World Voices Nexus
The WCCES Chronicle
ISSN: 2522-7483
Vol. 4 No. 3, Oct. 2020
Article 3 by Soe

Teaching and Learning with ICT in Libraries

12/24/2020 1 Comment

Abstract: Integration of Information, Communication, and Technology (ICT) will help librarians to the global requirement to replace conventional education strategies with technology-based teaching and learning tools and facilities. Library and information services are fundamental to the goals of creating, disseminating, optimally utilizing, and preserving knowledge. Data innovation is as of now taking center to arrange and changed the complete world into a worldwide town with a worldwide economy, which is increasingly dependent on the creative management and distribution of information. In this 21st century, the term “technology” is an important issue in many fields including libraries. This can be because technology has become a knowledge transfer highway in most countries. Integration of Information, Communication, and Technology (ICT) in libraries refer to the use of computer-based communication

promoting the e-resources at no cost to the library. Based on the finding of a literature review of information communication technology in libraries the paper highlights information communication technology and the role of libraries.

Key Words: Information Technology, Information and Communication Technology, Role of libraries, Librarian

1. IntroductionICT integration in education generally means technology-based teaching and learning process that closely relates to the utilization of learning technologies in libraries. Librarians in universities are innovative in their use of new information technologies to provide access to a range of multimedia sources. Today's libraries teach students the information handling skills to last a lifetime. Libraries organize collections and provide access and services that incorporate changes in teaching, learning, and information technologies. Libraries are established for the systematic collection, organization, preservation, and dissemination of knowledge and information. Man needs to preserve and maintain the valuable knowledge and information contained in the books and documents because we want to preserve our knowledge and wisdom for the coming generations. Libraries are an essential link in this communication between the past, present, and future. Libraries provide access to the information they need to work, play, learn, and govern. Libraries have been identified as one of the key elements for open access to information, which is crucial to educational development. Libraries often provide a place of silence for studying. Most academic libraries are linked to other libraries in cooperative networks, enabling them to share scarce and little-used materials required for advanced research. Libraries in carrying out this role of education can provide necessary materials such as textbooks, journals, magazines, and exercise books related to the curriculum of the existing literacy institutions in the community be it conventional schools or adult classes. In this way, it has assisted in the campaign to make society a more literate one. Libraries are regarded as the people's university providing independent decision making. Libraries attempt to meet a wide varies of reader's needs, providing varied information resources such as textbooks, journals, literary books, and other publications.

The information has emerged as the prime in the 21st century. ICT has exerted a profound influence on traditional academic libraries. The use of computers for library operation avoids respectively jobs and saves a considerable amount of time, resources, and labor. It also speeds up technical processing and information services. ICT has been a means to bring quality services. In the present scenario, the library and information centers at a global level can provide access to;

- Online databases across the country and worldwide
- Comprehensive statistical databases and content page services
- Full-text information sources with keyword searching

Teaching students and faculty to use new ICT may have become one of the important roles of librarians and information managers. Information and communication technology (ICT). It plays a vital role in bringing about changes in society. The importance of ICT in the library can be realized from ICT

of ICT application in the library. The attitude and skill of library professionals can be developed positively by providing training them and conducting seminars and conferences on the ICT application in the library. Trained professionals with ICT having a positive attitude will ensure the development of libraries and information centres.

2. Role of Libraries in Education

The role of the library can be defined within the framework of the university's mission and a library development program can be undertaken accordingly. The academic community particularly in a university utilizes library services for research and teaching purposes. Academic work is supported by the library. Education consists of all these experiences that affect the individual from birth until death. Education is essentially a process of growth and development which goes on throughout the whole life." The purpose of education is essentially that of effecting desirable changes in individuals who in turn change different aspects of the life of the society that is social, economic, political, technological, or cultural. Education directs and changes the people and enables them to change society in relevant ways to conquer its environment for the benefit of mankind. Education shall be directed to the full development of the human personality and the strengthening of respect for human rights and fundamental freedoms. The University is an important agency for imparting higher education. The traditional functions of a university are mainly acquisition, preservation, dissemination, and extension of the frontiers of knowledge, the balanced education of individuals, and the training of personnel for all walks of life.

The academic community particularly in a university utilizes library services for research and teaching purposes. Academic work is supported by the library. Therefore, the library is rightly regarded as the heart of an academic institution. According to the Librarian's Glossary, " 'University Library' is a library or group of libraries established, maintained and administered by a university to meet the needs of its student and members of the academic staff."

