



Professional Development Programme on **OER-based eLearning**



CEMCA



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Professional Development Programme on OER-based eLearning



Commonwealth Educational Media Centre for Asia
New Delhi

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OER-based eLearning

As part of the institutional capacity building programme to promote development and use of Open Educational Resources, the Commonwealth Educational Media Centre for Asia (CEMCA) supported an initiative at the Wawasan Open University (WOU), Penang over a period of one year, which resulted in development of the present five modules. While we acknowledge all the participants in the workshops, where ideas were discussed and crystallised, the following individuals have continuously supported this activity.

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Dr. Som Naidu facilitated all the workshops leading to the development of these modules, and also mentored the pilot online programme that used these materials for developing capacities of other teachers. We sincerely thank Dr. Naidu for providing timely support to develop the materials within a scenario-based learning design.

Contents

Overview of the programme	01
Module 1: Concept and Practices of Open Education	03
Module 2: Designing Learning Experiences for OER-based eLearning	39
Module 3: Searching and Evaluation of OER Materials	61
Module 4: Licensing and Copyright	91
Module 5: Integrating OER in eLearning	115
References	135

Overview of the Programme

Open Educational Resources have emerged as one of the most innovative teaching and learning tools as well as a cost-effective mechanism to improve the quality of educational offerings by optimising the use of available resources. While OER can be used by any student to learn on his/her own, universities (especially Open Universities) that depend on printed distance learning materials can now use the OERs to offer their courses and programmes and thereby reduce the development time of courses and programmes, and also reduce the cost of launching new programmes. However, not many institutions are in a position to actually develop OERs that can be used effectively for teaching and learning in the digital environment.

The Commonwealth Educational Media Centre for Asia (CEMCA), realising the need for professional development of teachers, has developed this professional development programme on OER-based eLearning to promote the use of OER in educational institutions.

The programme has been developed as part of the institutional capacity building for OER-based eLearning at Wawasan Open University (WOU), Penang. Faculty members of WOU and several other institutions in Asia have contributed to the development of the contents. The modules are learning outcomes of the participants in three workshops supported by CEMCA.

Learning Outcomes

This professional development programme has been designed to help teachers to develop courses and programmes using OER. After completion of all the five modules, the participants in the online/offline programme will be able to:

1. Demonstrate understanding of OER and argue in support of the use of OER.
2. Design appropriate learning experiences for OER based eLearning.
3. Find and evaluate the quality of OER materials used in different contexts.
4. Use appropriate open license to release educational materials as OER.
5. Offer OER-based eLearning courses and programmes using appropriate technologies.

Modules

The professional development programme has five modules, which can be taken up independent of each other. These modules are:

Module 1: Concept and Practices of Open Education

Module 2: Designing Learning Experiences for OER-based eLearning

Module 3: Searching and Evaluation of OER Materials

Module 4: Licensing and Copyright

Module 5: Integrating OER in eLearning

The learning material of the programme can be used by institutions to offer their in-house training programme using the modules in both online and offline mode.

The programme has been designed to use badges as assessment for each of the modules, and we have specified specific criteria for the same. However, institutions may like to adapt the same as per the need to offer the programme for their staff and other learners.



Module 1

**Concept and Practices
of Open Education**

Badge Requirements



What it means?

This badge means, the learner has demonstrated a reasonable understanding of the concept of OER and related concepts of openness in education; is aware of the historical background of the OER development and can critically describe the various OER initiatives taken by the governments and the institutions.

Who is eligible to earn this badge?

You can earn this badge, if you have done the following:

1. Developed and submitted your concept map covering all the concepts required along with a description of 1000 words that explains your concept map based on the posts and responses of your peers and tutor.
2. Created and submitted your graphical representation that shows all the milestones in the historical development of open educational resources along with a 1000 word summary that explains why you chose specific information to be included or left out of this graphical representation, based on the posts and responses of your peers and tutor.
3. Carried out and submitted a SWOT analysis of Open Educational Resource initiatives in the creation and implementation of OER worldwide by taking 6 initiatives representing both the government and institutions from the OER Dossier you have already prepared.

Module 1: Concept and Practices of Open Education

Introduction

This module previews the concept of openness in education. This comprises examination of the concepts of open access, open learning and open scholarship. It will help you to understand how to use open learning to gain, modify, adapt, enhance and share knowledge. It also covers the historical background, and the concepts of Open Educational Resources (OER). The module will examine initiatives taken by various institutions and governments to promote the usage of OER.

Learning outcomes

In this module, you will be able to:

1. Demonstrate an understanding of OER and related concepts.
2. Trace the historical development of open educational resources.
3. Critically examine OER initiatives by institutions and governments.

Learning outcomes	Outline	Assessment activities
Demonstrate understanding of OER and related concepts.	Open access. Open learning. Open scholarship. Open source.	Develop a Concept Map to demonstrate your understanding of the concepts.
Trace the historical development of open educational resources.	Introduction. Definition. Types of OER. Global OER logo. History of OER.	Development of a graphic representation.
Critically examine OER initiatives by institutions and governments.	OER initiatives and institutional support. Badges.	Development of a chart. Preparation of an OER Dossier SWOT Analysis.
	Final assessment.	Workshop plan with written evaluation report from 3 peers.

