ENHANCING QUALITY OF TEACHER EDUCATION IN NIGERIA: IMPACT OF ELECTRONIC/DIGITAL LIBRARY

Oghuvwu Victor Akpovona
Library Department
Delta State College Of Education, Mosogar. Nigeria

Abstract
The aim of this paper is to review e-libraries/digital libraries' role in supporting e-learning. Digital libraries offer technology based information resources and services to enable learners access relevant knowledge anywhere at any time. As such, digital libraries are inseparable from the learning process because they make e-learning possible. This paper highlights their respective roles in the libraries, role of the librarian, the inherent problems and challenges faced in using the e-library and some strategies and recommendations in which the problems can be tackled. . The paper provides a useful insight into the role and influence of digital libraries and online resources on e-learning and education generally.

Keywords: Electronic libraries; Digital libraries; education.

Introduction

The growth in e-learning, in which education is delivered and supported through computer networks such as the internet, has posed new challenges for library services. E-learners and traditional learners now have access to a universe of digital information through the information superhighway. New information and communications technologies, as well as new educational models, require librarians to re-evaluate the way they develop, manage and deliver resources and services. The library to some people is a building where a collection of books and other information resources are being kept for reading, studying and research purposes. The training of librarians and information professionals is needed so they can meet the challenge of providing information services in the new era. The critical need for libraries in developing countries is to understand how research practices are changing and what is required (with regard to infrastructure and skills) to improve and strengthen library support for research. Libraries are aimed at providing information to its users, so it is the job of the library to be able to make those materials available and accessible to its intended users or clients.

The coming of e-libraries has played significant and important roles in the modern library services delivery. From acquisition, processing, storage to the dissemination of information and information resources, e-libraries make it possible for libraries to deliver services to their users round the clock. E-library services has also made it possible for academic libraries to digitize their resources like theses and dissertations which are the

intellectual properties of their mother institutions and make them available to users anytime, from any place.

There has been a shift from the concept of libraries as repositions or storehouses for information materials to the concept of libraries as gateways to offer information resources located in any part of the world, gone are those days when libraries/librarians talked and boasted about the size of their collections, the emphasis today is not the size, but the ability of the library to connect and read through the internet facilities with the use of electronic data bases anywhere in the world. Digital libraries are opened to the wide public and as such they offer many possibilities of inclusion of their content in formal and informal learning. Calhoun (2014) investigated social roles of digital libraries which also include teaching, learning and the advancement of knowledge. For formal education, digital libraries can offer the following services: specialized educational digital libraries, portals for teachers or students, integration with learning management systems and access to primary sources,(Calhoun, 2014) E-library/Digital libraries have obvious roles to play in formal learning settings by providing teachers and learners with knowledge bases in a variety of media. In addition to expanding the format of information (e.g., multimedia, simulations), digital libraries offer more information than most individuals or schools have been able to acquire and maintain. Digital libraries are accessible in classrooms and from homes as well as in central library facilities where specialized access, display, and use tools may be shared. Remote access allows possibilities for vicarious field trips, virtual guest speakers, and access to rare and unique materials in classrooms and at home. The promise is one of better learning through broader, faster, and better information and communication services. These physical advantages promise several advantages to teachers and learners by extending the classroom, however, as with all technologies, there are costs and trade-offs to these advantages.

One clear difference between traditional libraries and digital libraries is that digital libraries offer greater opportunity for users to deposit information as well as use information. Thus, students and teachers can easily be publishers as well as readers in digital libraries.

