

Quadrant-I (e-Text)

Details of Module and its structure

Module Detail	
Subject Name	Education
Course Name	ICT in Education
Course Code	EDU504
Module Name/Title	Open Educational Resources: meaning, importance and various educational resources initiative; Creative common license: meaning, and how to get creative common license; Locating internet resources: browsing, navigating, searching, selecting, evaluating, saving and bookmarking
Module Code	IIE009
Pre-requisites	Basic knowledge of computer
Learning Outcomes	After going through this lesson, the learners will be able to understand the following: <ol style="list-style-type: none">1. Use Open Educational Resources (OER) and identify And Identify various educational resources initiative2. Utilize online search tools to locate OER for own purpose and get creative common license3. Analyse major considerations of Locating internet resources and use browsing, navigating, searching, selecting, evaluating, saving and bookmarking
Keywords	Open Educational Resources, Creative common license, internet, navigating

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Table of Contents

Introduction.....	3
1. Open Educational Resources	3
1.1 Genesis.....	3
1.2 Meaning and Definitions	3
1.3 Elements of OER.....	4
1.4 Importance of OER.....	6
1.5 Various educational resources initiative.....	6
2. Creative common license	7
2.1 Meaning	8
2.2 Types of Creative Commons licenses	8
2.3 How to get creative common license.....	8
3. Online Resources to Identify and Select OER.....	9
4. Locating internet resources	11
4.1 Browsing.....	11
4.2 Navigating.....	12
4.3 Searching.....	12
4.4 Selecting.....	13
4.5 Evaluating	13
4.6 Saving and bookmarking.....	13
5.0 Summary	14

Introduction

1. Open Educational Resources

With the advent of information and communication technologies and rapid globalization education system of the whole world, has affected as it has made accesses to the Web well available and affordable by the people of all fields including education. People are gradually welcoming the idea of openness, and ready to share and collaborate for the development of knowledge. As a result of this and open licensing practices Open Education Resources (OER) have evolved as an important source of educational materials at different levels and it has become easier for educators to share and adapt educational materials.

1.1 Genesis

The Open Educational Resources movement is part of a global effort to make knowledge available to all. The UNESCO's Virtual University Forum provides an overview about definitions, initiatives, and community-building. This term Open Educational Resources (OER) was first adopted at UNESCO's 2002 Forum on the Impact of Open Courseware for Higher Education in Developing Countries; to refer to the open provision of educational resources, enabled by information and communication technologies, for consultation, use and adaptation by a community of users for non-commercial purposes. UNESCO further designates "*teaching, learning and research materials in any medium digital or otherwise, that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions.*" OER is seen by some as a means to provide students in developing countries with access to affordable learning content. The Hewlett Foundation has taken a pioneering role in the development and use of OER with its support of many initiatives:

1.2 Meaning and Definitions

OERs are broadly defined as any type of free and openly accessible educational materials or resources. These educational resources are usually delivered by electronic means through Web and may take the forms of e-

books, lecture notes courseware, syllabi, assignments, tests audio, streaming videos, learning objects, animations or software and tools to support learning. OER have been defined by UNESCO, 2015 as: “any type of educational materials that are in the public domain or introduced with an open license. The nature of these open materials means that anyone can legally and freely copy, use, adapt and re-share them. OERs range from textbooks to curricula, syllabi, lecture notes, assignments, tests, projects, audio, video and animation.”