Learning scenario

The use of open educational resources is being adopted by numerous institutions, governments and the private sector. As part of its service to the academic community, your university will be running a workshop entitled 'An Introduction to OER' for lecturers involved in tertiary education. The main objective of this workshop is to *provide participants an understanding* of the basics of OER so that they can in turn run a workshop for their respective institutions in the following areas:

1. Openness in education.
2. Historical development of open educational practices especially OER.
3. OER initiatives by institutions and governments.

Your goal: You have been asked to lead a team of academics to prepare a plan/blueprint for the workshop as well as identify and collate all the necessary resources to support the workshop.

Section 1: Openness in education

To begin the preparation, we will cover the key concepts and the relationships among the concepts of openness in education. Let's begin with looking at the concept of openness in education.

The concept of open education is based on the premise that knowledge should be "open" and it should be shared for greater good such as for networking, community building, cultural binding and global distribution. This knowledge can be represented in any form of media and as its creator, you can retain ownership.

Part of the impetus for this is due to the enormous growth of social media and the increase in the number of online learners and users of the Internet and the World Wide Web. With the growing rate of discussions online and the use of Online Educational Resources, the social media network has led to more learners and educators using information and large data that is now available. This has led to a need for "Openness in Education" which supports collaborative interactions. There is increasing suggestions that more and more students are willing to learn as independent learners with the help of online learning materials (Franklin & Harmelan, 2008; Hemetsberger & Reinhart, 2006). Some of the tools used to support online learning are images and video, maps and educational units as informed by Okada et al. (2012).

Open Educational Resources are of great benefit to open and distance learning organisations, in particular. Some of the examples are OpenLearn, an initiative of the Open University in the U.K.; Otago Polytechnic in New Zealand; and many Connectivist-based Massive Open Online Courses (MacGreal et al., 2013). OERs are

also widely used in the primary and secondary school sector. An example of this is David Wiley's Lumen Learning which has its vision as the growth of Open Educational Resources for the middle schools, high schools and community colleges.

Activity 1.1

The following activity will help your participants understand what Openness in Education is. You can watch the video by clicking on the weblink below:

<https://p2pu.org/en/courses/140/content/287/>

Once you have watched the video, view the website link which includes the following topics:

1. Open educational resources
2. Education is sharing
3. Open teaching

<https://learn.canvas.net/courses/4/wiki/the-extended-argument-for-openness-in-education>

Some of the concepts that you will be coming across are:

1. Open learning
2. Open access
3. Open scholarship

Write brief definitions for each of the concepts mentioned above.

Now let us explore the concept of Open Learning further.

Open learning

“Open learning is an approach to education that seeks to remove all unnecessary barriers to learning, while aiming to provide students with a reasonable chance of success in an education and training system centered on their specific needs and located in multiple arenas of learning.” — Neil Butcher (2011)

Open learning has many different aspects. Some of the critical attributes of open learning are:

1. Open access
2. Collaboration
3. Open platforms
4. Transparent communication
5. Credit to sources
6. Feedback to loop
7. Approachability
8. Emphasis on learning for all
9. Interdisciplinary, intergenerational and international

Check out the URL below that will give you more information on Open learning.

<http://iamcorbin.net/articles/openlearning/33-openlearningguide?responseToken=01b515ff8f82fb213db7d2164c6856169>

Next, we will look at Open access.

Open access

Open access allows the user or learner limitless access. This may include access to journals, books, monographs, and data of any type or form. Some of the open access resources include open access journals, and hybrid open access journals. The publisher of an open access journal is an open access publisher who would be in the business of open-access publishing¹. Open access information is available online and is cost free. This includes data available that is free of copyright and licensing (Suber, P, 2004).

¹ http://en.wikipedia.org/wiki/Open-access_journal

Open access for the different fields of Sciences, Humanities, Research, Education, Medical etc., enables users to have a wide access, visibility and wider audience at low cost. With research work, open access helps to manage and speed up the dissemination and reviews for modification and assessment.

The next section will give you a brief overview of Open scholarship.

Open scholarship

Open scholarship involves providing the public with access to knowledge without limits thus targeting education for the public good. Traditionally, knowledge was shared without cost to enrich societies. With time, the values associated with enriching communities and development of societies in terms of participative sharing became redundant. The *open system* became closed and costs increased for dissemination of knowledge.

With Internet usage, online users, Bloggers, Facebook, YouTube and other tools, the reality of sharing becomes unlimited which results in new emerging ways of communication and dissemination of knowledge. For example, writers on open scholarships stated:

These developments call for new thinking on the part of research-based institutions — about what can be legitimised and what perhaps cannot, about the mechanisms for recognising, recording and assessing scholarly activity, and about the new reward systems that will be needed².

