E-Learning through Digital Libraries in India

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ABSTRACT

Library Learning resources and services are very significant to research and teaching in higher education. The introduction of ICTs has completely transformed libraries and information centers. They have emerged as early adopters of new technologies and act as service points for access to digital libraries. In India , R&D Institutes ,National Libraries, National Agencies Universities , Archival centers are involving in digitization and responding to the increasing importance of e-learning by developing their services accordingly. This paper highlights, Library Consortium in India, Scholarly Science Journals, Electronic Theses & Dissertations, Institutional E-Print Archives, Books (out of copyright),E-Paper(newspaper),Online courseware ,Data ,Manuscript ,Open Access initiatives at Metadata Level Other Major Initiatives in India.

Key Words: E-Learning in India, Digital Library Consortium, E-Books , ETDs.

Introduction

Electronic Learning is referred to learning with the use of computers and internet. Concept of e-learning refers that with the facility of internet anyone from anywhere can learn. It also refers to teaching and learning in the digital environment. It is one mode of distance learning with benefit of technology .It can also be used with class room learning which referred as "Blended Learning".

The significance of e-learning is growing in higher education. As we all know GER (Gross Enrollment Ration) is very low in comparison in other foreign countries. E-learning can be the boon for those who can not go for regular studies. E-learning provides flexibility of place ,time and person.Anyone can join for e-learning from their own place.

Digital Library Initiatives in India: Some Examples are below.

1 .Library Consortium in India

INDEST-AICTE Consortium (Govt.-funded)

The INDEST-AICTE Consortium has three types of members based on funding.
Type I: **Core members supported by MHRD** Type II: **AICTE supported members** Type III: **Self-supported members**.. The basic goal of the consortium is to provide the e-resources to the academic institutions of the country. Open-ended Consortium: Self- supported institutions + Member institutions

Core Members is 38 (Funds for e-resources through MHRD)Members with AICTE Support 63Self-supported Members 459 Total560

CSIR E-Journals Consortium (Govt.-funded)

Funded by the Deptt. of Scientific and Industrial Research (DSIR) Administered by the NISCAIR, New Delhi Restricted to 38 CSIR Laboratories. It .has agreement with 11 publishers for providing access to selective access to 3,316 e-journals to 38 scientific laboratories.

UGC Infonet Consortium (Govt.-funded)

Funded by the University Grants Commission. Administered by the Information and Library Network (INFLIBNET) Centre, Gandhinagar .Benefits 150 universities as in 2006. Likely to be extended to all universities (200) as well as to selected colleges. It has agreement with 25 publishers for providing access to 4,000 e-journals to 150 universities.

DAE Consortium (Govt.-funded)

Funded by the Deptt. of Atomic Energy (DAE) Administered by the BARC, Mumbai. Restricted to 36 DAE institutions including BARC and TIFR. It   has agreement with 4 publishers (including Science Direct, Springer, MathSciNet) for providing access to 2000 e-journals.

MCIT Consortium (Govt.-funded)

Funded by the Deptt. Communication and Information Technology (MCIT). Administered by the C-DOT, New Delhi. Restricted to 18 institutions under MCIT including NIC, CDAT and CDOT. It has agreement with 5 publishers (including IEL, Science Direct, ACM, EBSCO, JCC) for providing access to 2000 e-journals.

FORSA Consortium

Findings from member institutions. Administered by the members libraries (by rotation) Restricted to 10 institutions including TIFR, PRL, IUCAA, etc. Has agreement with 4 publishers (including Springer, Nature, IoP, etc.)

2. Scholarly Science Journals

Indian Academy of Science (IAS)
IAS established in 1934. It organizes meetings, discussions, seminars, symposia and publishes 11 journals.Web link Is http://www.ias.ac.in/

Indian National Science Academy (INSA)
INSA established in 1935.Publish journals, organize scientific discussions and bring out proceedings and monographs. DSIR supported for it's project of digitizing and web hosting .Web link is http://www.insa.ac.in/.
Medians:
Biomedical Journals from India (http://medind.nic.in/) having   full-text of 31 Journals Indexed in IndMED. Project supported by the Indian MEDLARS Centre, National Informatics Centre (NIC)

3 . Electronic Theses & Dissertation (ETD)

Vidyanidhi
A digital library initiative for digitizing and hosting theses and dissertations. Dept. of L&IS, University of Mysore. Supported by DSIR, GOI .Part of global ETD initiative. Web link is http://www.vidyanidhi.org.in

Sodhganga
Sodhganga project is running by INFLIBNET.As per UGC rule ,Every University must submit one copy of PhD theses to INFLIBNET centre,Gandhinagar. It is one of the biggest theses repository in India.

