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## OPEN EDUCATIONAL RESOURCES INITIATIVES IN INDIA: AN OVERVIEW

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### **ABSTRACT:**

*The main purpose of this research paper is to provide an overview of OER initiatives in India. Government of India has taken many relevant initiatives which are discussed in this article. This paper also highlights the challenges, importance and benefits of Open Educational Resources (OERs). This research paper outlined the concept, need and benefits of OER, with some challenging issues.*

*The role of libraries and information center is important in pertaining education and also plays big role in providing updated and advance information services with the help of OER. The research paper concluded that, it is essential for educators and students in higher education to become familiar with open educational platforms. Also concluded that, 'the library professionals were bridging the digital gap between the students' community and available Open Educational Resources'.*

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**Keywords:** *Open Educational Resources (OER), ICT, NPTEL, Digital Library, Open Education, Online learning etc.*

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### **INTRODUCTION:**

Open Educational Resources (OER) are teaching and learning materials that you may freely use and reuse at no cost and without needing to ask permission. Unlike traditional copyrighted resources, OER has been authored or created by an individual or organization that chooses to allow for re-use and adaptation of their work. The term "Open Educational Resources" first came into use at UNESCO's "Forum on the impact of Open Course Ware for higher education in developing countries" in 2002. According to UNESCO, Open Educational Resources are defined as "technology- enabled, open provision of

educational resources for consultation use and adaptation by the community of the users for non- commercial purposes”.

### ***1. The Concept of OER:***

Open Educational Resources (OER) are teaching and learning materials that you may freely use and reuse at no cost, and without needing to ask permission. OER has been authored and created by an individual or organization that chooses to allow for re-use and adaptation of their work. The term Open Educational Resources (OER) was first coined by UNESCO and it has been growing rapidly. According to UNESCO Open Educational Resources are defined as, technology enabled, open provision of educational resources for consultation use and adaptation by the community of the users for non-commercial purposes.

### ***2. Some Important Terms Regarding of Open Educational Resources (OER):***

- The theory “Educational Objectives” was first developed by Wade Hudgins in 1994.
- David Valley first coined the term open content in.
- Open educational resources, open distance learning, open distance education system and open source education etc. have emerged in twentieth century.
- In 2002 UNESCO first used the term “Open Educational Resources” for open curriculum in higher education in developing countries.

### ***3. Five R's of Open Education:***

There are five key points to consider when using open educational resources within licensed boundaries.

Retain	Content can be reused in its unaltered and original form the right of use, such as in the classroom, in the study group, on a website and video etc.
Reuse	Copies of content may be retained for personal archives or for reference.
Revise	Content may be modified according to specific requirements the right to adopt, edit or modify, such as transferring material to another language etc.
Remix	The right to mix the content with other relevant content and the right to create new content.

Exchange the obtained material with others in original or modified form. Copies of original material or revised materials and the right to share your combined material with others.

#### **4. Types of Open Educational Resources (OER):**

Types of OER are textbooks, open curricula and online curricula. Open Educational Resources Books, Complete Curriculum, Textbooks, Videos, Tests, Assignments and images etc. which are readily licensed (with licenses) are included in all types of Open Educational Resources.

#### **5. Sources of Open Educational Resources (OER):**

There are many resources for open education. Some of the resources for OER are Open Stax, OER Metafinder, Library, OER Commons, YOU Tube, Merlot, Creative Common search, Open Text Book Library, Khan Academy, Wikipedia, Salor.org, Peer 2 Peer University, Rekhta etc. Apart from all these, all the books of 1<sup>st</sup> to 12<sup>th</sup> Grade are openly available by M. S. Board through “balbharati”. In addition to these there are other websites through which higher educational materials are easily available. OERs include many types of content: assessments, dissertations, books, articles, curricula, journals, basic media, reference materials, transcripts, tutorials, testimonials and textbooks etc.