Open scholarship is more widely being accepted because of a shared understanding among scholars who prefer knowledge to be openly disseminated. The normal procedure is for open scholars to create, make sure they contribute OER and self-archive. Where research is concerned, scholars share their data with others and are able to collaborate with others without restrictions.

Click on the weblink below and learn more about Open scholarships.

<http://www.slideshare.net/greg.g/enabling-open-scholarship>

Now we move on to the concept of Open badges.

Open badges

Open badges are defined as “New online standard to recognise and verify learning”. The Internet access, blogs and Web 2 technologies have helped users to be able to publish. There are platforms which design and issue badges for the accomplishment of learning. However, these are at the evolving stages.

² http://www.openscholarship.org/jcms/c_6160/open-scholarship

For a brief idea on open badges, please visit the following links:

1. <http://openbadges.org/>
2. <http://funnymonkey.com/taxonomy/term/289>

You will read a bit more about badges in Section 3. In the next subsection, we will look at *Massive Open Online Courses (MOOC)*. As we begin reading the content below, reflect on how MOOCs can be used in the classroom. You can even have a discussion on this topic with other teacher participants.

Massive Open Online Courses (MOOC)

Massive Open Online Courses (MOOCs) are courses that are built for wide dissemination of information. An open online course such as MOOCs support massive open online learning, and is not particularly restricted to one school or a community but engages the learners in developing their knowledge. A MOOC is open and without cost for participation and knowledge here is developed through “engaged participation” and hence it becomes collaborative and is largely peer-reviewed.

A MOOC can be structured and this may enable preservation of traditional and cultural information under a largely peer-reviewed group. Most of the discussions and blogs in a MOOC help to engage learners. There are reviews of studies in the U.S. that claim that although MOOCs represent an open system, there are evolving problems with signs of limitations to how open it is. One of the main reasons is that the MOOC platforms in the U.S. do not allow everyone to change its content and this brings in the same restrictions as traditional systems of disseminating knowledge. Although a MOOC is structured, actual practices demonstrate that most people who use MOOCs are students who have completed higher education and who have online access. This then brings educators and users to ponder on how acceptable can the situation be when the information and support do not reach the communities who are waiting for educational support and development in their own fields. As MOOC is an evolving field, it may be well advanced with new features in the next fifty years where social equity is practised with such type of learning. You will read more about it in the links below:

<https://creativecommons.org/tag/massive-open-online-course>

The term openness in education encompasses a large community of existing terms which are prefixed with the term “open” such as open licensing, open sources, open content, open courses, open educational resources, open access, open data etc. The terms can be understood and becomes meaningful to the user when the user is able to use the different online information, for example, in Creative Commons.

Activity 1.2

(for face-to-face workshop)

General discussion and group presentation.

Discuss the following questions in your groups. You should look at the following features:

1. Changing nature of openness in education.
2. Open education as a movement.
3. Open Educational Resources. How is openness in education perceived by other institutions?
4. What are the strengths and weaknesses of openness in education compared to traditional systems?

Your group presentation will be assessed on the following criteria:

1. Demonstrates the understanding of concepts and features of openness in education.
 2. Differentiating the similarities and differences of how educational institutions use openness in education.
-

Activity 1.3

(for face-to-face workshop)

Group work

You are required to work in groups to look into five websites and what kind of copyright issues they have used.

Step 1: Each group will browse as many websites as possible on Openness in Education on your chosen topic. You will have to jot down every resource you use and explain why you chose the contents.

Step 2: Read and find whether these websites belong to Open Source material or copyrighted material.

Step 3: You are required to identify what kind of copyright licenses these websites have used.

The following section will elaborate on the copyright licensing related to open learning.

Creative Commons and open learning

Creative Commons copyright licenses are widely used in sharing any educational resource. You will be learning about *Creative Commons* licenses in detail later on in this programme. *Creative Commons* support individual innovators, institutions and companies to standardise their copyright permissions. A vast array of information can be copied, edited, modified, adapted and developed under the umbrella of *Creative Commons*.

Read how *Creative Commons* are used for open learning from the following links:

1. <http://creativecommons.org/taa-grant-program>
2. <http://creativecommons.org/about/downloads>
3. <http://creativecommons.org/choose/>
4. http://iptedtec.org/copyright_1/

You will learn more about copyright applications in the later modules.

Assessment 1.1

Now that you have explored and analysed the different concepts related to openness in education, you are required to develop your own concept map in a page. You should also write a description of about 1000 words that explains your concept map.

Your concept map should follow the following principles.

1. **KEY/RELATED CONCEPTS...**What are the key/focal concepts? And what are the related concepts? Have you identified all of these clearly?
2. **RELATIONSHIPS BETWEEN KEY AND RELATED CONCEPTS...**How do you see the relationships between key/focal and related concepts? Are these labelled clearly? This is the fun bit...and not all of us see relations in the same way....and one is not right or wrong.
3. **LINKS AND CROSS LINKS...**Are the links and cross links between key/focal concepts and related concepts identified? Have you labelled these clearly? This is also going to be interesting.