IIT Delhi Repository
IIT Delhi started the project with grants received from the Ministry of Human Resource Development & Department of Biotechnology. Around 1200+ Ph.D. theses scanned. Electronic submission of theses approved by the Institute senate.   Web link is http://eprint.iitd.ac.in

IIT Bombay Repository
Dissertations and Ph.D. theses More than 3,500 deposits as on date. Bibliographic data along with abstracts available to all .Full-text of theses and dissertations available on Intranet. http://www.library.iitb.ac.in/etd

4. Institutional Repositories

Eprints @ iisc
E-Print archive of Indian Institute of Science , Bangalore. Online digital repository of IISc research papers. Research papers (preprints, post-prints), book chapters, technical reports, unpublished findings, conf papers, magazine articles. Set up using eprints.org open source software. Part of worldwide institutional e-print archives http://eprints.iisc.ernet.in/ INDEST Consortium promotes establishment of e-print archives at its member institutions under "INDEST Extended". Training imparted to participants from 22 institutions at NCSI, IISc, Bangalore. Institutional E-prints Archives has already been established at:

Librarian's Digital Library
Established at DRTC, Bangalore by Dr. A.R.D. Prasad Open to the entire community of Librarians Powered by DSPACE The depository contains: Publications / Articles ,Theses / Dissertations ,Power point Presentations ,Demo of Multi-lingual Documents ,Photographs of LIS activities ,Photographs of DR. S.R. Ranganathan.

5. Electronic Books(Out of copyright):

Universal Digital Library Project (http://www.dli.gov.in/).Portal on Digital Library of India launched in Sept., 2003 by the President of India, Dr. APJ Abdul Kalam. The portal has more than 27,000 books in digitized form. Goal is Free-to-read.Searchable collection of one million books (out-of-copyright).Test bed for research - language processing, indexing, search and retrieval. Support from Carnegie Mellon University (CMU) coordinated in India by Indian Institute of Science, Bangalore.

National Science Digital Library (NISCAIR): Books being written by authors from universities under contract with NISCAIR.

National Library Kolkota: There are Books (<1900, Indian <1920),6600 Titles, 2.5 M pages, 548 CDs, Bengali Journal (Prabasi), East India Company Records, Many Diaries.

6. E Paper (Newspapers)

Times of India: http://epaperdaily.timesofindia.com/ Complete News paper with all city additions Current + 6 days   Plans to charge Rs. 50 per month and Rs 5000 per month for archives in Pdf. Other newspapers with e-archives include: Hindustan Times, Hindu, Indian Express, Anand Bazar Patrika, Enadu, etc.

7. Online Courseware :

National Programme on Technology Enhanced Learning (NPTEL) (http://www.nptel.iitm.ernet.in/) MHRD-sponsored programme. The programme is executed by all IITs & IISc. Aimed at developing curriculum-based video and web courses (at least 200) . several web-based courses already available from web-sites of participating institutions .Online Courseware Directory in IT at IIT Delhi (Ministry of Information Technology-sponsored Project).

8. Data:

National Chemical Laboratory (NCL) National Collection of Industrial Microorganisms (NCIM)**.**Culture collection of around 3700 strains of algae, bacteria, fungi and yeast.Free access to all related data**.** http://www.ncl-india.org/ncim/**.** National Centre for Biodiversity Informatics. Indian biodiversity informatics. http://www.ncbi.org.in.

9. Manuscripts

India has the largest collection of manuscripts in the world (5 million approximately).India is the repository of an astounding wealth of ancient knowledge belonging to different periods of history, going back to thousands of years. Most of this knowledge belonging to different areas of intellectual activity such as religion, philosophy, science, arts and literature is preserved in the form of manuscripts. Composed in different Indian languages and scripts, they are preserved in materials such as birch bark, palm leaf, cloth, wood, stone and paper.
National Manuscript Mission was launched five-year programme in Feb., 2003 by the Ministry of Human Resource Development, Govt. of India to get all the manuscripts and conserve them.