Electronic/ Digital Libraries and Education

Digital library services are similar to those of traditional libraries. The difference is that, digital collections are in digital forms. The services are technologically driven. Less space is required for the users to occupy and access its services. Digital library materials can be accessed from anywhere on the globe provided electricity and network are available. Computers are the means to deliver digital services to its users unlike in the traditional library services where human labour is vital in its operations (Magaji, 2015). Digital libraries are indispensable for education because they offer up to date material, immediate access to a wide range of sources which do not exist physically, provide resources via an internet connection each moment from each place and because of these advantages, in digital libraries learning is independent process. The role of digital libraries is clear: they function as digital schools that offer formal packaging for specific skills and topics as well

as general browsing for creative discovery and self-guided, informal learning"(Abbasi and Solmaz, (2012). digital libraries serve at least three roles in learning: they serve a practical role in sharing expensive resources including physical and digital resources, equipment, human resources – librarians who serve to allow instructors and students to share expensive materials and expertise; they serve a cultural role in preserving and organizing artifacts and ideas as well as ensuring access to materials through indexes, catalogues, and other aids that allow learners to locate items appropriate to their needs; and finally, they serve social and intellectual roles by bringing together people and ideas with formal, informal, and professional learning missions. Libraries "both traditional and digital one have three roles in education: place for sharing reach information, maintaining ideas, and give awareness to bring together individual with learning aims. The increasing availability of digitized resources allows educational institutions to provide students with more varied, more accessible and richer teaching materials than ever before. This encourages a more exploratory, research based approach to teaching and learning

The Role of Electronic/ Digital Library
The importance of an electronic library in this modern era also known as the information age cannot be over emphasized. The digital library is understood to have the information stored predominantly in an electronic or digital medium for easy access and retrieval of information to the library patrons or users. Digital libraries promise new societal benefits, starting with the elimination of the time and space constraints of traditional bricks-and-mortar libraries. Unlike libraries that occupy buildings accessible only to those who walk through their doors, digital libraries reside on inter-networked data storage and computing systems that can be accessed by people located anywhere. At their full potential digital libraries will enable any citizen to access a considerable proportion of all human knowledge from any location. From an access vantage the Internet provides a preview of the possibilities. The role of a Digital Library is essentially to collect, manage, preserve and make accessible digital objects. According to Jie and Bao-Zhong, (2012). The following are some of the functions of digital library:

(1) To provide friendly interface to users.
(2) To avail network facilities. It helps libraries preserve rare and fragile objects without denying access to those who wish to study them. Some materials that cannot be gotten physically can be bought online and be saved in the library so that patrons can have access to it.
(3) To support library functions It is convenient, once books are converted to digital form, patrons can retrieve them in seconds rather than in minutes, materials online are easily gotten than those in print form being shelved in the library.
(4) To enhance advanced search, access and retrieval of information.
(5) To improve the library operations. Reduces labour (no shelving) and saves the time of both the staff and the user, library materials stored in the system are easily gotten on the computer than done manually in shelves.
(6) To enable one to perform searches that is not practical manually.
(7) To protect owners of information.

(8) To preserve unique collection through digitization. Acquisitions and collection development have been made easier by the availability of online selection databases, which provide bibliography information, pricing abstract and reviews, through the internet, libraries can buy books online, negotiate prices without having to meet the authors or book vendors. Other roles of digital libraries are; It is convenient, once books are converted to digital form, patrons can retrieve them in seconds rather than in minutes, materials online are easily gotten than those in print form being shelved in the library.

They occupy millimeters of space on a magnetic disk rather than meters on shelf. The magnetic disc can save large materials and it will reduce space on the shelve.

Enhances immediate receipt of issues and eliminates the problem of missing issues, files stored in a computer can easily be retrieved when missing, but when the materials are in book form, they can easily be missing and no available copies which makes the library loses it value.

In cataloguing and classification some schedules are online and cataloguing information and holdings of other libraries can now be searched from remote locations. Libraries that operate in a centralized or cooperative system of cataloguing can enjoy the e-libraries, as it allow them to have access to other libraries. Virtual reference queries have been developed such that librarians can now answer reference queries and guide users through online services such as online chats, email.

It must be emphasized that the electronic library does not replace the traditional library services; rather it is another means of providing easy access to information that are not easily available. Electronic libraries are about new ways of dealing with knowledge: collecting, organizing, preserving, propagating and accessing it.