4. EXAMPLES...These are specific events, objects and valid instances of the key/focal concepts represented on your concept map. Are these identified? And what are they?

Criterion for assessment:

A. Competency based assessment

1. What are the key/focal concepts? What are the related concepts? Have you identified all of these clearly?
2. What is the relationship between key/focal and related concepts? Are these labelled clearly? Are the links and cross links between key/focal concepts and related concepts identified? Have you labelled these clearly?
3. These are specific events, objects and valid instances of the key/focal concepts represented on your concept map. Are these identified? And what are they?

B. Performance level assessment

1. Originality, creativity and innovations.
2. Initiative and autonomy.
3. Resource planning and use.
4. Depth and breadth of knowledge and skills demonstrated.

Supplementary readings

To read more about open learning, open access and open scholarship, you can study the links below:

1. <http://iamcorbin.net/articles/openlearning/33-openlearningguide>
2. <http://www.distancelearningportal.eu/articles/239/benefits-of-oer-and-open-courses.html>
3. http://colfinder.net/materials/Supporting_Distance_Education_Through_Policy_Development/resources/OL%20in%20SA/Chapter%2001.concept%20of%20open%20learning.htm
4. <http://legacy.earlham.edu/~peters/fos/overview.htm>
5. <http://www.sherpa.ac.uk/guidance/authors.html>

Section 2: Historical development of OER

Let us now move on to the second part of your module. In this part, we will be tracing the historical development of open educational resources. We will be looking at the definition of OERs and the historical development of open educational resources. Finally, we will work on a graphical representation that will link the key concepts discussed in this section.

Now that you are familiar with the concepts of openness in education, let us take a virtual walk through the globe to trace the historical beginnings of OER. This part is very important because the majority of the workshop participants that you will be meeting have no exposure to this area so it is important that they get a broad overview. To prepare for the workshop that you and your friends will be organising for the participants, you will need information on the historical background of OER.

Let's begin by reading a short overview of OER first.

Historical background of OER

Open Educational Resources (OER) are teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits sharing, accessing, repurposing — including for commercial purposes and collaborating with others.

Today, OERs are in the process of gaining in scope and quality and are supported by an increasingly robust community that includes many of the most distinguished scholars and educators around the globe. Although OERs provide an important additional source of educational materials that can be downloaded from easily accessible platforms including institutional repositories, and wider umbrella repositories including JORUM, Scribd, Slideshare and WikiEducator, they are currently under-utilised in the teaching, learning and assessment strategies of many academic communities, even though their free and usually digitised nature makes them easy to integrate into module delivery. The following points suggest how OERs can contribute effectively to the teaching and learning process:

1. OER can play an important central and **extra resource** role in our teaching and learning strategies at a time when education is increasingly expensive and the learner population is faced with having to choose one resource over another.
2. OER have a role to play in **raising the visibility of our research** at a time when the **impact** of our research is coming under increasing scrutiny.
3. OER have the capacity to allow us to be **frugal** with our time and budgets and, importantly, they encourage us to learn from the work of others. They stop us from wasting time re-inventing the wheel and encourage us instead to take someone else's wheel and devote our energies to improving it (Hunter-Jones, 2012).

Now read seven (7) things that you should know about Open Educational Resources by Dr. Bartlett at <http://net.educause.edu/ir/library/pdf/ELI7061.pdf>

Activity 1.4

(for face-to-face workshop)

Work with your participants on the following activity.

1. Summarise the information that you read in the link above in the following table (<http://net.educause.edu/ir/library/pdf/ELI7061.pdf>).

OER	Description
What is it?	
How does it work?	
Who's doing it?	
Why is it significant?	
What are the downsides?	
Where is it going?	
What are the implications for teaching and learning?	

2. Now ask each group to search the Internet for THREE other websites that can supplement information that you have been provided with above and fill in the supplementary information in the table as well.
-

We now move to the part on definition and types of OERS.

Definition of OER

OERs are freely accessible, usually openly licensed materials that are useful for teaching, learning, educational assessment and research purposes. There are many definitions of OER but some of the most widely used ones are from The William and Flora Hewlett Foundation, the Organisation for Economic Cooperation and Development (OECD) and Commonwealth of Learning.

According to the William and Flora Hewlett Foundation (n.d.), OER is defined as “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 repurposing 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 OECD (2007) 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 licenses, that are useful for teaching, learning, educational assessment and research purposes” whereas the Commonwealth of Learning (COL) has adopted the widest definition of Open Educational Resources (OER) as “materials offered freely and openly to use and adapt for teaching, learning, development and research”. This is to take into consideration the fact that while OER are mainly shareable in digital formats (both online and offline formats such as DVD or CD-ROM), COL sees OER not simply as synonymous with online resources, online learning or eLearning but also as in printable formats.

Types of OER

Open Educational Resources include the following: full courses, course materials, modules, learning objects, open textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge. Resources for the implementation of open education include intellectual property licenses that govern open publishing of materials, design-principles, and localisation of content (Geser, 2012). While OERs are intended for a variety of educational purposes, they cannot be used to award degrees nor provide academic or administrative support to students who are working towards obtaining recognised degrees (Johnston, 2005).

