators and their students. This is due to poor internet connection. In this prevailing situation, the right information that can enhance effective teaching may not be attained thus; students who are potential librarians and the libraries will be at the receiving end.

3. Degree of ICT compliance by LIS Educators

The extent of ICT adoption in any training institution in library and information science depends on the degree of interest and determination devoted towards it by the LIS educators. Though quite a number of these educators in Nigeria have acquired certain skills in ICT applications, there are still many traditionalists who find it difficult to comply with the use of emerging technologies. It

is obvious that an LIS educator who is not ICT compliance cannot impact any modern skills to his/her students. In this kind of scenario, the products of library schools will also be less skillful in ICT exploitation.

4. Placement of LIS Department in a faculty

In Nigeria, there have been divergent conceptions on the most appropriate faculty to house Library and Information Science Department in a University. Majority of LIS departments in Nigeria are in Faculty of Education. The first library school at University of Ibadan placed the Institute of Librarianship and later the department in the Faculty as a result of its proximity to the library where the pioneer Director was also the University Librarian. Many institutions have been using this example as a reference point including the National University Commission. The concerns of certain professionals have facilitated the shift of the department to other faculties like Faculty of Management and Social Sciences and more recently, Faculty of Information and Communication Technology. This shift has resulted in incessant reviews or restructuring of curriculum in order to suit the hosting faculty. For instance, the Department of Library and Information Technology at the Federal University of Technology, Minna, Nigeria has within ten years been shifted to three faculties/Schools namely: School of Science and Science Education, School of ICT and School of Technology Education. With this shift, the department has witnessed both upward and downward review of the curriculum especially in ICT courses.

Conclusion/Recommendations

Relevance is very fundamental in any effort or service one render. A library can only be relevant if its service provision at any period meets user satisfaction. The technique of effective service delivery in this contemporary period is for the libraries to embrace the emerging technologies. To succeed in this regard, the Library and Information Science Training Institute have a great role to play since their products are potential employees in various libraries and information centers. To this end, the curricula of library schools can make a significant impact if relevant ICT courses are incorporated. However, certain issues and challenges in LIS education and training in Nigeria cannot be underrated but it is believe that the following recommendations can address them:

- a) There are many experts or specialists in the information profession today striving to usurp the primary responsibility of librarians in the area of information provision because they are skillful in the use of ICT. In view of this, the library and information science training departments should endeavor to incorporate more relevant ICT courses into their curricula so that their products after graduation can provide or be pro-active in their information service delivery. The development of macro curriculum that is adequately balanced in all the necessary areas can also allow LIS products in Nigeria to compete with their counterparts from any part of the world.
- b) The management of the institutions of higher learning in Nigeria need to provide adequate financial support to allow the LIS department acquire most emerging technologies so that adequate practical classes can take place. An ICT library without the necessary facilities is amount to nothing but a well-equipped laboratory has a significant influence on skill acquisition.
- c) There should be a revolutionary shift from the traditional training technique in library schools to the modern system. To achieve this, the institutional administrators should continue to develop the LIS educators (lecturers) through attendance of courses, conferences, seminars, workshops, etc. on modern technologies and their applications. The LIS educators should not rely on government sponsorship alone but should also endeavour to self-sponsor since any additional skill acquired is for one's advantage.

- d) For a lasting solution on where to place the Department of Library and Information Science in Nigeria, the National University Commission should call all the stakeholders for a symposium where everyone will be given the chance to present his/her views. From the communiqué, a policy in this regard should be formulated by the NUC. Through this, the undesirable incessant curriculum review will be curbed.

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