Aims, Objectives of University Library

A library is considered as the 'heart' of a university and it is the centre of learning for higher education. Each university has a central library attached to it and may have many constituent libraries attached to its different teaching departments or the constituent colleges. The aims and objectives of a library are as below:

- Education must facilitate the process of change that is essential for a developing and growing society.
- To provide the promote facilities for advanced study and research in education.
- To provide opportunities for professional educators to improve their knowledge and ability through summer and evening classes, short term courses, seminars and other means.
- To provide teacher training & guidance in order to prepare candidates for the Master / Ph.D. in educational degrees of the university & such other disciplines / diplomas in education may be instituted.

- To stimulate educational research of high quality, both fundamental and applied, required for the improvement of education.

3. Information Technology used in Libraries

Information technology is a broad term that covers all forms of technology used to create, store, exchange, and use information in different forms. It is a very important tool for knowledge management. Information Technology (IT) provides tools to support the management of explicit knowledge and also to support communities of practice. Since most practical situations involve a combination of explicit and tacit knowledge, only an integrated set of information technology tools can provide effective and efficient support to knowledge management. Advancement of Information Technology (IT) and its applications in Libraries and Information Centres, the concept of document management has been changed to information management and again the entire situation of information management has started its change to knowledge management (KM). In academic library information acquisition, storage, management, and dissemination have been tremendously and positively affected by computer technology. All routine activities involved in collection development, readers services (circulation and reference services), serials management, and technical services are being accomplished by computer and related technology. Computer and IT applications have notable benefits to academic libraries. ICT tools and techniques, knowledge management systems, the internet, web resources, digital libraries have made an important change in the existing library systems and services**.**

The academic libraries play a prominent role in providing information services in various forms to researchers, scientist, policy makers, planners etc. he went further to state that a well-organized academic library should have ICT to assist both patrons and Thus, today's library information systems is comprised of software systems capable of capturing, transmitting, storing, retrieving, manipulating, and displaying of information, that support the personnel, organizations, or other software systems.

Importance of IT in library Services

- Help researchers for effective literature review search needs.
- To introduce and provide new services, revitalize the existing services by providing faster access to the resources, by overcoming the space and time barriers.
- The Online Public Access Catalogue (OPAC) is the computer form of assisting library users to catalogue library materials.
- To provide need-based, (tailor made), browsing and retrospective search services to the users.
- To have large number of databases in CDs.
- Computers have aided libraries with digital library which occupies little space but large storage capacity.
- To utilize the staff for providing better information services
- To develop/upgrade the abilities of professionals
- Information is preserved, conserved over a long period of time without image or quality degradation.

- To have access to a number of national and international journals which are being published only in machine readable form
- To digitize the documents for preservation and for space saving
- To capture, store, manipulate, and distribute information
- To improve the efficiency of library functions
- To improve the cost effectiveness of library operations.
- To support library functions such as circulation, serials control, acquisition control, stock maintenance and other routine office works and developing in-house database.
- To access library catalogues databases of other libraries through library networks
- Global integration of library services.
- Universal access to information due to the use of Internet
- Increased innovation and transformation of knowledge found in hardcopy books into soft-copies
- Change in the philosophy of the library from being a physical structure housing books to a database for universal access of information.
- IT has reduced the services/organization of the library by storing, retrieving and discrimination of information in real time
- Library automation has been of tremendous help to the library workers.

4. Impact of ICT in Libraries

Most teachers leave teacher training institutions with limited knowledge of ways technology can be effectively used in their professional practice. In this age of digitization, being able to effectively apply technology should be high on the list of what teachers at all levels of our education should know and be able to do in any instructional transaction. ICT for education refers to the development of information and communication technology specifically for teaching/ learning purposes, while ICT in Education involves the adoption of general components of technologies in the teaching process, more specifically, often for the training of teachers in the use of technology for teaching. Information technology is an organized combination of people, hardware, communication networks, and data resources that collects, transfers, and disseminates information in an organization. ICT training, but the pieces of training these teachers received seemed not to have impacted their use of these technologies.

