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Use of E-learning in Library and Information Science Education

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ABSTRACT

The paper presents a review of e-learning initiatives in LIS. It defines e-learning and its characteristics, and describes the tools of e-learning. The paper also compares the traditional education with e-learning and states how both these methods complement each other.

Keywords: E-learning, LIS education, distance education

1. INTRODUCTION

Development is a continuous process. Each new development of larger social relevance brings new opportunities to the respective field. The field of education has no exception to this. To provide and get education is one of the characteristics that differentiate human beings from other living things. And for better education human beings are continuously improving their teaching-learning tools and techniques. Each revolution of the human society had its impact on education. The developments in information and communication technology (ICT) have brought psychological, sociological as well as technological changes in the field of education. The present boon of ICT has its own very special impact on education. This impact of ICT is noticeable in formal and informal education, traditional and professional education as well as at all levels of education. The most recent influence of the ICT in the field of education is recognised as e-learning. E-learning has many other nomenclatures such as computer assisted instruction, computer-based training, online education, web-based training, etc. E-learning is there for quite some time now[1]. It has brought new opportunities to education in all subjects, including library and information science (LIS). This paper describes e-learning, its suitability to LIS education, and on-going initiatives in applying e-learning in LIS education.

2. WHAT IS E-LEARNING?

E-learning is learning enabled by the electronic media. It is a learning facilitated by the application of ICT. E-learning is a process of education using computer, telecommunication, networks, and storage technology. According to CISCO's definition quoted by Jeevan[2], e-learning is the over reaching umbrella that encompasses education, information, communication, and training. It is the web-enabled system that makes information and knowledge accessible to those who need it, when they need it—anytime, anywhere. In the present context it is a web-based learning. To put it in a more pedagogical frame, e-learning has the following characteristics.

Remote Learner-Teacher: In the e-learning environment, the learner and the teacher need not to travel to a common physical location for the purpose of education. They can be away from each other, yet achieving the goal of education through technological means.

Learner Centered: E-learning can be personalised to the learner, or as it is called customised to the needs of the learner. Unlike the classroom-based learning the e-learner can choose his/her learning module.

Course Material: The teacher (aptly called as facilitator) and or his institution prepares course material. This includes curriculum, courseware, assignments, glossaries, citations to other online and offline resources, quiz, lecture presentations, examination questions, etc. The course material is made available in the electronic format; most of the time online. The course material is made interactive by inbuilt exercises, simulations etc. It is made more understandable by the use of animation. Being in electronic format the course material can be updated quickly.

Multimedia Nature: The course material being in electronic format can be in textual, audio or video format. A typical course material can combine all these features.

E-communication: All notices, announcements regarding admission, submission, examination, results, etc. are sent through Internet/are made available on websites. As the administrative work is carried out online it becomes fast and accurate.

Use of Internet: Counselling/educational instructions are provided interactively through Internet-based services such as, blogs, chat-rooms, peer and expert discussion groups, e-mails, etc. The online courses also provide links to useful resources on the Internet and Intranet. Internet empowers both the learner as well as the instructor.

Anywhere Learning: E-learning provides remote access to learning facilities through the ICT. As such the e-learner can learn from the place of his convenience, even from home, office, while travelling, or literally from anywhere. In the globalised world the work style is changing. People are expected to work from anywhere and anytime. The e-learning suits to this philosophy.

Anytime Learning: The time is not a constraint to the e-learner, one can learn anytime that suits his schedule. It is truly 24x7 learning system.

Just-in-Time: The c-learning (classroom learning) adopts the philosophy of just-in-case. So what is taught and studied in c-learning is on the thinking that such and such knowledge, skill may be needed in future. On the contrary the e-learning is arranged to develop skills, which are needed at the particular time.

Multiple Collaborations: In e-learning there emerge multiple collaboration, i.e., teacher-student; student-student, as well as teacher-teacher. Multiple collaborations also includes collaboration between the content development experts and the technology people.

Learner's Active Participation: E-learning is impossible without active participation from the learner. If the learner does not respond to the initiatives of the teacher the learning purpose remains unattained.