Now, go to https://oerknowledgecloud.org/sites/oerknowledgecloud.org/files/A_Guide_to_Using_Open_Educational_Resources_final%5B1%5D.pdf and preview the different types of OERs seen as building blocks.

Activity 1.5

Please read the section entitled “Different types of OER meet different needs” at http://wiki.creativecommons.org/Free_to_Learn_Guide/Different_Types_of_OER_Meet_Different_Needs.

Ask the participants to reflect on how various types of OERS can be used to meet different needs.

The global OER logo



A global OER logo was created for the 2012 UNESCO World Open Educational Resources Congress, at UNESCO HQ in Paris. Go to the following link that will reveal the logo. The significance of the various parts of the logo is also explained here.

http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/Events/global_oer_logo_manual_en.pdf

Some questions that you can reflect are as follows:

1. Why was there a necessity to create a global OER logo?
2. What difference will it make in the propagation of using OERS?

The history of OER

The following description traces the beginnings of OER. Ask the participants to refer to this link to get a clear overview.

Go to **http://en.wikipedia.org/wiki/Open_educational_resources** and read the part on the history of OER.

The following link will take you to the site where the timeline for the history of OER is shown.

<http://www.coursehero.com/blog/2012/05/31/infographic-a-history-of-open-educational-resources/>

Activity 1.6

The information in this link stops at April 2012. Now ask the participants to search for information that details further developments till today. Create a table that incorporates the information in the link and your search results.

Now ask the group to reflect on what they think would be the important milestones in the timeline of OER development.

Assessment 1.2

Design a graphical representation that shows the historical development of open educational resources. Include about 1000 word summary that explains why you chose specific information to be included or left out of this graphical representation.

Criterion for assessment:

A. Competency based assessment

1. What are the key/focal concepts? What are the related concepts? Have these been identified clearly?
2. What is the relationship between key/focal and related concepts? Are these labelled clearly? Not all of us see relations in the same way and there will be no right or wrong way.
3. Are the links and cross links between key/focal concepts and related concepts identified? Have they been labelled clearly?
4. These are specific events, objects and valid instances of the key/focal concepts represented on your concept map. Are these identified? And what are they?

B. Performance level assessment

1. Originality, creativity and innovations
2. Initiative and autonomy
3. Resource planning and use
4. Depth and breadth of knowledge and skills demonstrated.

Section 3: OER initiatives by institutions and governments

In this section, you are now going to study OER initiatives taken by various institutions and governments which will help you in the preparation of the blueprint for the OER workshop you are planning.

We are going to cover the following areas under this section:

1. OER initiatives carried out by various institutions and governments.
2. Institutions and governments' concerns and participation on OER resource based learning.

Scenario:

OER initiatives is an essential area to be covered in the workshop and so as part of the blueprint for the workshop, you decide to make a presentation to explain and discuss OER initiatives taken by various institutions and governments. Since the presentation on the OER initiatives should be analytical, the participants will be asked to prepare a presentation in the form of a chart and OER Dossier (information profile) and a SWOT Analysis.

Introduction

As you know, OER is a relatively new phenomenon which may be seen as a part of a larger trend towards openness in higher education including more well-known and established movements such as Open Source Software (OSS) and Open Access (OA). But what is meant by “open” and what are the arguments for striving for openness?

The end-user should be able not only to use or read the resource but also to adapt it, build upon it and thereby reuse it, given that the original creator is attributed for her work. In broad terms, this is what is meant by “open” in all three movements. It is also what is more or less covered in the definition used by The Open Knowledge Foundation³ when they say that knowledge should be legally, socially and technologically open.

The term Open Educational Resources first came into use in 2002 at a conference hosted by UNESCO in Paris. Participants at that forum defined OER as: “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.”

The most commonly cited definition of OER is as follows: “Open Educational Resources are digitised materials offered freely and openly for educators, students and self-learners to use and reuse for teaching, learning and research.”

³ <http://www.okfn.org>

Walker defines “open” as “convenient, effective, affordable, sustainable and available to every learner and teacher worldwide” and Sir John Daniel speaks of “the 4 As: Accessible, Appropriate, Accredited, Affordable” (Downes, 2006).

At the moment, it is not possible to give an accurate estimation of the number of on-going OER initiatives. All that can be said so far is that the number of projects and initiatives is growing fast. Along with a number of large institution-based or institution supported initiatives, there are numerous small scale activities.

Building on Wiley (2006), the following brief overview is given over the OER movement in post-secondary education:

1. Over 150 universities in China participate in the China Open Resources for Education initiative, with over 450 courses online.
2. 11 top universities in France have formed the ParisTech OCW project, which currently offers 150 courses.
3. 9 of the most prestigious universities in Japan are engaged in the Japanese OCW Alliance that offers over 250 courses in Japanese and an additional 100 in English.
4. 7 universities in the United States have large scale OER programmes (MIT, Rice, Johns Hopkins, Tufts, Carnegie Mellon, and Utah State University).
5. Altogether there are over 2000 freely available university courses currently online. More OER projects are emerging at universities in Australia, Brazil, Canada, Hungary, India, Iran, Ireland, the Netherlands, Portugal, Russia, South Africa, Spain, Thailand, the UK, the US, and Vietnam.

