

Major Initiatives for Creating OER in India

Dr. Dhvani B. Desai

Assistant Professor, Accountancy
Government Arts and Commerce College, Kachhal, India
dhvanidesai710@gmail.com

Abstract: *India is one of among such countries in the recent past which has improved its position in the world forum and has taken a big stride by transforming human resources into knowledge workers. The entire credit goes to government of India, their scheme and most importantly the people working tirelessly in the higher education institutions. But the percentage is very low. The reason is higher education of India is plagued with several challenges like poor quality of teachers, poor infrastructure, poor libraries and poor educational resources. National knowledge commission has recommended that problems of educational materials to a large extent can be reduced by OER. The easy and wide spread availability of high quality educational material will change the concept of teaching and learning and thus improve the quality of education.*

Keywords: Open Education, OER, India

I. KNOWLEDGE

In general knowledge is facts, information and skills acquired through education or experience. Knowledge can refer to a practical or theoretical understanding of a subject. "Knowledge is power" that does not get reduce after sharing with someone else. Knowledge is what allows us to shift on to a better life.

II. REVOLUTIONS IN KNOWLEDGE

The first revolution in knowledge came with the invention of written language, which meant that for the first time people could store information and retrieve it without needing to rely on memory. The second revolution that occurred in the middle of the fifteenth century came with the invention of the printing press. With this revolution, information in books and pamphlets could be disseminated much more widely and quickly. The third revolution brought about by ICT is accelerating the dissemination of information and knowledge. In the second decade of the 21st century, are we on the threshold of a fourth revolution? The internet and such services as Google and email, together with numerous new by-products like Wikipedia, Skype, Facebook, WhatsApp and Twitter are transforming further the way we live, learn, work and play. It is suggesting the emergence of a possible fourth revolution, in some countries, learning is moving beyond the walls of the classroom, and that new terms have been coined to express these innovative ways of learning, terms like: *M-learning* or mobile learning, and *U-learning* or ubiquitous learning.

III. OPEN EDUCATION

Open education is the simple and powerful idea that the world's knowledge is a public good and that technology in general and the Worldwide Web in particular provides an extraordinary opportunity for everyone to share, use, and reuse knowledge." Open education leads to Institutional practices that broaden access to the learning and training traditionally offered through formal education systems Elimination of barriers anytime, anywhere, anyone

IV. OPEN EDUCATIONAL RSORCES

4.1 Beginning of OER

The term "open educational resources" was firstly used at UNESCO's 2002 forum on the Impact of Open Courseware for Higher Education in Developing Countries, although OER were being produced and used before that time. For instance, the MIT Open Course Ware project, which began in 2001, was one of the first major initiatives of the OER movement.

4.2 Definition of OER

According to William and Flora Hewlett foundation: “Open Educational resources are teaching, learning and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use and re-purposing by others. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge”.

The Organization for Economic Co-operation and Development (OECD) defines OER as: “digitised materials offered freely and openly for educators, students, and self-learners to use and reuse for teaching, learning, and research. OER includes learning content, software tools to develop, use, and distribute content and implementation resources such as open licences”.

4.3 Benefits of OER

Traditional resources are insufficient to support the demands of Indian higher education due to budget crunch and other infrastructural problems. OER may be a useful for a huge subcontinent like India. OER are important for many reasons.

Openly available for use by educators and students

- Easy to share between students & institutions
- Guiding students effectively
- No cost for textbooks and tuitions
- Opportunities to improve teaching
- Safest way to protect the own IPR and copyright
- Remains attributed to the author
- Provides opportunities to market services and
- Go global

4.4 Types of OER

- Courses
- Course materials
- Content modules
- Learning objects
- Collections and
- Journals

V. MAJOR OPEN EDUCATIONAL INITIATIVES IN INDIA

1. NPTEL

In the India there are three or four major initiatives for creating open educational tools and resources. All of them are directed towards OER in the basic sciences and engineering science areas. One of the major programmes in India is the national programme on technology enhanced learning. The NPTEL project is carried out by seven IITs, the Indian institute of science and other prime institutions around the country and being funded by the human resource ministry. The NPTEL objective is to enhance the quality of students. It also provide an opportunity for teachers and students from rural areas to learn from this high quality lectures and improve the quality of teaching in this rural colleges.