Facilitates Lifelong Learning: Being self-paced, e-learning can develop skills in the e-learner which can be useful to him for lifelong learning.

3. E-LEARNING TOOLS

Apart from the Internet, Intranet and other network tools and techniques, the e-learning community extensively uses the following tools:

Course Management Systems (CMS): CMS tools are also known as virtual learning systems, content management systems, learning management systems, learning content management systems, etc. CMS tools help in the creation, and management of course material such as lessons/courseware, assignments, glossaries, citations to other resources, etc. In other words these tools help in total e-learning. Moodle, Sloddle, Lectureshare, elementK, Blackboard, AuthorIT, digitalTthink.com IndiaWebDevelopers, E-learning Solution are some of the course management tools. Each one of them has its own specialty. In order to have some uniformity in various CMS a set of specifications known as SCORM (Sharable Content Object Reference Model) has evolved. Most CMS are free and open source, so that they can be downloaded free and can be customised to once own needs.

Blogs: A blog enables to disseminate and access specific information. Apart from blogs devoted to LIS, the websites of departments of library and information science have blog facility. Blogs can be used by students as well as by instructors to provide updated information. They are useful to initiate discussions.

Wikis: Wikis is a piece of software where individuals under the control of an editorial board, can upload contents or modify existing contents. Wikis is a useful source for getting information and extensive links to information. For example, LITA (Library and Information Technology Association) offers blogs and wikis for the LIS e-learners. Wikipedia and Knol are other examples of wikis.

E-mails: E-mails as well as e-mail-based discussion forums such as LIS-forum are useful in delivering contents as well as communications about e-learning.

Messenger: Messenger such as Yahoo Messenger, MSN Messenger can be used for synchronous interaction. Facilities like eZmeeting can also be used for real-time conferencing. The ACRL, for example, has live chat series called OnPoint. Using this tool the ACRL organises e-learning events for various occasions.

E-learning 2.0: It refers to new ways of thinking about e-learning. It is inspired by the emergence of Web 2.0. It emphases on use of social learning, and tools such as blogs, wikis, podcasts, and virtual world such as second life. According to Craig[3] new generation learners are influenced by social networking. Experienced and empowered to create, publish, and redistribute contents, they find the structure of LCMS traditional and inflexible in contrast with the user-centered approach of web 2.0 services. Case studies[4] indicate that LIS schools are making changes in curriculum and teaching-learning methods using more and more Web 2.0 technologies.

4. TRADITIONAL LIS EDUCATION VERSUS E-LEARNING

With the tremendous benefits and increasing success of e-learning, it is but natural to ask the question, can e-learning render the traditional LIS education obsolete? However, thinking rationally, one has to answer negatively to this question. The traditional LIS education provides a strong knowledge base to the potential professional. It develops in him the most basic library management skill—cataloguing, classification, indexing—broadly referred to as knowledge organisation skills. The traditional LIS education also fulfills one of the basic objectives of education, i.e., to develop an attitude for the profession. To get all theses advantages the traditional LIS education is a must and should be of minimum two years duration.

Does this means that e-learning is not suitable for imparting LIS education! This is also not true. E-learning has its own advantages. The experience of Mutula *et al*.[6] confirms that the e-learning even proves more beneficial than face-to-face learning. E-learning's effectiveness in LIS is proved by Forrest[7].

5. SUITABILITY OF E-LEARNING FOR LIS EDUCATION

E-learning should be adopted in LIS education for the following reasons:

5.1 Management of Change

Like most other institutions libraries are also facing dramatic changes in its dimensions. Particularly, the growing use of ICT in library activities is enforcing many changes. However, the staff working for many years in libraries may not be well-convergent with the ICT. The reason could be the emergence of ICT long after they had their education. The ICT terms like metadata, thesaurus construction, ontology, taxonomy, electronic Dewey, information literacy programmes, open source software for library management, digital library, digital library software, creation and maintenance of institutional repositories, Web 2.0, Library 2.0 technologies and their use in libraries, HTML, XML, knowledge management, web design, copyright-implications in the digital library era, etc. might be a bit difficult for them to comprehend. E-learning is the most suitable teaching-learning method for imparting education on such important and useful topics in LIS.