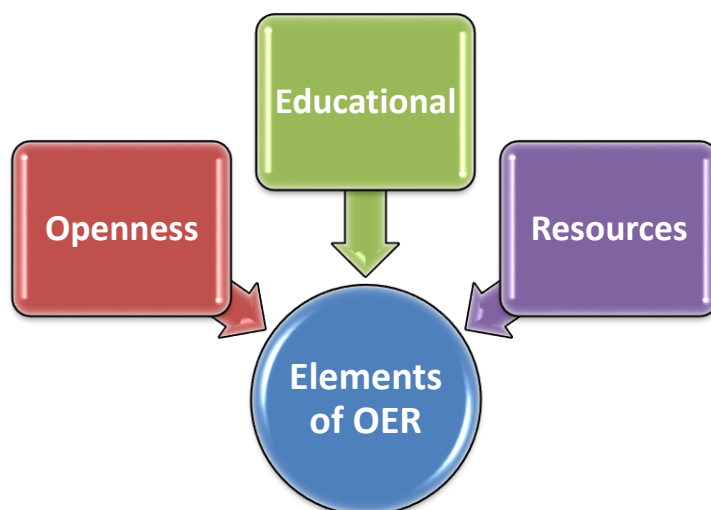
According to Johnstone, S. (2005), in “Open Educational Resources and Open Content, Background Note”, Open Educational Resources (OER) are “digitized materials offered freely and openly for educators, students and self-learners to use and re-use for teaching, learning and research.”

According to the Commonwealth of Learning, Open Educational Resources (OER) are 'materials offered freely and openly to use and adapt for teaching, learning, development and research” it is the most adopted the widest definition of OERs.

The above definitions show some ambiguity that remains with OER, such as- In some of the definitions nature of the resource has been limited only to the digital resources, whereas some others believe that any variety of educational resource can be included in it. While some of the definitions require that source of the resource to be produced with an explicit educational aim in mind, while others include any resource which may potentially be used for learning. In the same way most of the definitions require that a resource must be placed in the public domain while some others intend to the level of openness for use to be granted just for educational purposes, or commercial uses to be excluded. Open Educational Resources (OER) are learning materials freely available in the public domain.

1.3 Elements of OER

Defining the elements of OER will make the understanding about the content more clear which are as follows:



(i) Openness

As the openness of Open Educational resources provides the openness in various ways to its consumers as; openness to afford, to sustain, to avail, to be appropriate to use, to accredit, to apply in real surroundings, to modify. So one can say that these resources are flexible enough to the consumers either they are learners or the teachers or the simple human beings. According to Walker, openness is “to be convenient, effective, affordable, and sustainable and available to every learner and teacher worldwide”.

(ii) Educational

The second most important term “educational” also needs some elaboration. The intention of making such resources open and flexible is the universalization of knowledge and to avail the facilities of quality learning for each and every person in the whole world. The purpose of using OER in education is to enhance learning, that enables the development of both individual and social perspectives in formal and non-formal surroundings.

(iii) Resources

Learning resources can be stored as well as created sometimes. Knowledge is also a kind of an everlasting resource that can be consumed without destroying the stock. Considering teachers view; the educational resource is “anything that can be used to organize and support learning experiences”.

