AN OVERVIEW OF OPEN COURSEWARE INITIATIVES IN INDIA

Manjunatha K. S.* Pradeep Kumar D. Arun Kumar R.*****

*Assistant Librarian,
AIMS Institute of Higher Education,
Bengaluru, Karnataka, India.

** Librarian,
Seshadripuram Commerce College,
Bengaluru, Karnataka, India.

***Library Trainee,
Bangalore University Library,
Bengaluru, Karnataka, India.

QR Code

ABSTRACT: - In today's digital world readers can't depend only for traditional collections like printed books and other reading materials. They will like to read where ever they are through the electronic devices via online or offline. This practice enforces to create open access resources, open digital repositories and open Courseware in the field of higher education. This paper gives brief description about Indian open Courseware initiatives, such as CEC, eGyankosh, Ekalavya, ePGPathshala, NCERT, NPTEL and Sakshat portals.

KEY WORDS – Open Courseware, eGyankosh, ePGPathshala, NPTEL, NCERT, Sakshat.

INTRODUCTION

The universities and other educational organizations have been adopted the electronic media in their education system. In this growing technological era Open Courseware or OCW concept is getting more importance in recent days. OCW is a course materials created by the universities and other organizations shared freely on the web. OCW is like an institutional repository it contains study and learning materials in electronic form. It is a free and high quality open digital publication of educational materials and organized as courses and also it is available for use under open license.

OCW INITIATIVES IN INDIA

1. CEC Learning Object Repository

Consortium for Educational Communities (CEC) is an inter university centre on electronic media

set up by UGC of India. CEC emerged as a nodal agency in 1993 to coordinate, guide and facilitate educational production at national level. The CEC is in coordination with 21 Educational Multimedia Research Centers (EMRC), these are producing television programmes in various subjects in English, Hindi, and other regional languages. Its main aim is to coordinate, facilitate, guide, and give direction to the activities of the media centers throughout the country. Dissemination of educational programmes, production of educational programmes and support to research activities related to optimizing the effectiveness of such programmes are also included in its activites.

1.1. E-Education or e-Learning: This is computer and network based transfer of skills and knowledge. E-learning applications include web based and computer based learning, virtual education opportunities and digital collaboration.

1.2. Vyas*:* CEC-UGC Higher Education Satellite channel called Vyas. 24X7 transmission is based on educational contents of various undergraduate subjects to supplement the classroom teaching. The main advantage of having this channel is education can reach to large number of viewers across the country. The channel for higher education is also launched in 2004.

1.3. E-Knowledge Resources*:* Digital Media Library of CEC is a Central Repository of all educational video programmes produced by EMRC's. CEC has a collection about 20,000 education video programmes on various formats. Digital media Library adds more than 2000 video programmes and e-content on various subjects and topics every year.

Media library collections

- Enrichment Video Programmes
- University video Course Lectures
- E-contents on under graduate subjects
- Video programmes on undergraduate subjects
- Learning Object Repositories (LOR's)

2. E-Gyankosh

eGyankosh is a initiative of Indira Gandhi National Open University (IGNOU). It has emerged as one of the largest educational repositories of the world. More than 2200 courses and 2000 video lectures are available online in the repository. e-Gyankosh access was restricted to the IGNOU community of students, staff and faculty. In 2008 IGNOU was taken a bold step facilitating open access to eGyankosh contents. Now any one can register for free access to learning resources available in various formats from the repository

3. Ekalavya

Project ekalavya provides an interactive platform for the creation, absorption, dissemination and usage of knowledge for the individual and the society. It is an open source initiative launched by the ASL (Affordable Solutions Laboratory)

Dept. of Computer Science and Engineering, IIT Bombay. Ekalavya attempts to bridge the gap between the seekers and givers of knowledge by producing innovative channels of communication. The web portal of Ekalavya aims at a free exchange of knowledge and thoughts by placing all the relevant material in open source, therefore making considerable contribution to the society. It aims to large collaborative communities the seekers are matched by the givers.