The Role of the Librarian in Electronic Library
Gibbons (2004) reason that since the range of digital content can be vast, which includes text, audio, video, images, learning objects and datasets, born of digital or of a physical medium that has been digitized, such as scanned images, digital librarians could be defined as bridges between digital resources and users. This implies that he or she must be skilled in the use of Information Communication Technology (ICT). Librarian's job has also changed as it began to depend more intensively on information and communication technology. According to Sreenivasulu (2000), the librarian's role is now oriented towards „consultancy to the users and providing digital deference services, electronic information services, navigating, searching and retrieval of digitized information through web documents that pan the universal digital library or the global digital library". For Ashikuzzaman (2016), librarians must assert themselves as key players in the learning process, thereby changing their roles from the information providers to educators, they should become information gateways and advocates the librarian's involvement in teaching communities so as to meet information needs of the students

The increased amount of information and technological advances has changed the nature of the libraries profession, the role of the library has broadened beyond the

traditional library model with its emphasis on physical resources. The concept of the library in physical structure is rapidly changing to that of an electronic or digital environment. Going into library no longer requires physical visit but virtual. Library resources are increasingly being expanded to include electronic formats to support user expectations.

Other notable changes on the library scene are that librarians are becoming information and knowledge professional. Librarians before the information age/era measured the effectiveness of their collection in terms of volumes of books and journal titles. This emphasis has shifted to easy accessibility of collections and data bases in some distant locations. It is no longer ownership but easy accessibility to desired information that counts.

The explosive information revolution has placed information at people's finger tips. A click at a button on a computer can bring forth a great amount of information. In such a situation, the tendency is to rely on self rather than the librarian in the search for information. If information can be obtained so effortlessly, why should users go to the library instead of getting it at home or in the office? The intermediary role of the librarian between information and the user is under threat. In view of this development, librarians Khoo (2005) observe that librarians now go the extra mile to provide 'value added' services including research skills and skills are synthesing and packaging information to support readers work and decision-making. They also develop online digitalised collections of core materials, developing online gateways, repacking information for users in the form of summaries, literature reviews. Not only has the librarians role changed from 'keeper of books' to information manager, the traditional librarian is able to move out of the library setting to the information environment where he can perform a variety of roles as 'information brother', 'website developer', 'information specialist', 'knowledge manager', 'software librarian' and 'information analyst . For Hermosa and Anday (2008) librarians transformed their jobs into virtual or digital environments, while customizing their services and resources for e-learners (they provide remote access to, and electronic delivery of, library resources, and are using communication technologies to deliver electronic reference services and instructional support

The change have brought into focus, the issue of competencies for librarians. The paradigm shift has brought about major challenges for library and information professionals who now require a variety of competencies to enable them perform in the new system of libraries (e-libraries).

Challenges for Effective Electronic Libraries in Nigeria
In running an electronic library, there are challenges that both the librarian and the patrons face in having ease to making good use of the library.

Funding is a major factor in setting up an electronic library because it needs money to be able to set up a modern day library. Computers and networking are very expensive to handle, buying books online or making information available to the end user is not as easy as it sounds, money is heavily involved and that is a major hindrance in setting up an electronic library.

Inadequate professional staffs: in setting up an e-library, the librarian and the other library workers most at least have an idea about ICT's and how to go about it. If the library does not have such qualified staffs then it becomes a problem because the library needs someone to put the users or clienteles through when information is needed online. Operation of the E-Library requires a lot of Skill and Training from the User. The User should be able to access the materials and resources, needed to acquire knowledge and information .training of an individual, using the E-Library, enables for skills acquired to gain employment. However, most Libraries in Nigeria, do not have the skills on how to operate the E-library.

Most Librarians do not know how to use the Computers or access the Electronic Library. Many Libraries in Nigeria, still acquire information or data through outdated materials, articles, books, or Journals.

Most Students at the higher Institutions, find it difficult to use the E library. This is in relation to the non-availability of Computers, or Internet networks. Students write out their school assignments merely by using textbooks or materials that may be outdated for their school projects. It is due to this that such Students, find it difficult to use the Internet to assess the E library services, in Schools, which will enable them study properly.
Students in Schools in Nigeria are not taught to be computer literate which make them more unable to equip with recent knowledge, through E. Library.