ICT has impacted every sphere of academic library activity especially in the form of library collection development strategies. ICT presents an opportunity to provide value-added information services and access to a wide variety of digital-based information resources to their clients. Furthermore, academic libraries are also using modern ICTs to automate their core functions, implement efficient and effective library cooperation and resource sharing networks, implement management information systems, develop institutional repositories of digital local contents, and digital libraries. Information and Communication Technology (ICT) has brought unprecedented changes and transformation to academic library and information services, conventional LIS such as OPAC, users services, reference services, bibliographic services, current awareness services, Document delivery, interlibrary loan, Audiovisual

information services by changes in format, contents, and method of production and content and method of production and delivery of information products. Modern information and communication technology have created a global village because of the information revolution and the consequent computer based messaging system, and electronic networks for access to information and library services. ICT is a growing phenomenon in society. The library is a dynamic and evolving enterprise in education. Libraries have been transformed into information centers. Formal tools and techniques have been replaced by modern technologies. Information and communication technology has become an integral part of modern libraries. Databases are replacing the huge amounts of inventories. Resource sharing has become a requirement and is easier through modern techniques. To meet the information need of users, academic libraries provide various services such as user education (orientation/instruction services), interlibrary loan/connection services, abstracting and indexing services, referral services, and circulation services. Other services provided include library book loans, reference services, photocopying, online services, a compilation of reading lists and bibliographies, e-mail, internet connectivity, CD, Researching, and publishing.

In libraries, information technology has assisted library professionals to provide value-added quality information service and give more remote access to the inter-nationally available information resources. Today's highly sophisticated information technology to facilitate the storage of huge amounts of data or information in a very compact space. Information technologies promise fast retrieval of stored information and revolutionize our concept of the functions of a traditional library and a modern information center. Recently technological developments have dramatically changed the mode of library operations and services

5. ICT Need of Library Professionals

Libraries have also created a website that facilitates access to their local resources outside the library. Patrons can now search on-line databases and access the library website remotely, independent of time and distance, thereby transforming the use of library materials and the way the library provides its services. New techniques for identifying, locating, accessing, transferring, analyzing, manipulating, comparing, and revising texts, images, and data have also been developed. This has a direct impact on the role of academic librarians in meeting the information needs of their patrons. Advancement in technology has made it possible for anyone with the necessary technology and skills to post anything on the Internet without independent review and evaluation. Academic libraries in specific have witnessed a surge in the number of computers and internet accessible work stations for patrons and library staff. Acquisition of technologies into the library should give preference to those that enhance access to digital content and capable of enhancing global visibility of local content. Information professionals must not only be aware, but they should be trained to get involved to efficiently and effectively discharge their duties. More library automation training should be organized for staff to enable them to cope with the digital advancement and on how to aggregate online information techniques to diversify search, evaluate internet service providers and the technicalities supporting uploading and holding local material on the internet. Junior staff should also be released and sponsored

among the computers. The Internet provides the medium for communication using different online tools. Social media like Facebook, Twitter, Blogs, etc. have become the central focus for quickest information dissemination. Most of the libraries are using these social media for the promotion or marketing of their e-resources. Technology has a great contribution to the security of the library through computer after having been civilized various technological processes. The base of the digital library is computer and computer network because the reading material cannot be processed in the digital material without the computer and even no published books can be modified to digital form. ICT can be used for resource sharing among libraries and information centers. It provides a great prospect for sharing both the human and material resources of a library with other libraries. The role of technology is very much significant for cooperative acquisition, cooperative processing (cataloging and classification). ICT is used in various library housekeeping operations as well as for different library activities and services. The use of electronic gadgets such as computers, barcode scanners, and library management software helps to perform circulation routine operations most easily and quickly. After the invention of barcode technology, library transaction has become faster. Nowadays, for any type of communication, we depend on the internet, email, telephone, etc. These technologies are also used in the library for the day to day activities of the circulation. The following duties are performed in the circulation by using ICT.

Conclusion

Technologies are created, subsequently, there is the need to develop our skills and capacity to provide improved library services. Library resources must be utilized at a large amount. It is inescapable for the library professionals to be updated with the technology for their existence. ICT to improve their teaching methods and approach is desired to promote effective learning as well as to meet the demand of the 21st century teaching skills. Information and Communication Technology (ICT) has brought phenomenal changes and transformation to academic library and information services, conventional LIS such as OPAC, user's services, reference services, bibliographic services, current awareness services, Document delivery, interlibrary loan, Audiovisual services, and customer relations can be provided more efficiently and effectively using ICT.

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December 2020

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