5.2 Modular or Cafeteria-based Learning

Most of the undergraduate courses are of three years duration. The postgraduate courses are of two years duration. This 3+2 years pattern of education is common in LIS education also, and does not allow studying topics which are peripheral to the core subject of the degree. As a result, there remain some topics which the potential LIS professional desires to study, but not been able to do so due to the set pattern. E-learning will certainly help to overcome this problem because it allows creating customised learning modules as per the need of the learner.

5.3 Increased Expectations from the Employers as well as Users

All potential library employers expect that the LIS professionals must have optimum skills and thereby efficiency in their housekeeping operations. They also expect that the library staff should be able to provide library services effectively. The users of the library also have similar expectations. They feel that the library staff must answer their reference and referral queries quickly and accurately. One common expectation of both these stakeholders is that the LIS professional of any cadre must have skills to use ICT to provide efficient library services. Thus, the ICT handling skills have become an essential qualification for the LIS professionals. These and other similar expectations of the employers and users of the library can be fulfilled if LIS professionals get an opportunity to learn these skills. Due to time constraint, in-service library professionals may not be able to attend regular LIS courses. In such a situation, the e-learning remains the most viable option for in-service LIS professionals.

5.4 Multi-skilled Personnel

The present employment market expects that their potential employee must have multiple skills. The skills required by libraries are changing. A study indicates that library staff needs more and newer skills[5]. The workflow is changing. The classroom-based, traditional pattern of LIS education may not allow the library staff to have multiple skills. Through e-learning they can acquire more skills at their own pace and time.

5.5 Job-Specific Needs

The traditional LIS education, particularly in India, is a general LIS education in the sense that the learner of this system of education does not get specialised in managing a specific type of library. He even does not get special/depth education for any specific information technology or depth education on designing tools like ontology or a digital library. The above requirements are environment specific, where the LIS professional is working after having the basic LIS education through the traditional methods. E-learning offers the opportunity to provide education, which is job specific and will help LIS professionals to perform to the optimum extent.

5.6 Image of the Profession

The e-factor (electronic factor) is an image building factor. As such the provision of e-learning, if made available by the LIS educational institutions will definitely improve the image of LIS teaching profession.

5.7 More Content and Short Duration

In India library science is mostly taught as a postgraduate course (there are some undergraduate and certificate courses also). These courses are of one- and or two-year duration. New subjects, aspects, facets, are continuously emerging in LIS. The quantum of knowledge and skills to be imparted to the upcoming LIS professional are continuously increasing. It is difficult to provide all this knowledge and impart all expected skills in one or two academic duration. So the subjects which could not be taught/studied during regular courses can be taught through e-learning.

5.8 Changing Learning Trends

The changing learning trends are of part-time/home learner. To respond to these trends the LIS education should adopt the e-learning.

5.9 Distance Education and E-learning

The distance education and e-learning share many common features such as remote learner, course material, emphasis on self-study, learning at once own pace and time, etc. However, e-learning adds value to distance learning by delivering digital course material. The digital nature of course material brings much flexibility to the learner.

6. THE BLENDING METHOD

In fact the blending of the traditional teaching methods and e-learning for imparting LIS education will be the best strategy to optimise the efficiency of the LIS professionals. The traditional teaching methods should be adopted to provide the basic knowledge, and to develop skills in carrying out library housekeeping operations, and the e-learning should be adopted for the continuing education in LIS. According to Krishan Kumar and Jaideep Sharma the use of blending method in LIS education will help to retain students in the LIS courses[8].

Thus the use of e-learning in LIS education need not be thought as a competitor to traditional LIS education. On the contrary e-learning complements the traditional LIS education. LIS e-learner learns by using the electronic information sources and various ICTs. As a result they will be in a better position to manage electronic information sources effectively in hybrid and electronic library, and therefore more capable to provide effective services to his e-learning users.