### **NEED OF OPEN EDUCATIONAL RESOURCES:**

Open educational resources (OER) are materials used to support education that may be freely accessed, reused, modified and shared. Their purpose is to encourage decision-makers in governments and institutions to invest in the systematic production, adaptation and use of OER and to bring them into the main stream of higher education in order to improve the quality of curricula and teaching and to reduce cost.

#### **1. Use of Open Educational Resources (OER):**

Library is an important source of OER that can greatly enhance educational resources. Educational materials can be published through any digital form. For this first selection, then the choice, arrangement, dissemination and dissemination through which educational materials can be made available openly. Sometimes high and affordable cost of textbooks, OER offers a solution

for those faced with economic restrictions. OER books can take and keep them forever use any time anywhere.

OER are beneficial for teachers. Teachers can enhance their abilities through OER. They can have a wide range of materials through which they can easily understand students under any topic. Teachers can save their time. Through OER any organization can equip students through e-learning. In addition, it can provide numerous educational resources to students and teachers through a computer. This will save money and space.

### ***2. Importance of Open Educational Resources (OER):***

Open Educational Resources (OER) are freely accessible, openly licensed documents and media that are useful for teaching, learning and assessing as well as research purposes. OER is often link to open access (OA), to online learning, and to open education, OA refers to research outputs that are distributed online and free of cost or other (major) barriers, while OER has a focus on educational purposes. OER has a strong link to online learning. Although OER does not only come in digital format, information technologies have been essential to the growth and spread of the movement.

OER is a key part of open education, which relies on these materials to achieve the goal of giving broader access to more effective learning and training opportunities. This applies as much up to formal education systems as to informal learning. However, open education is a much broader concept that also looks into other aspects of the learning experience. As the importance and benefits are more there are some issues with Open Educational Resources.

### ***3. Issues and Challenges with Open Educational Resources:***

There are some issues which are related with technology, human, system or with devices. Some people have the challenges due to lack of awareness, hands-on training and practical approach.

- ICTs are not accessible to everyone and many lack the skills or confidence to use them.
- The large amount of OER material made available online, efforts need to be made both in digital literacy and access to digital technologies.

- Some have accessibility issues (e.g. not adopting materials to the needs of users with print disabilities) can stand in the way of access to knowledge.
- Many students do not have a digital device (e.g. Android mobile phones, Laptops, computers etc.) for accessing open educational Resources. So students face particular difficulties in open educational resources.
- In traditional style of teaching, there is a strong link between the teacher and the student, which extended the chain of respect of the teacher to form a better society.
- The method of open education has deprived the society of this blessing. Due to which many forms of corruption are emerging in the society.
- In traditional education relationship between teachers and guardians through their children had profound effect on morality, which is now lacking.

### **ROLE OF LIBRARIES IN PROMOTING OERS:**

The basic function of libraries is to support students in their various needs of information. It can encourage and support students on the usage and access of OERs through a variety of programmes. It may include conducting awareness programmes, providing links of OERs on library websites or downloading useful videos, and making available on library website, purchasing videos and creating infrastructure and conducive environment to use this videos.

### **OER INITIATIVES IN INDIA:**

India has taken several steps for the development and welfare of OERs in India. There are many national level initiatives taken by the Government to improve the quality of education. Some OER initiatives in India are as follows.

#### ***1. National Programme on Technology enhanced Learning (NPTEL):***

National Programme on Technology enhanced Learning (NPTEL) is a programme initiated by IISc and seven IITs which primarily aimed at enriching the standard of engineering education in India. The project is funded by Ministry of Education Government of India, and was launched in 2003. Initially it is started as a project to take quality education to all corners of the country.

**2. Consortium for Educational Communication (CEC):**

Consortium for Educational Communication (CEC) is one among the University Centres set up by the University Grants Commission (UGC). CEC produces educational programmes in different subjects by coordinating with 21 media centres. The e-content of CEC is in the form of audio, video etc.

