

Impact of information communication technology on LIS education in India: Problems and futuristic perspectives

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Abstract

Adequacy of infrastructural facilities is one of the important elements for offering qualitative teaching, learning & research. The infrastructure includes the teaching and other non-teaching staff and laboratory equipments. It is noticed that except few university departments, the majority of the departments do not have the proper infrastructure facilities. The teaching departments are suffering from the minimum staff having the latest knowledge of ICT although many developments are occurring in this field. At the same time, the laboratories attached to the teaching departments have inadequate number of computer and other equipments to train the library professionals. The UGC is also in its stride to having comprehensive and proper training facilities for the in-service training for the LIS teachers. In this paper highlight's impacts of ICT on various components of LIS education, teaching, learning, research and also focus the problems, future perspectives of LIS education of India.

Keywords: *ICT, LIS education, LIS research, Teaching, Virtual Learning, Knowledge commission*

Introduction

Information and communication technologies (ICTs) which include radio and television, as well as newer digital technologies such as computers and the Internet have been touted as potentially powerful enabling tools for educational change and reform. When used appropriately, different ICTs are said to help expand access to education, strengthen the relevance of education to the increasingly digital workplace, and raise educational quality by, among others, helping make teaching and learning into an engaging, active process connected to real life. However, the experience of introducing different ICTs in the classroom and other educational settings all over the world over the past several decades suggests that the full realization of the potential educational benefits of ICTs is not automatic, Blurton, C (1999). The effective integration of ICTs into the educational system is a complex, multifaceted

process that involves not just technology indeed, given enough initial capital, getting the technology is the easiest part, but also curriculum and pedagogy, institutional readiness, teacher competencies, and long-term financing, among others, as 'Basic Education for All' 'Core Work Skills for All' and 'Lifelong Learning for All'.

In India a major changes as regards to LIS profession is seen only in last few years. India is having a remarkable place in the world as regards to its history of highly developed civilization and culture. In the fast changing world of the 21st century, several professions are adapting with changes and pacing with new useful technologies for their survival and advancement. In this century creation of new knowledge, capturing of new ideals promptly and their timely application is crucial for success in any endeavor. Concerns over educational relevance and quality coexist with the imperative of expanding educational opportunities to those made most vulnerable by globalization developing countries in general; low-income groups, girls and women, and low-skilled workers in particular. Global changes also put pressure on all groups to constantly acquire and apply new skills. The International Labour Organization defines the requirements for education and training in the new global economy simply, ILO (2003).

Impact of ICT on LIS Education

During the last few years, it seems in India a major changes as regards to LIS profession and professionals. India is a significant place in the world as regards to its history of vastly developed civilization and culture and way of life. But, in current years, India is having all types of libraries, which are located at the well-known places of learning. They include State Central libraries, Regional libraries, Oriental Manuscript libraries, and libraries attached to educational institutions, Research centers, Religious/Cultural organizations, Learned Societies and libraries managed by private organizations, Velmurugan&Kannan (2011). 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 LIS graduates to adopt and use of ICT application in effective manner. The use of electronic resources in teaching and learning positively impacts the delivery of LIS modules. Some of the new approaches, methods, techniques and instructional resources/tools of teaching/learning, when innovatively used, not only make it easier for students to learn. But also insidiously acquaints students with the ICT tools. LIS researcher along with depending on print sources also refers a lot of E-resources due to various advantages of eresources.

Libraries also have started depending on and providing ICT based information services along with traditional services. However, the significance or magnitude of these issues and challenges vary between countries and institutions, presumably due to socio-political and economic environments.

The IT revolution of 1990s had major impact in the syllabus of BLIS/MLIS level courses of all the universities in India UGC and various State Universities also changed the NET & SET syllabi for library and Information Science subject and the major changes were made in 2000s. The components of ICT those were included in BLIS/MLIS/SET/ level are-

- ❖ ICT-Components and impact on society.
- ❖ Computer- Components and Impact on Libraries,
- ❖ Operating Systems.
- ❖ Network & Networking, ISDN, OSI.
- ❖ Library Automation, bar coding technology.
- ❖ Internet, Search Engines, DOI, OSS, Institutional Repositories.
- ❖ National & International Information Systems NISSAT, NASSDOC, NISCAIR, DESIDOC, MEDLARS etc. Telecommunication Technology.
- ❖ Types of e-Resources.
- ❖ Web 2.0, Semantic Web, Website development.

According to CISCO's definition quoted by Jeevanelearning is over searching umbrella that encompasses education, information, communication and training. It is the web enabled system that makes information and knowledge to those who need it; they need it- anytime, anywhere.

Impact of ICT on Learning

The ICT revolution is a revolution in learning, it also has transformed available technologies, the means and methods of studying, the modalities of school operations, the manner of investment and expenditure of resources, and the very way we think about what education could be and should do. The advent of the Internet and the Web, these opportunities have expanded vastly, and educational institutions have made more and more varied use of them. Course material is posted on the Web, assignments can be communicated through the net, and teachers can be accessed around the clock by the new modes of transmission, GudmundHernes, (2002).

