Information Communication Technology in Library and Information Science Education : An Overview

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ABSTRACT

Information Communication Technology ICT plays an important role in society when we take into account the social, culture and economic role of computers and the Internet. Considering that all youngsters move through compulsory education, school is the appropriate place to develop crucial ICT competencies. The present paper focus on the What is ICT, concept of information technology, ICT in libraries, ICT and library professionals, objectives of ICT, advantages of ICT, ICT disadvantages/ limitations, components of ICT, library and information science education (India). Information and Communication Technologies (ICTs) have become central to education and training in Library and Information Science/Service (LIS) because of the great influence of these technologies on the professional world.

I. INTRODUCTION

The recent development in science and technology has led to a new startling condition concerning information created in the world. In the present ICT era, it becomes necessary for the librarians to use the computers and other devices in the day-to-day work. In this context, the librarians shall possess, in addition to the academic and professional qualifications, certain ICT skills, such as dexterity in operating systems, use of application software packages, knowledge of databases and programming, acquaintance in webpage design, library automation software, technical skills, and managerial skills. In recent years, Information and Communication Technologies have been regarded to have a pervasive influence on the economy as well as other parts of society. The Information and Communication Technology is widely considered as the most important revolution humankind has experienced since the industrial revolution and the development of movable type printing techniques. A country's development depends on the extent of use, speed of access, and skill application of ICT systems. The utilization of Information and Communication Technology has become an indicator of the level of the nation's wealth. Countries, which do prepare for ICT but not use it, are likely to lose their global competitiveness.

II. ICT IN LIBRARIES

ICT has changed the traditional methods of library activities and services providing new dimensions for teaching, learning and research in higher educational institutions. With the help of ICTtools, it is possible to store, retrieve, disseminate and organize information by creating websites and databases. Information is now published both electronically and by print making it accessible to users according to their demands. It is important to assess the ICT applications in library and information centers in the context of changing user needs. This section includes studies related to the application of ICT in libraries both in India and abroad.

The first and foremost ICT component, which can be adopted in the libraries, is the computer for library automation and to have an in-house database of library holdings in electronic form. As many primary journals and being published in CD form, it becomes necessary to equip the libraries to optimize the use of information. E-mail, online retrieval networking, multimedia and internet are the other important technologies, which can be used for faster access to information.

III. ICT AND LIBRARY PROFESSIONALS

In a changing environment when most of the library services are ICT based, it is important for library professionals to be well informed and updated regarding developments in ICT. This section deals with different studies regarding the use of ICT based applications by library professionals, their attitudes towards ICT, skills in handling new technologies, need for training in the new technologies etc.

IV. OBJECTIVES OF ICT

1. To provide greater information and easier access
2. To allow access to computers and the internet for everybody, so that a divide does not build
3. up between those who do not possess computers
4. To assist people to develop their ICT skills for accessing information.
5. To give access to digital learning materials, which are set to increase in both quality and quantity.
6. To provide staff expertise to seek out information or learning materials-staff become skilled gatekeepers not just of printed sources but of the digitized ones too.

V. ADVANTAGES OF ICT

Before embarking on an elaborate discussion of the issues involved in library training by deploying ICT, it is essential to understand the advantages of ICT in a Library situation. These advantages include:

1. Opportunities methodologies and to deploy more interesting material that creates an interest in the librarians;
2. Enables better management of library a librarian thereby improving the productivity of the tutor as well as the taught;
3. Enables the librarian to concentrate on other tasks such as research and consultancy;
4. Enables optimum utilization and sharing of resources among institutions thereby reducing the costs of implementing ICT solutions.

VI. ICT DISADVANTAGES / LIMITATIONS

Impact of ICT made various problems in online publishing. In case of e-journals and online databases, the library looses its access after stopping the subscription. The publishers do not give access to the issues which were subscribed. Besides these ICT has following general disadvantages:-

- Expensive
- Need Expertise
- Socio technical issues
- Information insecurity
- More technology dependence
- Less use of human brain

VII. LIBRARY AND INFORMATION SCIENCE EDUCATION (INDIA)

Library and Information Science is now a discipline that has made immense developments in modern times, but library profession has not yet attained equal status as that of other professions. According to Singh (2000), the growth of library profession is influenced by the growth of library and information science education, for it is the education and training that gives direction to the profession. In India a formal course in library science was first started by W. A. Borden in Baroda (1911) and later by A.D Dickinson in Punjab University (1915). The certificate course started by Madras Library Association in 1929 was taken over by Madras University in 1931 under Dr. S.R Ranganathan and was subsequently converted into a postgraduate course of one - year duration in 1937. Other Universities which started Library science courses in are early periods Andhra University the (1935) : Banaras Hindu University (1941) ; University of Delhi (1947) ; Aligarh Muslim University (1952) etc.