**3. E-PG Pathshala:**

The E-PG Pathshala covers many subjects in its spectrum across the disciplines of Arts, Commerce, Humanities, Languages, Engineering and Technology, Life science, Medical and Health Science, Physical and Basic sciences and Social Science. It strongly advocates “Massive Open Online Course” (MOOCS).

**4. e-Gyankosh:**

e-Gyankosh is national digital repository meant to store, index, preserve, distribute and share the digital learning resources developed by the Open and Distance Learning Institutions in India. The items in e-gyankosh are protected by copyright. The course material is available in PDF format that is downloadable freely. Resources can be accessed through a onetime registration. It provides access to videos.

**5. Eklavya:**

Ekalavya is another programme launched by the Indian Institute of Technology Bombay in the year 2004. It offers several programmes like e-OUTREACH, e-GURU. E-GURU is an open source initiative meant to provide e-guidance and online mentorship to students of B.E., M.C.A. and M.Sc. programmes, for their for their final year projects.

**6. Virtual Learning Environment (VLE):**

It is an institute of Life Long Learning Environment. It provides e-learning in the disciplines of Commerce and Management Studies, Humanities and Social Sciences, Sciences, Mathematical Sciences at undergraduate and post graduate level.

**7. National Digital Library of India (NDLI):**

Ministry of Education developed the National Digital Library of India. (NDLI) the objective of the NDL India is to provide all language information

content, specially also holding up regional language content information. It also gives help to all educational level disciplines from primary to postgraduate, all types of researchers along with lifelong learners of various academic courses.

#### **8. *Vidya-Mitra:***

It is an online learning portal for all the e-content projects developed under the NME-ICT (National Mission on Education through Information and Communication Technology), MHRD. The portal provides a facility to search and browse all hosted content wherein a learner can easily access the desired material including audio/ video learning material, textual material, multimedia-enriched material etc. through a single interface.

#### **9. *Swayam:***

Swayam is a programme initiated by Government of India and designed to achieve the three cardinal principles of education policy viz., access, equity and quality. The courses hosted on SWAYAM are in 4 quadrants- (1) video lectures (2) specially prepared reading material that can be downloaded/ printed (3) an online discussion forum for clearing the doubts

#### **1.1 *Shodhganga:***

Shodhganga is the digital repository of Indian Electronic theses and dissertations set up by the INFLIBNET center. Shodhganga stands for the reservoir of Indian intellectual output stored in a repository hosted and maintained by the INFLIBNET center. The INFLIBNET center promotes the setting up of institutional and ETD repositories in member universities using OAI-PMH compliant software. A number of member universities have already set up their institutional and ETD repositories using either Dspace or other OAI-PMH compliant Institutional Repository Software. It would be possible for universities to have sufficient network and computing infrastructure to maintain their own ETD repositories wherein their research scholars could deposit e-versions of their theses and dissertations. At present 450000 Full text theses are accessible.

**CONCLUSIONS:**

Open Educational Resources (OER) have emerged as a significant means of enriching the diversity of learning materials accessible to students in higher education across India. These freely accessible digital resources are designed to promote inclusive education by offering unrestricted access to learning content via the internet (UNESCO, 2019). The effective utilization of OER is largely dependent on the availability and quality of Information and Communication Technology (ICT) infrastructure; institutions equipped with robust digital frameworks are better positioned to harness the benefits of open resources compared to those with limited infrastructure (Mishra, 2017). For students and educators alike, familiarization with open educational platforms is becoming increasingly important, as OER play a pivotal role in enhancing subject knowledge and developing essential practical skills (Butcher, 2015). The versatility of OER, being available in multiple formats, further adds to their value in the academic environment. Importantly, library professionals serve as key facilitators, helping to bridge the digital divide by guiding learners toward effectively accessing and utilizing these open resources (Perryman & Coughlan, 2013).

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