Importance of Digital Library for E-Learning in India

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Abstract

The potentialities of information technology, together with economic concerns, have been forcing various organizations to go for digitization. This has also happened to libraries, whose primary value lies not only in their collections but also in their contribution to education through providing information service, facilities for e-learning and management of collected information, which they make easily usable and accessible to users. The design and development of web-based educational systems for people is happening in India also.

Keywords: Digital Library, E-learning

0.   Digital Library and E-learning

Digital library in India is under the supervision of Indian Institute of Science which is being helped by the Carnegie Mellon University. For the first time in history, the Digital Library of India is digitizing all the significant literary, artistic and scientific works of mankind and making them freely available, in every corner of the world, for our education, study and appreciation and for all our future. Learning process through digital library will be available free to any one round the world and the needy will get benefit.

Digital library at National Level is must and should have legislative responsibility to provide access to the nation's documentary heritage and to preserve the heritage of the country for the posterity. National Digital Library(NDL) has also the responsibility of providing resources to support all facets of the Indian School Curriculum. These e-sources are being used and will be extensively used by the next generation for which information technology and telecommunication will be must. As we explore next generation e-learner system needs to be introduced from the school level. Moreover, this technique needs national approach. If we are to maximise all of the advantages of the next generation e-learning and digital library environments then we must achieve this level of interoperability, interaction and seamlessness. In future education will be fully connected and supported by smart use of information communication technology.

There will be need of connectivity at every level and content creation. It is generally agreed that there will be content from a variety of sources and repositories which will have many purposes and users to support teaching learning and research. The digital libarary in all of its manifestations (e-publishing, e-print, digitization etc.) will provide content for next generation e-learning environment.

E-learning will decrease the digital divide of the country. Within India some states are still backward and some too much advanced in information technology. Similarly some states have made provision for computer education from school level whereas some states are unable to afford such facility to all the schools.

Digital library has its own implications in India as we have lakhs of books in various languages. Thus language problem is one such impediment in digitization which is likely to be solved in near future as promised by Microsoft Co. However, after the middle of twentieth century number of books in English increased at a rapid speed because of the spread of education , development in science, technology and telecommunication. Most of the books in these subjects are by foreign authors which cannot be digitized by Indian Digital Libraries as the copyright law does not permit them to do so. So far as Indian books are

concerned these relate particularly to religion, humanities, social sciences and very few to other subjects like sciences, technology, telecommunication and information technology.

Digitisation of old Indian books and manuscripts may be useful only to few scholars whereas the present need of the students and scholars is latest publications in science & technology. Old Indian literature can be digitized without much difficulty as there will not be any major copyright problem.

Information for all can be applicable only if the advanced countries provide free latest information to the developing nations. E-learning with latest knowledge will be available only if the digital library has all the latest books digitized. Changes are very fast even in education technology. The days are not afar when e-learning and digital library will be popular and much sought after by the students in India. However, certain institutions and universities have started work in this direction and are now leading the others to follow the same.

With the advent of fast development in telecommunication and information technology the traditional system of education, popular for centuries, is going under rapid change. Computer and internet technology has absolutely revolutionized the system of education. India has lakhs of schools, about 14,000 graduate and post graduate colleges and three hundred universities. At present more than 85 lakh students are going for higher education and millions of students are studying at school level. Inspite of it our 35% population is still uneducated because of several reasons.[1]

The world today engrossed by the web revolution is strongly influencing all aspects of life including education. India is no exception. Learning will shift its focus from 'Teacher centric' to 'Learner centric' education system.[2] E-learning grew out of the distance learning programmes offered by open universities and correspondence courses. Traditional libraries are being threatened by web technology.

ODES (Open and Distance Education System) is now gaining roots in India. India has ten open universities and one National University. About 235 different academic programmes and more than two thousands different courses (subjects) are offered through these universities. These universities have on rolls about 14 lac students. So far only seven languages have been included to provide education to the students.[3]

Number of students in these open universities is increasing very rapidly. However, the students of urban areas are privileged ones because of various educational facilities. Students of rural, tribal, hill areas, part-time servants, handicapped persons and military personnel are in need of education which most of them cannot avail of because of various reasons. Correspondence education is losing its popularity because of the universalization of internet.

In India print media is still popular and role of other medias like audio, video, radio, television, multimedia etc. is still only supportive. Learner has to match place and time for using the other media for learning.

Availability of information on internet has proved a boon for the developing countries. Micro or Macro Information of almost every subject is available on the internet. With the coming of internet Indian educational institutions are under great pressure to use internet for teaching.[4] Because of it E-learning has become possible even in third world countries.