Continuation of scenario:

Now you have to identify OER initiatives. The initiatives will enable you to get a broad idea and knowledge of Open Education and Open Education Resources. You will be able to identify as many initiatives taken by various institutions and governments globally. This will help you in the process of conducting your workshop.

Activity 1.7

Now watch the following videos related to OER initiatives by various institutions and governments. Go to the links below:

1. <http://youtu.be/zyDqvMMenio> (CC-BY)
2. <http://youtu.be/ocJkKvGJGqI> (STANDARD YOUTUBE LICENSE)

3. <http://youtu.be/8SdrhGrcvsk> (CC)
4. http://youtu.be/Wz_LPY3SW28 (CC-BY)
5. <http://youtu.be/EgI5CcXHxw> (STANDARD YOUTUBE LICENSE)

Critically review the videos and write a summary on the key initiatives taken by various institutions and government. Your 1 or 2 page summary should demonstrate your understanding of the **Strengths, Weaknesses, Opportunities and Threats (SWOT)** of each one of the initiatives.

To understand SWOT Analysis in detail, visit the following links:

1. http://en.wikipedia.org/wiki/SWOT_analysis
 2. <http://www.wikiswot.com/swot.htm>
 3. <http://youtu.be/51pCBCNN2CU> (STANDARD YOUTUBE LICENSE)
-

OER – A global perspective

The vision of developing and sharing OER resources as part of an Open Education agenda is interesting. It has the potential to substantially help solve existing educational problems throughout the globe. The concept of open education is based on sharing and it enables people across continents and organisations to transform their talents into professional competences and grow by removing existing economic barriers and invent new strategies to open up education globally.

In 2011, in the Davos World Economic Forum, it was already stated that the lack of adequately educated people not only limits personal fulfilment but will also hinder prosperity and economic growth in the near future. Since the learning needs and learning possibilities today differ fundamentally from that in the 20th century, the question is how to unlock the learning potential of people in a situation where mainstream education still heavily relies on traditional institutionalised closed formats. This has been realised as global phenomena.

Activity 1.8

Below are some of the Regional Policy Forums conducted by UNESCO in various countries. Fill in the blanks provided below by explaining the theme and purpose of these forums. Use this link below to get more information:

<http://www.unesco.org/new/en/communication-and-information/events/calendar-of-events/events-websites/world-open-educational-resources-congress/regional-policy-forums/>

Country and year	Forum theme and purpose
Caribbean — January, 2012	
Africa — February, 2012	
Latin America — March, 2012	
Europe — April, 2012	
Asia and Pacific — April, 2012	
Arab States — May, 2012	

Open badges

Our learning experiences are not just limited to the classroom. However, it is not always easy to obtain recognition for our skills and experiences outside the academic world. Through Mozilla's Open Badges project, this problem is being solved. The result is that it is now made easy for people to earn badges and display them across the web through free infrastructure. Their main motive is to help people of all ages to learn and display contemporary skills which provide them access to other viable career and educational opportunities that will give them choices when finding new directions in life.

You can also read further at:

http://ob-awareness.myknowledgemap.com/MKM_open-badges_portable-rewards-for-learner-achievements.pdf

Activity 1.9

You would like to enhance your qualifications by obtaining badges for some of your work experiences. Explain why badges would be helpful to you. Give two examples.

OER initiative by institutions

A large part of the early work on open educational resources was funded by universities and foundations. UNESCO is taking a leading role in “making countries aware of the potential of OER.” In 2010, UNESCO, in collaboration with COL launched the initiative: ‘Taking OER beyond the OER Community: Policy and Capacity’ in order to expand understanding of OER by educational decision makers and quality assurance experts so as to promote their wider use. The initiative focuses in the first instance on higher education institutions — universities located in Africa, Asia and the Pacific — and is being implemented as part of a Joint Work Plan Agreement between UNESCO and COL. It builds on the results of previous and ongoing collaboration between the two organisations. Paris OER Declaration was approved during the 2012 OER World Congress held in UNESCO HQ.

The following are the OER initiatives taken by various institutions:

1. Carnegie Mellon Open Learning Initiative

Using intelligent tutoring systems, virtual laboratories, simulations, and frequent opportunities for assessment and feedback, the Open Learning Initiative (OLI) builds courses that are intended to enact instruction — or, more precisely, to enact the kind of dynamic, flexible, and responsive instruction that fosters learning.

<http://oli.web.cmu.edu/openlearning/>

2. College Open Textbooks

College Open Textbooks is a collection of colleges, governmental agencies, education non-profits, and other education-related organisations that are focused on the mission of driving the awareness and advocacy for open textbooks.

<http://collegeopentextbooks.org/>

3. Connexions

Connexions is a place to view and share educational material made of small knowledge chunks called modules that can be organised as courses, books, reports, etc. Anyone may view or contribute.