In India about 118 universities and institutions impart Library and Information Science (LIS) education While Bachelor of Library and Information Science (BLIS) is offered by 105 universities , Master of Library and Information Science (MLIS) courses is provided by 78 universities and 21 universities offer two - year integrated courses Seventeen universities provide M.Phil in Library and Information Science , 53 universities provide Ph.D in Library and Information Science and 2 universities provide D.LittDegree (Jain, Kaur, &Babbar, 2007) . Out of 17 institutions offering aM.Phil degree, 14 are regular universities and three are under distance education. Dr. B.R. Ambedkar Open University , Hyderabad (then known as Andhra Pradesh Open University) , is the first Open University in India offering Library and Information Science programs correspondence at Bachelor's Degree and Masters . through Degree from 1985 and 1998 respectively , followed by the University of Madras . Indira Gandhi National Open University in 1989) started BLISC and later MLISC and PhD program. IGNOU has played a major role in popularizing distance education in India

by providing educational opportunities at distance in many disciplines , including Library and Information science . IGNOU has a number of study centers spread across the country. The academic program of the University have multi - media support with facilities for audio, video , radio , television , interactive radio and video counseling , as well as tele - conferencing . IGNOU is the nodal agency for running a 24 - hour educational TV channel. GyanDarshan, in collaboration with other institutions of higher learning .GyanVani is emerging as a huge cooperative network of FM radio stations, exclusively devoted to education (IGNOU , 2010) . Other open universities in India offering library science courses are Annamalai University, Algappa

University, S.V. University Tirupati, University of Madras, Madurai - KamarajUniversity , Madurai etc. Today there are more than 20 Library and Information Science schools in India offering LIS courses through distance mode (Naushad Ali &Bakshi, 2006).

In all levels of higher education, ICT is creating a significant change in the traditional concepts of teaching and learning . This shift from the traditional environment has forced LIS education andare training to attempt to improve the quality of programs and hence, LIS curricula need to consolidate ICT concepts , knowledge , skills and proficiency into core competencies , and LIS schools need to provide adequate content and practice that will enable the professionals to use ICTs effectively . The trends noted in the context of Indian LIS program relocation of the academic administration of LIS schools (Information Science at the University of Madras and NISCAIR in New Delhi) , and expansion of LIS departments (Ramesha& Ramesh Babu, 2007) . Information technology oriented M.Tech course is being offered by International School of Information Management (ISIM). University of Mysore, two - year graduate training program by IIT Madras, PGDLAN (IGNOU, University of Hyderabad), etc. In addition, DRTC and NISCAIR have been providing advanced courses in Library science, viz. , Master of Science in Library and Information Science (MS - LIS) , and Associate ship in Information Science (AIS) respectively , which is equivalent to Master's degree in Library & Information Science . The different LIS courses available in India, including regular and distance education, are as follows:

➢ Certificate course in Library and Information Science (C.Lib.Sc)
➢ Diploma in Library and Information Science
➢ B.Lib.Sc. / BLIS (Bachelor Degree in Library and Information Science)
➢ M.Lib.Sc. / MLIS (Master Degree in Library and Information Science)
➢ MS - LIS (Master of Science in Library and)MS - LIS (Master of Science in Library and Information Science)
➢ AIS (Associateship in Information Science)
➢ PGDLAN (Post Graduate Diploma in Library Automation and Networking)
➢ M. Phil (Master of Philosophy) in Library and Information Science
➢ PhD (Doctor of Philosophy) in Library and Information Science
➢ D.Litt in Library and Information Science

Another major trend is the Digital learning environment or e - learning, facilitated by the application of ICT, which has revolutionized continuing education for learners of all ages. Initiatives across the world include ALA online continuing education of American Library Association and ACRL, Association of College and Research Libraries, Special Library Association - learning Series and in India, Flexi learn of IGNOU, etc. are few examples of providing open learning space for LIS professionals. MIT, Massachusetts Institute of Technology (USA) and NPTEL, National Program on Technology Enhanced Learning (India) provide free e - learning modules on different subjects.

VIII.   CONCLUSION

Information and communication technology (ICT) influences the role of LIS professionals and the offer number of opportunities for professionals and personal development . Professionals with appropriate ICT skills are crucial for transforming traditional library to the electronic library Information and Communications Technology (ICT) or Information Technology (IT) usually a more general term that stresses the role of unified communications and the integration of telecommunications , computers , middleware as well as

necessary software , storage- and audio - visual systems , which enable users to create , access , store , transmit , and manipulate information . The library professionals must possess sufficient knowledge of new ICT skills such as library automation, e resources management, content management, organization of information on Internet and Intranet. Developing and maintaining digital libraries / institutional repositories, web based library services etc.

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