The lack of Student knowledge of Computer Literacy, was a recent lamentation from Nigerian Joint Admissions Matriculation Board. The Board organizes a unified exam system for Students, seeking admission into the Nigerian Universities. The Board observed that Students, are not able to use the Computer Based Testing, used for the examinations. Most of the Student Candidates barely knew how to operate the computer device and this affected their academic performance. The Board lamented that there was need for more electronic learning centres in Schools or in Public. This will enable more Individuals, have better knowledge on Information Technology.

Use of some of the online materials is limited by copyright laws and licensing agreements. Digital or Electronic Library does not control piracy of intellectual works or duplication of another Individual's Research, Journals or Articles, which may be carried out by the user.

Individuals like Researchers, Academics or Lecturers, may copy works of others published online. However, there has been caution for such to be stopped or resisted, the Electronic Library does not provide much protection. The Legislation called the Copy Right and Patent Act in Nigeria, has been put in place to combat piracy or duplication of works without the consent of the Original owner .The failure of Compliance, based on the act will attract Imprisonment or Fine. Although the Legislation is in place, and threat of punishment for noncompliance, it has not prevented for example, Students, Academics, or Individuals, from committing Plagiarism (i.e. passing off of someone's work for your

own). The Electronic Library has the little means to checking Plagiarism, while individuals make use of its broad resources and materials.

Inadequate power supply and internet services: in running an e-library, power failure is a major problem because the computers cannot be used without light. Most times libraries face the problem of slow and internet services failure or breakdown of servers which affects the e-libraries. Digital or Electronic libraries, cannot operate effectively without constant electricity supply. Nigeria has poor service of Power Generation. Most States in the Country, hardly generates less than 18hous of Power Supply. This does not make the use of E-Library, fully operational.

Dependency on technology. There is too much reliance on technology to operate Computers, or E-Library effective. Technology often is upgraded either by a new software or application, and would require Adjustments or Amendments.

E-Library will have issues in operating effectively without Internet networks and a good Electronic Device. Most Libraries in Nigeria do not have the E-Library, because information Technology is not easily accessible. Internet Providers in Nigeria, provide Wireless or Broad Band connections that is not affordable to most. Offices and Business Organizations, find it almost difficult to make payment for monthly subscriptions, for Internet. Without using the Internet, availability of Electronic Library would be impossible.

Importance of E-Library Services in Nigeria
Provides centres to integrate E-Library Service:
Recently, Nigerian Tertiary Institutions have begun to provide centres where E-libraries, are to be located. This is to improve Students' ability to access the Library to carry out research, school projects or Assignments. Building electronic resources encourage more Students having access to more resources and materials, establishing centres, by promoting use of Electronic Library, for easier school work activities. E-libraries has a very vital role to play in library and information services, most libraries and librarians should try and set up an e-library for effective use of information resources available worldwide. In setting up an electronic library, whether it is owned by government, institutions or private individuals, funds should always be made available to ease the problems of buying online materials and also in running the day to day activities of the library. Library administrators should collaborate with their parent institutions or establishing authorities to gain some sort of financial assistance and any other form of assistance to help them in running the e-library. There is need for proper establishment of centres to promote the use of E library. This will enable for better access to information.

Provision of affordable internet services
Nigeria has internet services ranging from wireless, broad band and mobile internet services. Unfortunately, the services are generally not very cheap. Telecommunication companies in Nigeria, who offer internet services place heavy tariffs on their consumers, to enable them pay their taxes, for Government. There is need to make internet service providers, make their network affordable and more convenient for users. Once there is affordable access of internet, users can reach sources of E-libraries operating locally or even globally.

Adequate funding of Libraries

Nigeria needs more access to Electronic Libraries, which should have more locations. For example the National Library of Nigeria, has been unable to spread its locations to all the States in Nigeria. This is due to lack of funding. Construction and equipping a Library is very expensive. There is need for not only Nigerian Federal Government funding, but Private Enterprises Partnership. There is need for other sources of funding apart from Government participation, to build more Libraries, in Nigeria.