Authors create and collaborate — instructors rapidly build and share custom collections — learners find and explore content.

<http://cnx.org/>

4. Creative Commons Education

The Internet and technology have transformed how people learn. Educational resources are no longer static and scarce, but digital and freely accessible. Teachers and learners everywhere can access world-class materials and participate in their creation and evolution. The potential impact of digitally enabled education is huge, but is also hindered by current legal and technical restrictions. Creative Commons provides the tools necessary to overcome these restrictions, opening up educational resources so that they are not only accessible, but adaptable, interoperable, and discoverable — helping to realise the full benefits of digitally enabled education. Read more in Creative Commons and Open Educational Resources (OER).

http://creativecommons.org/education?utm_source=ccorg&utm_medium=ccedu

5. Hewlett Foundation

Since 2002, the Hewlett Foundation has worked with OER grantees to improve education globally by making high-quality academic materials openly available on the Internet. The Education Program continues to work toward establishing a self-sustaining and adaptive global OER ecosystem and demonstrating its potential to improve teaching and learning.

<http://www.hewlett.org/programs/education-program/open-educational-resources>

6. Hewlett OER Initiative Overview

For the past four years, the William and Flora Hewlett Foundation has been the leading grantmaker in the field of “open educational resources” — high-quality digitised educational materials offered freely and openly for anyone with access to the Internet. These materials are available for use as is, or for reuse as appropriate. Hewlett’s commitment to advancing this exciting field is grounded in the belief that knowledge and education are common goods, and that limited resources and geography should not be barriers to an individual’s passion to learn.

http://www.hewlett.org/uploads/files/OER_overview.pdf

7. Hewlett Report on the Open Education Movement

In 2002, the Education Program of the Hewlett Foundation introduced a major component into its strategic plan “Using Information Technology to Increase Access to High-Quality Educational Content”. This review begins with this plan as a baseline. Hewlett program officers were motivated to initiate the component after thoroughly examining the content for K through 12 and post-secondary levels and finding it “alarmingly disappointing.”

http://www.hewlett.org/uploads/files/Hewlett_OER_report.pdf

8. MERLOT

MERLOT is a free and open online community of resources designed primarily for faculty, staff and students of higher education from around the world to share their learning materials and pedagogy. MERLOT is a leading edge, user-centered, collection of peer reviewed higher education, online learning materials, catalogued by registered members and a set of faculty development support services.

<http://www.merlot.org/merlot/index.htm>

9. MIT OpenCourseWare

MIT OpenCourseWare (OCW) is a web-based publication of virtually all MIT course content. OCW is open and available to the world and is a permanent MIT activity.

<http://ocw.mit.edu/index.htm>

10. OER Commons

OER Commons is a network of teaching and learning materials built by linking to institutional collections and individual authors’ curricula and other learning materials.

<http://www.oercommons.org/>

11. Online College Classes

A free compendium of educational multimedia content from around the web.

<http://www.onlinecollegeclasses.com>

12. Open Access Textbooks Project

The Open Access Textbooks Project is a two-year initiative to create a sustainable model for the discovery, production, and dissemination of open textbooks. Funded by a grant from the Fund for the Improvement of Postsecondary Education (FIPSE), this project builds on lessons learned in open textbook efforts across the United States and seeks to create a collaborative community to further sustainable implementation of open textbooks.

<http://www.openaccesstextbooks.org/>

13. OpenCourseWare Consortium

The OpenCourseWare Consortium is a collaboration of higher education institutions and associated organisations from around the world, creating a broad and deep body of open educational content using a shared model.

<http://www.ocwconsortium.org/>

14. Teachers Without Borders

Teachers Without Borders is a non-profit, international organisation with a small staff and a membership of over 6,500 in over 180 countries. Our programs are conceived by, led, and developed by local education leaders and supported by a global network of colleagues.

<http://www.teacherswithoutborders.org/>

15. UNESCO OER Community

The UNESCO Community of Interest on Open Educational Resources was formed in 2005 at the end of a formal Internet discussion forum on Open Educational Resources: open content for higher education. This forum was the third of a series organised by the UNESCO International Institute for Educational Planning (IIEP) to examine key issues related to the use of Information and Communication Technologies in higher education. The forum series and subsequent work on OER took place in the context of IIEP's "observation" function to explore new trends in education.

http://oerwiki.iiep-unesco.org/index.php?title=Main_Page

16. University of Michigan Open, Michigan

OpenMichigan is a University of Michigan initiative that enables faculty, students, and others to share their educational resources and research with the global learning community.

<http://open.umich.edu/>

17. WikiEducator

The WikiEducator is an evolving community intended for the collaborative:

- a. Planning of education projects linked with the development of free content
- b. Development of free content on Wikieducator for eLearning
- c. Work on building open education resources (OERs) on how to create OERs
- d. Networking on funding proposals developed as free content

http://wikieducator.org/Main_Page

18. OER initiatives by National Institute of Open Schooling (NIOS)

The National Institute of Open Schooling (NIOS) initiated Open Educational Resources (OER) specifically for Vocational programmes to be offered at Secondary and Sr. Secondary (+2) levels. These educational resources will not only be beneficial for the students pursuing their studies through Open and Distance Learning (ODL) system at school level, but also will be accessible to millions of learners interested in development of their skills in various vocations.