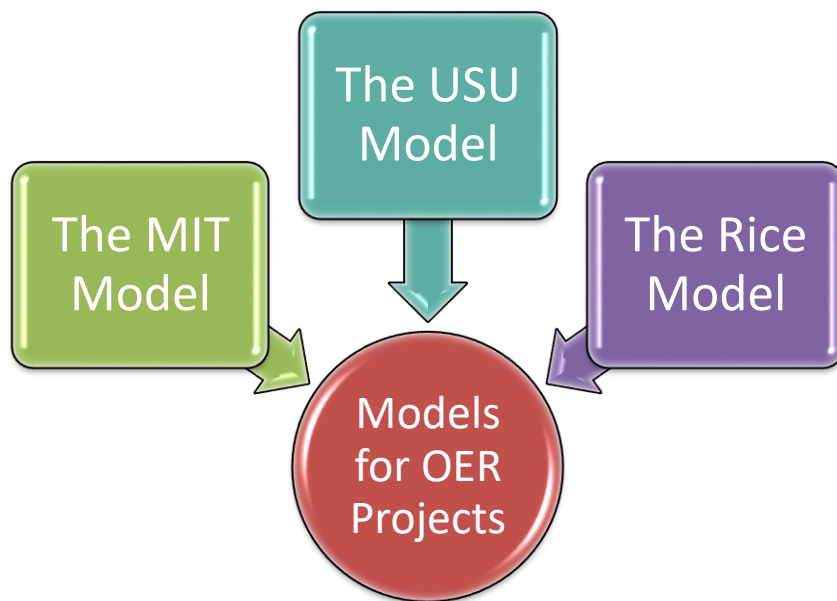
1.4 Importance of OER

Open Education Resources (OER) are important for many reasons. These are resources with an overt permit, where the generating soul or writer remains as the sole rights-bearer but pick-out which rights to sustain and which rights to forfeit. Increasing price are making textbooks unaffordable therefore, OER is a easy way to make every student access to course materials. OER also help faculty to create customized material for their classes. OERs are proven to ameliorate education globally for Educatee who is ineffectual to afford school text, where admittance to schoolroom may be circumscribed, and where teacher training programs are inadequate. They are highly significant in affluent industrialized nations, where they can fling substantial expenditure savings. OERs helped to facilitate the free and legal availability of world's best courses and degree programs to educators with the help of ministers of education and government. Thereafter it can be use by the teachers according to local suitability which serves as the groundwork for initiation. OERs open new pathways for the people from dissimilar ages and backgrounds who await to improve their lifestyles and wishes to learn much more about the global happenings with the help of available resources. OER is important because it offers affordable material to students, allows faculty to enhance their own work, and provides faculty with own content for classes.

1.5 Various educational resources initiative

There are three common models for open educational resource projects in higher education. There is an instructive diversity in the content creation, size, organisation and other services of these three models.

1. The MIT Model,
2. The USU Model
3. The Rice Model



The MIT OCW stands for Massachusetts Institute of Technology Open Course Ware. Its primary objective is to publish each and every course in the entire 1800 course university catalogue in a fixed period of time. It also republishes new versions of courses continually and archives the older versions.

The USU OCW or Utah State University Open Course Ware aims to publish as many courses as possible in the USU course catalogue. USU OCW does not support third party content. The USU model employs a hybrid approach of centralisation and decentralisation in both organisation and services; the work is distributed among employed staff and volunteers.

The Rice model is almost fully decentralised and volunteers provide almost all services. The chief objective of Rice Connexions is to enable the collaborative development of educational modules and courses by different experts from around the world. The courses and modules developed in Rice Connexions are not all from the courses being taught at the host university; the content has been created and contributed to the site by authors from around the world unlike to the MIT or USU OCW.

2. Creative common license

Text books, the traditional learning material are protected under conventional copyright terms. The OERs also need licensing thus an





alternate and more flexible licensing options have become available as a result of the work of creative commons. This is an organization that provides readymade agreements of licensing that are less restrictive in nature than the “all rights reserved” terms of standard international copyright. The first project of Creative Commons was started in December 2002, was the release of a set of copyright licences for public use.

2.1 Meaning

These licenses are machine-readable and specially designed for websites, scholarship, music, film, photography, literature, courseware, etc and they help people make their creative works available to the public, retain their copyright while licensing them as free for certain uses, on certain conditions. In 2007, CcLearn, the educational division of Creative Commons, was introduced and is totally dedicated to realizing the full potential of the Internet to support open learning. It is expected to further reduce barriers to sharing, remixing and reusing educational resources.

2.2 Types of Creative Commons licenses

Following types of Creative Commons licenses on the basis of combination of the following conditions of use and distribution are available.

1.  **Attribution (BY):** Allows users to copy, distribute, display and perform the work and make derivative works based on it, as long as the author or licensor is given the credits for the original creation.
2.  **Share-alike (SA):** Allows users to distribute derivative works only under a license identical to the license that governs the original work.
3.  **Non-commercial (NC):** Allows users to copy, distribute, display and perform the work and make derivative works based on it, only for non-commercial purposes.
4.  **No derivative work (ND):** Allows user to copy, distribute, display and perform the work, but not to make derivative works based on it.