10. Archives of Indian Labour V.V. Giri National Labour Institute,Heritage of Indian Working Class Commissions on Labour Oral History Collections Trade Union Collection Regional Collections Strike Collections Powered by Green Stone Digital Library *http://www.indialabourarchives.org/*

11. National Library Kolkata
Manuscripts (Work in Progress) Paper –3000, Palm Leaf-334

12. Open Access Initiatives at Metadata Level

National Informatics Centre (NIC)

NDMED – Bibliographic database of Indian biomedical literature – 75 Indian journals http://indmed.nic.in/

INFLIBNET

Resource sharing network of Indian universities – UGC programme Databases – P.D. theses, experts, R&D project http://web.inflibnet.ac.in/

DELNET

Resource sharing network of libraries within & outside Delhi region Several Database – Books, Periodicals, Articles, Dissertations & Theses, Experts, Others http:/www.delnet.nic.in http://delnet.nic.in/   Other Library Networks: CALIBNET, BONET, PUNET, ADINET, etc.

Other Major Initiatives

Traditional Knowledge Digital Library (TKDL)

http://203.200.90.71/IndiaTkdl/index.asp**.**Focus on preservation of community knowledge resources for posterity **.**To give legitimacy to the existing traditional knowledge and enable protection of such information from getting patented from India's traditional knowledge systems Joint Venture of National Institute of Science Communication and Information Resources (NISCAIR) and Department of Indian Systems of Medicine and Homeopathy (ISM&H)Documentation of this existing knowledge to be made available in public domain, on various traditional systems of medicine

National Health Information Collaboration (NHIC)

WHO/ ICMR project - Heath InterNetwork India Portal for Indian health data and information Free open source software under development

URDIP: CSIR Unit for Research & Development for Information Products

Open access to Indian patents and medicinal plants

Central Secretariat Library

Major Project - Gazette of India (post independence only; pre-independence in microfilm format with British Library, London)**.**Annual Reports

Khuda Baksh Oriental Library

Activities being initiated to archive valuable centuries old special collection Manuscripts – Around 4 Lakh pages

National Library, Kolkata

Activities initiated to archive valuable special collection and brittle books Scanning and archiving of rare English books and documents published before 1900 and Indian publications of pre 1920 are considered for digitization. Pilot Project – 6600 selected books in Indian and English languages have already been scanned and stored on CDs (total of over 25,00,000 pages)   (www.nlindia.org)

Digitization of Records of Fellow of INSA (INSA)

Special Collection archived by the INSA library Archived in print format since last over six decades. Digitization - initiated in 1998-99 Full-text Data stored in TIFF   (compressed) with database containing

Indira Gandhi National Centre for Arts (IGNCA) The Pioneering Digital Treasure of Arts (http://www.ignca.nic.in),Digital Images,Manuscripts in India,Multimedia Documentation

,Video & Audio Recordings ,Papers and Essays ,Animations and Walk through ,Research Reports,Databases; Conference Proceedings,adequate search parameters.

Nalanda Digital Library at NIT Calicut

Nalanda digital library contains E-books**,**E-Journals (Open Access)**,**Requests for Comments (RFC)**,**E- theses.

Digitization of Debates of Parliaments

All debates, questions, committee reports, bio data of present and past MPs including photographs and addresses, etc. have been digitized and available on the Web (http://parliamentofIndian.nic.in/)

Gateway services for open access resource

- SciGate: Science Information Portal (IISc)
- AeroInfo: Aerospace Virtual Library (NAL)
- Biotech Portal @ IIT Delhi
- Library Portal @ IIT Kharagpur

Conclusion

Digital Libraries are redefining the role of libraries in society & the role of librarians & information specialists National level mechanism is essential to promote and coordinate open access and public domain digital library systems Improve awareness of open access Regular training – tools, processes, standards Support setting up of working models, services National Resource Centre for open access publishing International agencies like UNESCO, ICSU, ICSTI, CODATA need to actively promote and support developing country initiatives

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