Knowledge is expanding at lightning speed in the world. Indian students also need to learn more, better and faster. E-learning system can empower both students and teachers, for quality education. It will create a knowledge resource for the nation and any module can be easily shared by anyone, any where. E-learning aims to provide excellent learning support to the students, which is as good as face to face teaching. Such an effective learning, improved quality, reduced duration, cost effectiveness and flexibility

can be considered as objectives of E-learning. The mode is not truly, 'online education' but may be called as a 'web enabled education'. In India initially the prices were very high, but with the passage of time the prices of computers, spare parts, browsing charges have come drastically down. It has enabled the poor and developing countries to avail of the facility. Web based E-learning is already viewed as an important tool to improve academic quality. Quality education 'anywhere anytime' is the need of the hour in India. E-learning is a great step forward towards ensuring quality education for all', with cost effectiveness at door steps of learners.[5]

Thus for the ODES (Open and Distance Education Centres) of India there is now a strong need to consider how the Internet, with its present technology, limitations with costs, can affect the teaching, learning, expectations and employability of students.

Internet is a fast, easy and reliable communication media with a global presence. Latest 'Active Server Page' (ASP) technology offers excellent secured opportunities for interactive intelligent communication and on demand feedback about learning effectiveness, on the internet. Video interaction, virtual classroom and (virtual classroom modules) are useful in best time utilization. Other features will be information in CDs, no ambiguities but clear knowledge, best development of understanding, discussion forum on internet, online counsellors etc.[7]

For E-learning in India standardization of internet software in universities and other educational institutions is to be standardized. In order to provide education on a large scale there will be need of study centers and counsellors. Internet will affect our mode of learning and communication methodology. ODES cannot afford to ignore the benefits of internet. Quality and efficiency of academic and administrative services will improve a lot. Drastic changes in the method of learning will appear in the new millinium in India. Some universities are providing online education, online admissions as well as online examination and online results on the internet.

E-learning is an ideal mode of imparting education in an open learning system, where learners are located at different places. E-learning will be provided via all electronic media including the internet, web based digital library, intranets, extranets, satellite broadcast, audio-video tape, interactive TV and CD ROM. Content creation, content management and content distribution are other components of E-learning.

India is a developing country with 26% population still living below poverty line. Poor students unless helped financially cannot avail of facility of E-learning. E-learning allows an end user to learn at his own place, own pace and the time at which he likes. E-learning tool is a complete, composite and customized solution. It offers an engaging online environment that delivers the knowledge we need, when we need it, and where we need it. Participants irrespective of their locations can interact with other participants, facility or management through various collaborations.

There are a number of contentious issues like instructional design, quality, cost, student's outcomes, access, equality, accreditation, personal and institutional impact. E-learning is poised to catalyze both-competitive and collaborative relationships among the profit firms and non-profit colleges and universities. Unlike India, almost all the colleges and universities in U.S.A. are using e-mail, materials on the WWW (World Wide Web), or other internet applications. It will reduce average instructional cost per student and the distinction between 'distance' and campus based students will also disappear slowly and slowly. E-learning cuts the costs of travel, other expenditures, administrative over head, duplication of effort etc.

Because of digital library on internet the students can have twenty four hours accessibility, consistent quality, high retention of power and low cost. E-learning that is using the internet for instruction in post secondary education and training – has been joyously welcomed by some and bitterly described by others [12].

1.   Conclusion

The challenges of providing education to a huge population in India with diverse needs and learning styles will require a new approach in our delivery strategies. It is essential that UGC should create a learner-centered, cost effective system to support the use of E-learning by the institutions. The target group of the system will be the teachers as well as learners, at all levels (formal, non-formal, informal and continuing), multimedia content developers and learner support staff.

Future of E-learning through digital library is very hopeful in a country like India. Those who are yet deprived of educational facility because of various reasons will be able to avail of E-learning facility very soon.

2.   References

1.   Chopra, H.S., Library Conservation, New Delhi; Common Wealth Publishers, 1995, p. 21.

2.   India 2004 : Refence Annual, New Delhi; Ministry of Information and Broadcasting Government of India, 2004. p. 207.

3.   Killedar, Manoj, "Web based Engineering Education in India". http://killedar. Tripod.com accessed on 10.03.04 at 7.15 pm.

4.   Ibid., p. 3.

5.   N. Venkateshwarlu and Subhasis Maji, "E-learning in Distance Education", Journal of Distance Education. 2004, p. 162.

6.   Killedar, Manoj, p. 5.

7.   Loc. Cit.

8.   Ibid., p. 6.

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