2.3 How to get creative common license

To get creative common license go to <http://creativecommons.org/choose/> and select the desired options or allow commercial use etc. After selecting the desired options, you may add metadata to the license that provides more

detail about your work. Copy the HTML code that the CC License Chooser has provided for your work and paste this code into a text or HTML Widget to your work. This same HTML code that you pasted into the text/HTML widget can be placed in any HTML document or field. Once this is done, you'll have a nice shiny Creative Commons license on display on your website or blog.

3. Online Resources to Identify and Select OER

Following are the various resources available on the internet to provide teachers. Those tools will help to identify and select OER for use in instruction for enhancing Teaching Learning Process.

- **OER Commons:** OER Commons is a platform created by the Institute for the Study of Knowledge Management in Education and supported by the William and Flora Hewlett Foundation collaborating with several other OER partners, where one can identify and select out of the open educational resources with a free membership. OER commons also provides the facility of creating user's profile through which one can tag, rate, review, comment and add favourites.
- **MERLOT:** MERLOT is the developer of Open Resources for Higher Education, which provides searchable as well as sharable educational resources. MERLOT maintains the quality of its educational resources by providing criteria for peer review by its registered members. Thus it is like an online community of learning members collaboratively involve in creating, using, modifying the Open Educational Resources.
- **Connexions:** Connexions is a collection of OER that are searchable by keyword, author subject, language, popularity and title and also open license which allows for free use and reuse of all its content. There are two types of formats in Connexions: modules, the small "knowledge chunks," and courses, the collections of modules. The repository of connexions contains 3925 reusable modules woven into 211 collections.
- **FREE:** FREE is 'Federal Resources for Educational Excellence' that provides links to hundreds of education resources from or supported by the U.S. government.

- **Creative Commons:** Creative Commons provides a way to find shareable photos, music, text, books, and other educational material utilizing Creative Commons licenses. A Content Curators wiki area is available that provides a list of curators of Creative Commons-licensed content. Users are invited to contribute to and edit this list themselves.
- **Open DOAR:** The University of Nottingham as part of a portfolio of work in Open Access and repositories under the SHERPA umbrella has developed and maintaining the Open DOAR that is the Directory of Open Access Repositories. It provides a vetted listing of Open Access Repositories (OAR) across the world.
- **Internet Archive:** It is a non-profit service was founded in 1996 for the purpose to build an Internet library, for offering permanent access to historical content collections that exist in digital format.
- **COL Knowledge Finder:** COL Knowledge Finder is an openly accessible service that helps to search reliable sources of information in open and distance learning and provides organizational tools. The Emphasis of the service is on international development goals like health and education for the whole world and poverty alleviation. The service is provided by an intergovernmental organization, The Commonwealth of Learning (COL) which is created by Commonwealth Heads of Government to promote the development and sharing of open learning and distance education knowledge, resources and technologies.
- **Curriki:** Curriki is dedicated to providing quality learning materials worldwide in the form of a global education and learning community. On Curriki learning materials can be searched on the following topics like; Mathematics, Science, Social Studies, Arts, Educational Technology, Foreign Languages, Health, Language Arts and Vocational Education. One can manage his/her own contributions and collections, as well as their user profile and blog, using your personalized space in MyCurriki.

- **Edu2.0:** Edu2.0 is also another open educational content provider to discover all browsable shared course content organized by topic. Resources include presentations, experiments, courses, classes, curricula, quizzes, web quests, projects, audio, video, power point, excel etc.

4. Locating internet resources

Although technology is a very important, useful and indispensable part of the life, effective and appropriate usage of it still needs to be improved in education. How we access the Internet and other resources for our classes or for some academic information is very important. Internet is the reservoir of information and the diversity of internet resources should be assessed properly for its reliability, validity, copy right, and other related issues.

4.1 Browsing

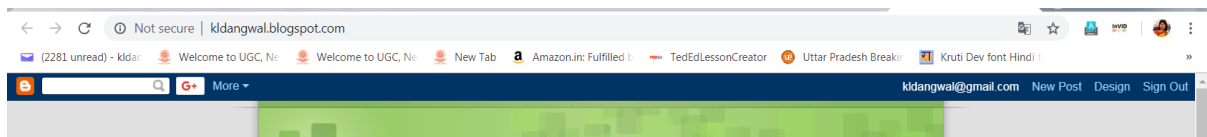
Browsing is usually considered as a random activity on internet. It is said to be the act of looking through a set of information quickly, without a sense of specific purpose.