7. E-LEARNING INITIATIVES IN LIS

As mentioned earlier, e-learning is more suitable for short-term, specialised courses in LIS. This is confirmed by the following e-learning initiatives in LIS undertaken in recent times:

- **ACRL (Association of College and Research Libraries):** ACRL has developed e-learning courses of three weeks duration. The topics include creating plan for information literacy, designing websites for libraries, teaching portfolios for librarians, and virtual reference competencies. ACRL even has e-learning courses of 1 and 2 hr duration on topics such as technology trends in academic libraries.

- **Click University:** The e-learning programme of Special Libraries Association is known as Click University. Presently, it is offering e-learning courses of 15 days duration on knowledge management.

- **YALSA (Young Adult Library Services Association):** YALSA of ALA offers continuing education programmes for young librarians through e-learning.

- **AASL (American Association of School Libraries):** AASL offers short-term e-learning courses for school librarians. The topics include children literature, how to create collaborative lectures, etc. These courses are of 3 to 10 hr duration.

- **RUSA (Reference and User Services Association):** RUSA offers e-learning courses of 5 weeks duration on subjects such as business reference service, readers advisory service, reference interviews, etc.

- **PLA (Public Library Association):** PLA has e-learning programmes to solve problems in public libraries. At present the eLearning@PLA has announced 'Power Tool Planners', an e-learning programme for librarians of public libraries.

- **IMARK (Information Management Resources Kit):** IMARK is a partnership-based e-learning initiative to train individuals and support institutions and networks worldwide in the effective management of agricultural information. It comprises of suit of distance leaning resources, tools, and communities on information management.

- **LEAD (Library Education at Desktop):** Library Division of the Texas State Library and the University of North Texas School of Library and Information Science has jointly developed e-learning courses of 1 to 2 hr duration.

- **SLA (Special Libraries Association):** SLA arranges webinars, i.e., web-based seminars for library professionals. These e-learning programmes are made available live through video conferencing. Replay of the video conference is also made available to professionals who could not attend the live video conference.

- **NELINET:** NELINET is a network of public, academic and special libraries in six New England sates. NELINET has developed customised web-based training programmes for its members.

In spite of the contention that the e-learning is more suitable for short-term specialised courses in LIS, there are number of universities, associations and institutions, which are offering certificates to master level e-learning courses in LIS. Some of them are the Indiana State University, Mansfield University, Syracuse University, Texas Woman's University, University of Arizona, The University of Illinois, University of North Texas, University of Pittsburgh, University of Tennessee, and University of Wisconsin. Observing this list of universities and their e-learning courses one ponder whether e-learning in LIS has come to a matured stage?

8. E-LEARNING INITIATIVES IN INDIA

The distance/open education in India is spreading very fast. There are number of institutions offering distance education in LIS. The institutions of distance education are the first to adopt the e-learning in LIS. As has been discussed earlier e-learning suits more to distance education. Realising the importance of e-learning in distance education the Indira Gandhi National Open University (IGNOU) and various state open universities in India are already testing its feasibility. Even the distance education departments of traditional universities are also working to use the e-learning for their distance learning programmes. VidyaOnline[9] is one of such up-coming e-learning programme for the LIS education. It is a venture of Vidysagar University. Librarians Digital Library (LDL) developed by the DRTC (Documentation Training and Research Centre, Bangalore) provides digital resources to those interested in e-learning. LIS departments from the traditional universities in India will not be far behind to introduce need-based, short-term e-learning courses. Gradually, these departments may even run e-learning courses, parallel to their traditional courses.

9. CONCLUSION

The world scenario of LIS education is changing fast. The change is enforced by many forces such as technology, demographic features, economic characters, etc. The LIS education is responding to these changes by making appropriate changes in its teaching-learning strategies. Adoption of e-learning in LIS is robust indicator of this response. The Indian LIS education too, is slowly but steadily making progress in this direction. Availability of proper and adequate infrastructure will add momentum to LIS e-learning in India.

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