Developing Library and Information Services for E-Learning Environment

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Abstract

Now internet has shown new paths to learning. The educational resources are accessible to students. Learner needs are increasingly seen to be continuous throughout the working life. Education is a means of empower their lives and future within workplace. In India e-Learning systems and online courses are already started. This paper covers the issues of developing e-Learning system its requirement, and its implication in e learning.

Keywords : e-Learning, Distance Education, Information Service, Web-based Education, Library's Role

0.   Introduction

Technology has dominated all spheres of life. The education is also one of the field where we can see the impact of information technology. Education and library are twin sisters. Over several years the education process has seen drastic changes in imparting knowledge. Libraries are the effective tools in disseminating knowledge. From the few decades libraries have become the increasingly IT based. The emergence of Internet is changing the function of library. Physical walls of library have no significance. New concept is taking the library to the learner. This paper is an attempt to study the role of libraries in e-learning.

In the India, the enormous potential of the internet for rapid global communication is driving the creation of electronically delivered courses by both commercial and educational organisations alike.

e-Learning be it via the Internet, CDs, LAN or using a combination of mediums and training materials can influence everybody from a elementary school to a professional learner, from a corporate sector to government. It is life long process. The e-Learning in India is still evolving and in the process of transformation. With potential expertise in the field it is likely to that India become very prominent leader. However there are several challenges, they are not impediments to the growth of e-learning. This career opportunities requires a highly skilled manpower that specialized expertise. e-Learning is touching the upon our lives. It is true not only for those who have access to information and technology but also for those who fall in the have-nots side of the digital era.

1.   E-Learning

e-Learning term covering the wide set of applications and processes such as web based learning, computer based learning and virtual classrooms. It includes the delivery of content via internet, Intranet, Extranet(LAN/WAN), audio and video tapes, Satellite broadcast or CD ROM etc.

It refers to learning and other supportive resources that are available through computer. e-Learning is developed to apply information technology applications to education.

1.1   Need for e-Learning

e-Learning is a continuous process when the learner is unable to attend the traditional methods of learning, the distance mode of learning was introduced. The student need to learn and syllabus with near by libraries or materials sent by the course organiser. Modern medias such as radio and television were also used in the distance mode of learning process. These medias benefit a lot the learner, but they have their own limitations. The distance mode of learning process is further strengthened by video conference mode. The nodal centre will have studio where the experts assemble and deliver the lecture. This will reach audience through different medias. This technique will create the environment of the classroom and enables direct interaction between the teacher and learner.

Now internet has shown new paths to learning. The educational resources are accessible to students. Learner needs are increasingly seen to be continuous throughout the working life. Education is a means of empower their lives and future within workplace, at least in the advanced market led societies. The person who acquire and apply the knowledge and skills will be sustained in the future. One should require learning for updating their knowledge, skills and competencies.

2.   Partners in e-Learning System

e-Learning design in production requires a highly skilled manpower that have specilised expertise. e-Learning involves a gamut of professional workers, trained in their fields such as instructional designers, content creator/course writers, reviewer, graphic designers, graphic analysers and Information professionals.

2.1   Instructional Designers

e-Learning is mixture of technology and education. Instructional designing is bridging the concepts between content and technology. It is a systematic approach to planning and producing effective instructional materials. It covers instructional specifications using learning and instructional theory to ensure the quality of instruction. It is key to any successful e-Learning venture.

Instructional design is a systematic approach to course development and is an iterative process that require on going evaluation and feedback. Ability to learn a good academic research background is minimum requirement for instructional designers.

2.2   Course Writers/Content Creator

Presentation of concepts and explanations in most effective manner is most important factor. Guidelines given in the subject is must for content creation. The developments of contents requires a mature level of subject knowledge as well as the technical tools available for presentation. Text form of content is monotonous where as multimedia content is more impressive.

2.3   Reviewers

With growing proliferation of e-Learning the review or audit is much important. Reviewers should have a good understanding of instructional design principles. The persons in quality review or quality auditors require for this job.

2.4   Graphic Designers

Persons of this category are programmers, they have formal training in multimedia creativity and it is very much required for this kind of people. Graphic designer should embed the audio, video and graphic feature while designing.

2.5   Knowledge Managers

Knowledge Management is very important to share the knowledge and retrieve it for effective use. It is vague term stretching across many terms of spheres of influence. It becomes visible that 21st century information professional will basically, become a resource sharing librarian whose resources will have no boundaries such as local national or international. Library and information professional will have to be closely associated with the networks and also be contributing information to network or number of networks.

Application of e-Learning to the libraries will be treated by most of the libraries as a threat to them and their profession. But on the contrary it is not the end of the profession but widening the profession. Traditional knowledge organization techniques such as classification and cataloguing are no longer effective and useful for dissemination of information, on the other hand, the libraries are in track with latest development and applications of information technology skills are getting more importance, Hence it is need for the library and information professionals should reorient their skills.

3.   Virtual Universities

Virtual Universities are e-Universities functioning on Internet. These Universities are have offering a range of academic degrees from certificate to Ph.D programmes. This environment is absolutely simulation of traditional learning style. But the boundary of University are limitless. A learner may choose course of his/her choice after satisfying requirement of those course. Once a learner enrolls into particular course in these institution he can make use of communication tools and interact through online on off campus. The evaluation or performance audit will be done through e-media only.

3.1   E-Learning and Libraries

e-Learning has revolutionized and democratized the delivery and accessibility of education and has also changed how critical support services such as library and information services are provided. Libraries and librarians are very important to e-Learning. They are face to face to education. Library professionals need to understand the mechanics and concepts of e-Learning to provide effective distance library services. In distance education the learning takes place at the location of student and not at the institution of instruction. Today's learners are located any where, of any age and any gender.