According to Hjørland (2011) - "Browsing is a quick examination of the relevance of a number of objects which may or may not lead to a closer examination or acquisition/selection of (some of) these objects. It is a kind of *orienting* strategy that is formed by our theories, expectations and subjectivity".

For browsing a web browser is required A web browser is an application software that allows to retrieve, present, and traverse information resources on the World Wide Web; to find and view websites on the Internet. It is basically required to access the internet. Some of the common examples of web browser, commonly referred to as a browser include Google Chrome, Internet Explorer, Safari, Microsoft Edge, Opera and Mozilla Firefox etc. These browsers may have a different look or they may act a bit differently, but all web browsers basically work in the same way.

The most typical use of a web browser is to load and view websites on the Internet. To browse on internet, we need search words to locate information or we may directly go to the website. URL is the unique address, which is specific for each website, URL refers to Uniform Resource Locator. URL is the address that tells the browser where to go on the Internet. When the URL is typed in the address bar of

browser, it will load the webpages associated with that URL. In the below given example, the URL is <http://kldangwal.blogspot.com> typed into the address bar.



4.2 Navigating

In 1989, with the introduction of the World Wide Web, web navigation also came into existence. Navigation is a process of through which a network of internet resources could be navigated. Navigation allow to move from one page or section to the next. Navigation makes it convenient for users to explore websites.

Navigation buttons are located on webpage aside of web address in form of backward or forward arrows. These buttons allow the users to move through websites viewed recently. These buttons when click and hold show the recent search history. Links are also used to navigate the Web, links or hyperlinks are the word or phrase on a website that are generally underlined in blue. Clicking on a link, usually takes the user to a different webpage. While hovering over a link cursor changes into a hand icon. websites may use images, words or phrases as links, by just clicking on these links' user can navigate to another webpage. Website navigation menus usually come in two orientations: vertical navigation and horizontal navigation. Horizontal navigation menus show items side by side while vertical navigation is set for using the one side of pages to navigate through a set of screens.

4.3 Searching

An internet search, known as a search query, is an entry into a search engine that yields search results. Selection of keywords plays an important role in searching as it classifies the information while entering them into search engine. Refine the search on the basis of initial results retrieved from the keywords by adding specific words to make the search more specific. Keeps Changing and rearranging the keywords until it retrieves the accurate search results you are looking for.

4.4 Selecting

After searching of the information on web we need to select the appropriate information. User must select the subject-specific sites as per the requirement for this the knowledge of domain name is essential such as .com represents commercial websites whereas.edu represents educational websites similarly. gov.in represents government websites. For appropriate selection of information first we need to decide what we want and then we can go to specific website with the help of the search engines and select the information accordingly.

4.5 Evaluating

After selecting the resource, it needs to be evaluated for its reliability, validity, and trustworthiness to refer and quote it further. With the emergence of web 2.0 tools now anyone can publish anything on the web and there is no regulating authority to regulate the quality or accuracy of available information on the web. Thus, it becomes the responsibility of the user to evaluate the information effectively, on his own.

4.6 Saving and bookmarking

1. **Saving** While browsing the internet we often come across important and relevant information which we need to refer in future also. There are many ways through which we can save the information for future use. The simple ways of saving the internet resources are as follows-

Print: Internet resources could be print to make hard copies for the future use. Web pages, graphics, data, or email letters could be printed.

2. **Save Internet Resources on a Disk, Hard Drive, or Zip Drive:** Individual web pages could be saved simply by using the "save as" feature on the browser. It provides an option to save in "text" or "HTML" format. Selecting "text" allows the user to later open the document in a word processor. Whereas selecting "HTML" retains all the colours and formatting. The saved HTML document could be opened with a web browser without being connected to the Internet.