Virtual Learning Environment (VLE)

The 'virtual learning' term contains the online learning services and also called learning platform that organizes and provides access to online learning services for the students, teachers and administrators, Ibohal&Madhuri, (2009). These services include access control, provision of learning content, e-learning tools and administration of user groups. In much literature, different terminologies have been used for the term 'virtual learning' as:

- ❖ Internet learning.
- ❖ Distributed learning.
- ❖ Network learning.
- ❖ Online learning.
- ❖ Tele learning.
- ❖ E-learning.
- ❖ Computer assisted learning.
- ❖ Distance learning.
- ❖ Web-based learning.
- ❖ Federated learning.

These terms have given us an indication that in virtual learning, the learner is at a far off place from the tutor or teacher or instructor; uses some form of technology (obviously internet connected computer) to access the learning resource materials which are web-based; and also interacts with the teacher/tutor or instructor and other learners; is provided with some form of support to meet his/her needs.

Impact of ICT in Teaching and Training

Teaching at LIS School as well as Higher Education, mostly, concentrates on giving information which is not the sole objective of Teaching. Along with giving information, the other objectives are:

- ❖ Developing understanding and application of the concepts.
- ❖ Developing expression power.
- ❖ Developing reasoning and thinking power.
- ❖ Development of judgment and decision making ability.
- ❖ Improving comprehension, speed and vocabulary.
- ❖ Developing self-concept and value clarification.

- ❖ Developing proper study habits.
- ❖ Developing tolerance and ambiguity, risk taking capacity, scientific temper, etc.

With the present infrastructure, class size, availability of teachers, quality of teachers, training of teachers, etc., it is difficult to achieve all the objectives. Further, most of the teachers use lecture method which does not have potentiality of achieving majority of above mentioned objectives. The objectives are multi-dimensional in nature, so for their achievement multiple methods should be used in an integrated fashion at present ICT may be of some use, Sansanwal (2009).

Impact of ICT on LIS Research

Research is the basis of better understanding and the development of the sector research plays an important role in planning for the future of the domain, for example, in identify funding needs: planning for the future structure of LIS provision: helping to decide priorities: and identifying where funds should be concentrated. Prior to 1960s, analysis of data collected in large scale, ambitious research projects took weeks or even months for completion. The advent of computer and its high-speed of working allow the same analysis to perform in minutes or even seconds. In present era, the research worker needs to know, how to communicate the date to the computer properly and how to select a relevant technique of statistical analysis.

Statistical Packages like Statistical Package for Social Sciences (SPSS), Biomedical Statistical Package (BMD or BMDP). Comprehensive Meta Analysis (CMA), AcaSate, EViews, SciPyetc, ate some of the Statistical Packages that are specialized for Statistical analysis obtain the result of standard statistical procedure and statistical tests, without requiring low-level numerical programming. Most statistical packages also provide facilities for data management. The introduction of Internet in late 1960s brought yet another revolution.

Problems of LIS Education

LIS Professionals have to face many challenges to meet the present and future generations and prospects of Library and Information Science to bring the quality education and practice.

- ❖ Most of the open universities have limitless intake of students; as a consequence, qualitative students are not coming out from these universities.
- ❖ In addition, notwithstanding having higher degrees with good percentage, they are ineffective and unproductive in the field of professional.

Following points are other biggest challenges and issues that the LIS education system is facing by in this present context:

- ❖ Lack of Admission procedure
- ❖ Lack of finance policy
- ❖ Inadequate Infrastructures
- ❖ Inadequate of Knowledge and Training
- ❖ LIS course duration, curricula
- ❖ Insufficient Contact Classes
- ❖ Absence of Accreditation
- ❖ Lack of supporting policy
- ❖ Lack of a global Perspective
- ❖ Lack of Library Visit
- ❖ Lack of Permanent Faculty for Distance Program
- ❖ Lack of Evaluation & Medium of instruction

RELATED STUDY

SirjeVirkus Tallinn, Estonia(2008) Web 2.0 is influencing the way in which people learn, access information and communicate with one another. The Institute of Information Studies of Tallinn University has a long history in using ICT in its teaching and learning. Experiences with open and distance learning and e-learning have transformed teaching and learning, provided new alternative delivery modes, and helped to reach new target groups. Recently the staff have been experimenting with Web 2.0 technologies and a few have successfully adopted them in teaching and learning. Sutton (2001) observes that the changes brought into the LIS profession by ICTs can be divided into two major categories, namely, the natural evolutionary changes, on the one hand, and transformatory changes, on the other. As natural evolution, the library and information science profession has harnessed ICTs to perform old tasks better through the automation of housekeeping tasks such as reference work, bibliographic services, cataloguing, serials, circulation and acquisition, which are performed more efficiently in an ICT environment. Transformatory changes, on the other

hand, include the emergence of new functions arising out of an expanded, demand-driven information society, wider and/or interdisciplinary jurisdiction and closer focus on user needs.