3.2   Establishing and Manging Distance Librarianship

Library and information service for distance education is often extension of institution's existing traditional library services. When establishing the library services for e-Learning, traditional library standards and procedures can applied as a guide. Library services in the e-Learning environment to provide most intended to provide traditional library services such as consultation, reference and bibliographical searches and course reading material. Generally in providing postgraduate and research level library services it is most challenging as the learner needs cannot be satisfied just with repackaged reading and information.

The basic goals of library and information services in e-Learning environment are;

- Access to information resources, such as texts, supplementary reading and reference services
- Assess the library and information service needs of distance education programme in consultation with distance education with course teams, faculty and possibly a student survey.
- Determine the best media and delivery methods for e-Learning services such as audio, video, tape, print or online material to be distributed through traditional mail, fax, e-mail or download from website.
- Determine costs for setting-up library to provide services in e-Learning environment.

4. Developing Library Services in E-Learning Environment

Rapid spread of Information Communication Technologies, recent reduction in technology costs and increasing PC awareness in learner are very much attractive. Many libraries are in the process of delivering the information services and resources through the online chat rooms, e-mail services, listserves or fee online databases and reference services, teleconferencing and toll free numbers.

4.1 Access to Information Resources

Student at remote sites must get the information resources supporting their learning. Computer search services should be extended with full text document delivery. Library should provide full text documents. In a step ahead the e-learning the library can setup the Digital library. Digital Library will break all the barriers of data transfer. It can store a large amount of information in various forms i.e., text, audio, video, graphic material. Learners can make effective search for the information in digital libraries with sophisticated search engines and download into his or her system.

4.2 Consultation Services

Consultation can be conducted through e-mail, toll free telephone service, pre-packaged mail out information or scheduled remote site visits.

4.3 Reference Services

In the Distance education programme learner can use forms to make research queries electronically. Reference services on the Internet is gaining more popularity. Reference Librarian with the help of Internet can provide both short range and long range information services. The ready reference services in the form Frequently Asked Questions(FAQ) is most convenient for the learner.

4.4 Inter-Library Loan and Consortia Sharing

Today there is one or the other form of network or cooperation is existing in the form of associations or consortia. Such as INFLIBNET, DELNET, CALIBNET etc. Further each of the member library possess the computer, online systems and networks. The effective electronic transmissions of document demand helps quicker inter library loans and information services.

5. Issues in E-Learning

Today e-Learning is considered as alternative tools of empowering knowledge and skills. It is also treated as alternative means for classroom teaching. Now with the help of Internet it is possible to deliver the information with highest degree of precision which is not possible with traditional skills. It has overcome several constraints of traditional learning system. But still there are some issues such as

5.1   Instruction and Training

One of the main problem in e-Learning system that learner should have sufficient knowledge and skills of usage of Information Technology. In the web based education require much training as the e-Learning involves different types of multimedia files.

5.2   Interaction

There is a lack of interaction between learner and subject specialist. It may possible for subject expert availability. But teacher may be possible to access via e-mail. Some time face to face interaction can be made possible through online conferencing. E-Learning designer should need to increase the interactivity.

5.3   Speed of Network

To access the learning material it is very much required to connect Internet. As e-Learning involves ultimedia file, higher speed of network with sufficient bandwidth is required.

5.4   Budgetary Support

Considerable infrastructure such as hardware, software and manpower requires heavy Investment. Organisation who wants to start e-Learning system should have enough funding.

5.5   Quality of the Seravices

To ensure the higher quality of the services to its user regular survey is required to test the material and they should be repackaged on periodical basis.

5.6   Copyright

Libraries need to distribute copies of the same information to the distance learners. So Librarian must be familiar with the sufficient rights to acquire intellectual property.

6.   Conclusion

In e-Learning process the future libraries will emerge as active bridge between the learners and information. e-Learning supported by digital library is very much significant and critical in higher education and research. The Librarian can help in creating and developing repositories and content management. e-Learning helps learner to acquire education quickly and economically. The emergence of Information Communication Technology enables the delivery of library services more efficient and effective. Based on the increased improvement in the technology driven library services future of e-Learning is quite optimistic. It is anticipated that e-Learning as a learning environment will be well received. However, e-Learning is only the tool and its effectiveness will depend on the quality of the content including the learning resources and the use made of the communication tools. Universities, including the staff, have to change if they are to survive. All aspects of developing an online environment need to be carefully monitored and evaluated to ensure that the student learning experience and the change in current education practice is enhanced and that the University and its staff are sustainable in the 21st century.

7. References

1. Anandkrishnan, M. "e-Learning: substitute or supplement?" Paper presented in XX IATLIS National Conference, Madras, Chennai, 21-23 Nov. 2003, Pp.123-129.

2. Davies, D. "Virtual university : a learning University", MCB Journal of Work place learning, v10(4), 1998(Online edition).

3. Joshi, Vinod. "E-learning to the wisdom" The Hindu, October 15,2003. P5.

4. Patterson, G. "The leaning university", MCB Learning organization, 6(1), 1999(online edition).

5. Riggs, D.E "Distance education: rethinkingpractices, implementing new approaches" college and research libraries 58, 1997. Pp.208-209.

6. Sangam S L and Vatnal R M "e-Learning and Libraries in offering LIS education" Paper presented at XX IATLIS National Conference, Chennai, 21-23 Nov. 2003, Pp.123-129.

7. Why e-learning is so powerful? [www.zdnetindia.com/specials/elarning/]. 2 December 2003.

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