3. **Downloading-** often links point to a file that can be downloaded or saved to the computer. Some files may get automatically downloaded, while some other it just opens within browser instead of downloading. In the later case right-click the link and select Save link as.
 4. **Saving images-** to save an image from a website to the computer. just, right-click the image and select Save image as.
- **Bookmarking** to visit a webpage later it may be bookmarked. Bookmarks are the webpage locations or URLs that are retrievable. Bookmarking feature allows the user to save an internet address that has been visited earlier by user to re-visit. They may be saved by name rather by address. This makes it easier for the user to recognize and access it later. In internet explorer the saved web links are known as favourites. Bookmarking or favourites are great means to save and organize specific websites to revisit them again and again. For bookmarking simply locate and select the Star icon to bookmark the current website.

5.0 Summary

Open Education Resources (OER) have evolved as an important source of educational materials at different levels and it has become easier for educators to share and adapt educational materials. This term Open Educational Resources (OER) was first adopted at UNESCO's 2002 Forum on the Impact of Open Courseware for Higher Education in Developing Countries; to refer to the open provision of educational resources, enabled by information and communication technologies, for consultation, use and adaptation by a community of users for non-commercial purposes. OERs are broadly defined as any type of free and openly accessible educational materials or resources. These educational resources are usually delivered by electronic means through Web and may take the forms of e- books, lecture notes courseware, syllabi, assignments, tests audio, streaming videos, learning objects, animations or software and tools to support learning. There are three common models for open educational resource projects in higher education. There is an instructive diversity in the content creation, size,

organisation and other services of these three models are The MIT Model, The USU Model and The Rice Model

Creative common license licenses are machine-readable and specially designed for websites, scholarship, music, film, photography, literature, courseware, etc and they help people make their creative works available to the public, retain their copyright while licensing them as free for certain uses, on certain conditions. The first project of Creative Commons was started in December 2002, was the release of a set of copyright licences for public use.

Locating internet resources are that how we access the Internet and other resources for our classes or for some academic information is very important. Internet is the reservoir of information and the diversity of internet resources should be assessed properly for its reliability, validity, copy right, and other related issues.

Quadrant-III - (Learn More / Web Resources / Supplementary Materials):

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Quadrant-IV: (Self-Assessment)

For Self-Assessment, the Content Writer/Expert will provide 10-15 questions for each module in one or more of the following formats.

i) Multiple Choice Questions with answers

Choose the correct answer

1. Abbreviation of OER is

- a) Open Education Resources
- b) Online Educational Resources
- c) Online Education Repositories
- d) Open Educational Resources

2. Copy right

- a) is a legal right
- b) grants the exclusive rights to the creator
- c) is created by a law of a country
- d) all the above

3. Which is not element of OER

- a) Openness
- b) Knowledge
- c) Educational
- d) Resources

4. Which is not common model for open educational resource projects in higher education

- a) The MIT Model,
- b) The USU Model
- c) The Rice Model
- d) The Open Model

5. Which is not Online Resources to Identify and Select OER

- a) MERLOT
- b) FREE
- c) Education
- d) Open DOAR

Answers: 1. D, 2. D, 3.B, 4. D, 5. C

II. State whether the following statements are True or False

1. The ideology of open learning later led to the 'Open Movement.'
2. Open Educational Resources (OER) are not the part of Open Movement.
3. OER can be considered as the sub-set of Open Education.
4. Open licensing is a concept with in copy right law.
5. E-content is the part of digital course material that includes OER.
6. Copy right is usually for a limited time.
7. OER is the same as e-learning.
8. The first project of Creative Commons was started in December 2005.
9. Open Educational Resources (OER) was first adopted at UNESCO's 2002 Forum.
10. The Hewlett Foundation has taken a pioneering role in the development and use of OER with its support of many initiatives.

Answers: 1. True 2. False 3. True 4. True 5. True 6. False 7. False 8. False 9. True 10. True