2. EKLAVYA

The second important open educational resource project is the EKLAVYA project launched by IIT Bombay. In this project the content is developed in various Indian languages and is distributed through the internet. The EKLAVYA project has also developed an open source educational resources, animation repository (OSCAR) and provides interactive animations based on web for teaching various concepts and technology

3. E-GRID

E-Grid is the third main open educational resources initiative of India that develops and maintains pedagogically sound and referred educational resources in identified subjects. This project is supported by the human resource ministry at IIT, Kerala. Currently this programme also offers open educational resources only in the science and engineering science.

4. NMECIT

National mission on education through information and communication technology is a centrally sponsored scheme to leverage the potential of ICT, for providing high quality knowledge about internet/intranet for all kind of learners in higher education. Major components of this scheme are generating the contents and connectivity along with provision for institutions and learners. In this project universities are connected with "National Knowledge Network" (NKN) and college are connected with broadband connectivity. This scheme launched on 3rd February 2009, by Govt. of India. Mission provide an opportunity for all the teachers and experts in the country for the benefit of every Indian learner. Some of the objectives for this mission are:

- Empowering and enabling students.
- Connected over 400 universities and 22000 colleges all over India through high speed data.
- Making available educational videos by teachers for U.G and P.G classes.
- To extend computer infrastructure and connectivity to over 26000+ colleges and 2000 polytechnics in the country including each of Dept. of 419 universities.

5. NKN

This project runs by national mission on education through information and communication technology. NKN providing a high speed network for all knowledge related institution in country. The purpose of NKN is building quality institution with research facilities and creating highly trained professionals, and enables scientist, researchers and students from different backgrounds. Target users for the NKN are all institutions engaged in the generation of knowledge in various areas such as research laboratories, universities, institutions of higher learning and including professional institutions.

6. SHAKSHAT

It is an initiative of the ministry of human resource development to develop needs of students, scholars, teachers and lifelong learners. It is a free portal launched by the honorable president of India on 30th October 2006. There are more than 100 projects on going under the NMEICT ranging from e-content development, access to e-resources, development of software tools etc. in these home page four navigations as a SHAKSHAT repository, picture gallery, SHAKSHAT saarc and whats new. Within SHAKSHAT repository various links are provided where in stakeholders can access course wise e-content being developed for undergraduate, post graduate, engineering education program are available prepared by teachers in the form of videos, animation, recorded lectures etc.

7. BITS' INITIATIVE

The birla Institute of Technology and Science (BITS) has brought around 14,000 books to students, research scholars and teachers at the click of a mouse. BITS has tied up with a leading e-learning company in India.

8. DIGITAL LIBRARY OF INDIA

The Digital Library of India is hosted at the Regional Mega-scanning Centre at IIT, Hyderabad. Its vision is to digitize all recorded knowledge in the world. The vision of the website states: "For the first time in history, all the significant literary, artistic, and scientific works of mankind can be digitally preserved and made freely available, in every corner of the world, for our education, study and appreciation and that of all our future generations."

VI. COCLUSION

Open Educational Resources (OER) is one of the ways of sharing the resources specifically the faculty and content by keeping it in public domain. The vision behind creating OER is to lower the cost of educational materials, develop innovations and improves the quality of content and thus it can be accessed anytime, anywhere and anyplace by anyone.

REFERENCES

- [1]. "Open Educational Resources". The William and Flora Hewlett Foundation. Retrieved October, 2016 from <http://www.hewlett.org/Programs/Education/OER/openEdResources.htm>
- [2]. <http://docs.lib.purdue.edu/iatul/2011/papers/32>
- [3]. www.i4donline.net
- [4]. <http://dli.iiit.ac.in>
- [5]. www.ugc.ac.in
- [6]. <http://ocw.mit.edu>
- [7]. www.mit.edu
- [8]. www.unesco.org
- [9]. www.ignou.ac.in