Fourie and Bothma (2006) observe the increased use of the World Wide Web in private, social, business lives of many people and hence note that it is a vital component of the enabling structure for school, university, career and other use for information and communication. This one platform exhibits the fact that those involved in information services need to be sufficiently prepared to handle both the users of information and the attendant technologies. Tafreshi (1997) found that more than 80 percent of the population studied did not find LIS programs suited to the needs of the profession.

OBJECTIVES OF THE STUDY

The study has been conducted on the basis of certain objectives:

- ✚ To know the awareness and use of ICT in LIS education among LIS students.
- ✚ To know how ICT education influences efficiency of students/learners.
- ✚ To know the availability of ICT infrastructure in departmental computer lab.
- ✚ Opportunities offered by use of ICT.
- ✚ To know attitude towards the e-learning methods.
- ✚ To ascertain problem faced while working with ICT.
- ✚ To find out satisfaction level on current LIS syllabi regarding ICT education.

Other problematic issues

- ❖ The challenge for the information professionals is to persistently learn, incessantly upgrade their competencies and skills to quickly step into new roles created by the service gaps in the growing knowledge intensive society.
- ❖ Being small, the LIS schools in India are not enjoying the professional status on a par with other subjects like computer engineering or business administration.
- ❖ LIS faculty is usually overstressed with several responsibilities such as teaching, research, administration, evaluation, and many other academic assignments such as curriculum development, infusion of relevant ICTs, and integration of new ideas into the LIS programs. But faculty is the first pillar of excellence and there should be no compromise in recruiting and retaining competent and committed faculty.

- ❖ LIS schools in India are facing uncertainties because of technological advances on the one hand, and lingering issues affecting the LIS schools and their programs on the other hand.
- ❖ Unplanned expansion of LIS schools and lack of professional accreditation are the major reasons for lack of quality education, research and training.
- ❖ No LIS school in India is running any program that may• prepare the LIS professionals for organizing information literacy courses regularly. Otherwise also the quality of LIS research in India is not up to the mark.
- ❖ The ongoing advances in ICTs and emergence of new state-of-the-art knowledge management tools pose challenges not only to library and information professionals and LIS educators, but also to the LIS profession as a whole.
- ❖ Most of the LIS departments do not have minimum qualified IT oriented faculties with some exceptions and also do not have sufficient number of equipments to teach the practical for the subjects.
- ❖ The faculty improvement programme is not so strong and effective because of shortage of manpower and budgetary provision at the individual university/college level.
- ❖ Rise in the number of LIS departments both in distance and regular modes without considering quality of the products, the job opportunities and infrastructure availability.
- ❖ The crucial issues related to the position and function of library and information science professionals for the scientists who are directly connected to the Internet resources and full text database services. It seems that for collecting information they do not need at all the help of any library professionals.
- ❖ Different type of employment opportunities, which are coming up for LIS graduates due to the technological changes. For example, web content manager, metadata creators, electronic publishers, etc.
- ❖ Survival of LIS profession in India in an ethicalmanner.

The biggest challenge for the LIS education providers in India is how to eliminate the shadow of gap between theory and practice on the one hand, and between push and pull technology on the other.

Futuristic Prospective of LIS Education in India

In the fast changing world of the 21st century, several professions are adapting with changes and pacing with new useful technologies for their survival and advancement. In India a major changes as regards to LIS profession is seen only in last few years and LIS Department and Faculties want to effectively utilize availability of limited resources and try implementation of those are programs in LIS Schools, they are.

- ❖ Modern LIS education requires infrastructure such as media labs, IT labs, and information products for practical approaches.
- ❖ Libraries and information centres are increasingly• organizing their work around newly emerging technologies and tools.
- ❖ Information professionals is changing and expanding and their existing skill sets and competencies are becoming obsolete, LIS schools are required to constantly take notice of the skill sets and new competencies that are in demand in the market place and accordingly create new wherewithal and conform their curricula to meet the requirements of present times and times ahead.
- ❖ In smart class rooms having interactive board and connectivity with the intranet, faculty can select electronic content to help the students in just-in-time learning.
- ❖ The LIS schools must initiate research-based teaching and ensure more emphasis on training keeping in view the vast potential of info-business.
- ❖ The library schools have opportunities to enormously expand their educational programs and play a proactive role in preparing human resources for managing knowledge resources for the society at large.

Conclusion

In the knowledge society mouse is more powerful than the pen. Technology enabled constant connectivity has helped in generation and use of more information and production and distribution of knowledge. The information networks provide most democratic access to information resources at any time and any place, thus accessing relevant information and its strategic use at a faster speed has become important. Changed role of LIS professional form “intermediary to facilitator”, new tools for dissemination of information, shift from physical to virtual services environment and extinction of some conventional information services and emergence of new and innovative web based LIS education in India.

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