Different Programmes under project Ekalavya.

3.1 E-Guru: It provides e-guidance and mentorship to needy students of B E, MCA and MSc programmes, in carrying out their projects and encouraging them to think of innovative technical solutions to various problems. IIT Bombay partnering with many companies to provide incentive awards for significant contributions. Scholarships are designed to encourage young talent and spread of open source philosophy.

3.2 E-Outreach: This creates a bank of high quality open access contents. These include digital audio, video and text of specialized lectures and workshops for the benefit of the students and teachers community. The Open Source Courseware Animations Repository (OSCAR) under eOutreach programme creates repository of interactive animations for teaching different concepts and technologies. An auxiliary goal of OSCAR is to provide training opportunities for students involving the creation of an animation, as well as the management and maintenance of animations in the repository.

3.3 E-Content: This programme is designed to create open source digital contents in various Indian languages through translation and new writings on topics of relevance in all levels of education.

4. E-PG Pathshala

E-PG Pathshala is established by UGC for developing of e-content in 71 subjects at post graduate level under MHRD's National Mission on Education through ICT (NME-ICT) programme. Its main aim is to develop high quality; curriculum based interactive content across all subjects. Any PG teacher engaged in teaching in an institution recognized by UGC for at least 10 years in the particular discipline, any educational institutions in the country imparting higher education who agree with the aims and objectives of the NME-ICT shall be eligible to submit proposals for e-Content development. The included subjects are categorized mainly;

- Arts, Humanities and Languages
- Engineering and Technology
- Life Science
- Medical and Health Sciences
- Physical and Basic Sciences
- Social Sciences

5. NCERT

The National Council of Educational Research and Training (NCERT) is an autonomous organization set up by Government of India in 1961 to assist and advise the Central and State Governments on policies and programmes for qualitative improvement in school education. NCERT publishes I to XII standard books in Hindi, English and Urdu. All its books are available freely for students and teachers via internet. This portal provides easy navigation to access class wise, subject wise and chapter wise contents of the books. Anyone can download those books for their study or teaching without any cost and violation of copyright is strictly prohibited while using these online books. NCERT portal is one of the important and useful open Courseware in India.

6. NPTEL

National Programme on Technology Enhanced Learning (NPTEL) is an initiative of seven Indian Institutes of Technology (IITs) and Indian Institute of Science (IISc) funded by the MHRD, Government of India for creating course contents in engineering and science. Its main aim is to develop curriculum based video and web courses. As on August 2015 NPTEL has 420 web courses and 509 video courses developed those can be accessed freely from the website http://nptel.ac.in. The content generation is spread across the eight institutions and it encourages other institutions to build their own versions of NPTEL courses based on their curriculum by using NPTEL materials and collective experience of IITs and IISc in Technology Enhanced Learning. The subject areas which have covered in NPTEL are civil engineering, computer science and engineering, core science and engineering, electronics and communication engineering and mechanical engineering.

7. Sakshat

Sakshat is a one step educational portal launched by MHRD, Government of India to facilitate all the educational and learning related needs of the students, scholars, teachers, lifelong learners and those in pursuit of knowledge free of cost. Its content developed by UGC, AICTE, IGNOU, NCERT, KVS, NVS, CBSE, IITs, IISc and eminent academicians in the field, and also provides links to vast knowledge resources, educational news, sample papers and other useful links available on the web.

Ongoing Projects of Sakshat

- Content creation (Non-Technical) in the area of Economic, Mathematics, Commerce, History, Botany and Zoology.
- E-Kalpa: Creating digital environment for design in India.
- Vidwan: Creation of an expert database.
- Developing an online Joint Entrance Examination (JEE) item bank to prepare candidates to developing the skills.
- Developing e-content for Law subjects.
- Developing e-content for Fashion Design and Technology.