Legal Regulations for E-Library Usage

Government must make up better policies to ensure better use of the E-library in Nigeria. Legislation such as the Copy right Act of Nigeria may not be enough to stop individuals from duplicating other people's work. Section 37 of the Nigerian Constitution is the only standard legislation that covers for the Privacy Rights of Nigerians. There should be a new legislation that covers privacy of individuals using data as well. An example of such Legislation Nigeria can adopt is the Consumer and Data protection Act. In running an electronic library, buying online materials are very important, so the library must be able to agree to terms and conditions of the copyrights laws and licensing agreement in other to have full access to online materials, even if it means registering with such an organization. This idea is very good if applied also to other internet service providers in Nigeria. It will save cost and also make internet services, like E-library affordable and accessible.

Computer Literacy Training Programmes and retraining of staff

For individuals to be use E- Library Services, there must be accurate knowledge of how to use electronic devices like the computer. Individuals when trained should have acquired necessary skills, to retrieve information and other intellectual resource materials. The management train and retrain staff. They can organize worships, seminars and conferences to talk about the computer literacy. Computer Courses should be taken by Individuals, Academics, or any Professional, to enable them have better knowledge on the use of technology.

Provision of working internet service network

In Nigeria, there is challenge of providing the best internet service. Nigerian Telecommunication Companies offer internet services which have been used in Schools, Business organizations, Firms, Non-government Organisation, Private or Public Enterprises.

Yet, the internet services experiences technical hitches, hereby generating very poor service, to Consumers. Lack of Business consistency occurring among Internet service providers, especially in Telecommunication companies, have not provided enough investment, for Technological Development in Nigeria. This is as a result of frequent Business takeovers.

Recommendations

E-library has become very useful in making information and information resources accessible and available to end-users in the library and the world at large. It is

recommended, with the coming of e-libraries, library operations and services should shift from the traditional in-house services to a digitalized library and information service. The emergence of e-library, library services have been made more sophisticated and interesting due to its user-friendly nature. Handling and availability of information resources has been made easier and quicker due to the growth and development in information and communication technology. It is advisable that E-libraries should be established in every facet of the country and the nation at large as its importance cannot be over emphasized.

Conclusion

E-libraries have become more responsive in making library users more literate in terms of using technology due to the continuous emergence of advancement in technology. These technology have not only affected the formats and sources of information, but also how and where to provide library services.

In conclusion, e-libraries have offered libraries new ways and dimensions of efficiently acquiring, organizing, storing and disseminating of information and information resources.

E-libraries have become more responsive in making library users more literate in terms of using technology due to the continuous emergence of advancement in technology. These technology have not only affected the formats and sources of information, but also how and where to provide library services.

References

Abbasi, F. & Zardary, S. (2012)."Digital libraries and its role on supporting e-learning", AWERProcedia *Information Technology & Computer Science*. 1, pp. 809-813

Ashikuzzaman. N. (2016). E-learning and digital library, 2016. Retrieved October 22, 2019.from http://www.lisbdnet.com/e-learning-digital-library

Calhoun, K (2014). Social roles of digital libraries, exploring digital libraries: Foundations, Practice, Prospects. London: Facet Publishing, 2014.

Hermosa, N.N & Anday, G, (2008). Distance learning and digital libraries: the UP open University experience, *Journal of Philippine librarianship*, 28, pp. 90-105.

Jie, S. & Bao-Zhong, Y. (2012). Development and characteristic of digital library as a library branch. 2012 conference on future computer supported education

Khoo, C.S. (2005). Competencies for new era librarians and information professionals Available at http://www//ico%20papers202%20Christopher%20khoo.pdf accessed

on 12th. December, 2019). http://www.lib.usm.ny/.../icolretrieved(march20,2012).

Magaji, S. (2015). Digital library education: *Global Trends and Issues Journal of Education and Practice*. 6 :17.

Sreenivasulu, V. (2000). The role of a digital librarian in the management of digital information systems (DIS), *The Electronic Library,* 18, pp. 12-20.

Shen X-X, Zheng Z. & Han S-G (2008). A review of the major projects constituting the China academic digital library. The Electronic Library 2008; 26 (1): 39-54.