- Development of e-content for academics and professionals in the area of the IT enabled management.
- Development of conceptual content for self teaching on advanced engineering subjects.
- E-Content generation and sharing laboratory.
- Establishing e-Training environment for technical teachers and students.
- E-Yantra: Robot enhanced teaching of subjects in engineering colleges.
- Introduction to programming and its mathematical foundations.
- Library Automation
- Text, Transcription of technical video lectures and production of searchable video index, and quizzes.
- U Share: Multi user real time access platform for remote experimentation.

TRENDS IN OPEN COURSEWARE

1. Very rich content is developing every fraction of second and also using in the same time in open environment.
2. Personal Learning Environment (PLE) is rapidly expanding trend, any student through open source web tools and apps can learn how to organize his or her own learning through creating PLE.
3. Podcasting, screen casting, and video casting are becoming very popular ways to capture and distribute course content.
4. Folksonomic approaches to creating metadata and indexing are getting popularity with end users.
5. Syndication formats like RSS and ATOM are becoming popular to distribute metadata and provide access to content.
6. Projects like the open source EduCommons software are making it easier than ever to do Open Courseware projects. EduCommons is a content management system made specifically for OCW users with specialized workflow, copyright tracking, etc.
7. Massive Open Online Course (MOOC) The idea to reproduce the entire classroom experience online, by allowing students to take part in an online class, being a member of a cohort, and completing a course in a scheduled manner.

CHALLENGES IN ESTABLISHING OPEN COURSEWARE

- Maintenance and sustainability.
- Intellectual property and copyright issues.
- Quality assessment and enhancement.
- Financial restrictions.
- Human resistance.
- Implementation of Interoperability standards.
- Technological barrier.
- Lack of good practice.

CONCLUSION

Mainly there are seven Open Courseware's identified and examined to know their various aspects and the Open Courseware's are free to all anyone can access available learning materials free of cost from the portal via internet under creative commons licenses. Basically Open Courseware initiatives are multidisciplinary in nature providing various kinds of useful resources for education. NPTEL is a specific subject oriented initiative. In recent days Open access is getting very fast and furious importance in today's digital world. There are very less institutions established Open Courseware if we compare to the 46 Central Universities and 342 State Universities in India. So the governments and other constitutional bodies of higher education is to take a step forward to create open Courseware repositories in various subjects and to promote open access publication. Because of its importance many foreign countries are allocating separate amount for open access publication in their university budgets to promote open access publications. So the authorities and also the contributors should move forward to publish in open access and it should be available to the end user without any barrier.

REFERENCES

- Taylor, James, C (2007), Open Courseware futures: Creating a Parallel Universe. *E-JIST, 10(1),* 1-9.
- Avineni, Kishore & Pusapati, Ramireddy (2012), Open Courseware Initiatives for Engineering Curriculum. *International Journal of Digital Library Services, 2(4),* 63-72.
- Imran, Sheikh Mohd (2012), Trends and Issues of E-Learning in LIS Education in India: A Pragmatic Perspective. *Brazilian Journal of Information Science 6(2),* 26-45.
- Mahat, Shabnam, S & Nalawade, K M (2013), Teachers Awareness about Sakshat: A One Stop Educational Portal. *International Journal of Innovative Technology and Exploring Engineering 2(2),* 22-24.
- Bherwani, Mohini, T (2012), Open Courseware Initiatives in India. *International Journal of information Library & Society 1(2),* 46-50.
- CEC learning Object Repository retrieved from http://cec.nic.in/Pages/Home.aspx
- eGyankosh retrieved from http://www.egyankosh.ac.in/
- Ekalavya Project retrieved from http://ekalavya.it.iitb.ac.in/ekalavyaHome.do
- ePG Pathshala retrieved from http://epgp.inflibnet.ac.in/about.php
- NCERT Information retrieved from http://www.ncert.nic.in/index.html
- National Programme on Technology Enhanced Learning retrieved from http://nptel.ac.in/
- Sakshat Information retrieved from http://www.sakshat.ac.in/