<http://www.oer.nios.ac.in>

Activity 1.10

You are required to prepare a chart indicating the OER initiatives taken by various institutions and its impact as per the table given below. Select at least 20 such initiatives and arrange them in the order of its larger impact. The assessment criterion is given below the table.

Institutions	Initiatives	Impact	Timeline

Assessment criteria:

1. Competency based assessment
 - a. What are the major common initiatives taken by various institutions in creation and implementation of OER?
 - b. What is the impact of the major initiatives taken by Wiki in the implementation of OER by various institutions?
 2. Performance level assessment
 - a. Originality, creativity and innovations
 - b. Initiative and autonomy
 - c. Resource planning and use
 - d. Depth and breadth of knowledge and skills demonstrated.
-

OER initiative by Government

You have already seen that OER developments supported by foundations have established a large pool of educational resources and a growing understanding of OER potential and benefits including grassroots development of OER generated declarations of principles that articulate those benefits. In parallel to foundation-supported initiatives, a small number of public governments have also initiated OER support via policy and incentive funding. Having established a strong OER foundation, there is a growing awareness that governments can generate significant

public benefits by supporting OER through policy, guidelines, and incentive funding. UNESCO, the Commonwealth of Learning, and others are pushing for widespread government endorsement of OER.

As more governments adopt the UNESCO-COL OER guidelines, participation and engagement of the global education community in the OER starts to take place and as OER practices become integrated into every day operations, the source and form of public support and funding will diversify. Funding allocated to OER will not just come as grants from governments but will come from time investments of individuals, standard educational practices of faculty and students, and strategic goals set not just by government but by schools, colleges, and universities of all kinds. Coalitions and collaborations will form among education providers globally. These international OER partnerships will be the norm and require new models of funding based on collaboration as opposed to current models, which foster competition.

OER will flourish when bottom-up grassroots OER development takes place in an environment supported top-down by policy. Government support for OER can happen at the policy and guidelines level without any additional funding. There is a growing awareness of the potential role government and public funds can play in the OER field. The UNESCO-COL *Guidelines for Open Educational Resources (OER) in Higher Education* provide a set of guidelines to support governments, teaching staff, higher education institutions/providers, quality assurance/accreditation and recognition bodies. The guidelines for government include the following:

1. Support the use of OER through the revision of policy regulating higher education.
2. Contribute to raising awareness of key OER issues.
3. Review national ICT/connectivity strategies for higher education.
4. Consider adapting open licensing frameworks.
5. Consider adopting open format standards.
6. Support institutional investments in curriculum design.
7. Support the sustainable production and sharing of learning materials.
8. Collaborate to find effective ways to harness OER. (Daniel, 2011)

The following are the examples of government funded OER initiatives:

1. Canada, BCcampus Online Program Development Fund: The BCcampus OER program is being funded by the British Columbia provincial government's Ministry of Advanced Education.

2. United Kingdom, Joint Information Systems Committee (JISC) and the Higher Education Academy (Academy) Open Educational Resources Program: The JISC OER program is being funded by The Higher Education Funding Council for England (HEFCE).
3. United States, Department of Labor Trade Adjustment Assistance Community College and Career Training Grants Program (TAACCCT).
4. Open Educational Resource initiatives for adult learning by European.

Assessment 1.3

You are required to develop an OER Dossier containing an overview of ongoing initiatives in the creation and implementation of OER worldwide to serve as a resource for the capacity building workshop you are planning.

Then you are required to pick 6 initiatives representing both the government and institutions from the OER Dossier you have already prepared (from your earlier activity) to carry out a SWOT analysis of Open Educational Resource initiatives in the creation and implementation of OER worldwide.

Components of SWOT analysis:

1. **Strengths:** characteristics of the project that give it an advantage over others.
2. **Weaknesses:** characteristics that place the team at a disadvantage relative to others.
3. **Opportunities:** elements that the project could exploit to its advantage.
4. **Threats:** elements in the environment that could cause trouble for the project.

To understand SWOT Analysis in detail, you can visit the following links:

1. http://en.wikipedia.org/wiki/SWOT_analysis
2. <http://www.wikiswot.com/swot.htm>
3. <http://youtube/51pCBCNN2CU> (STANDARD YOUTUBE LICENSE)

Assessment criteria:

1. Competency based assessment
 - a. What are the major strengths of the initiatives taken by Governments and institutions having larger impact in creation and implementation of OER?
 - b. What are the challenges in the initiatives taken by Government in the implementation of OER by various institutions?
2. Performance level assessment
 - a. Originality, creativity and innovations
 - b. Initiative and autonomy
 - c. Resource planning and use
 - d. Depth and breadth of knowledge and skills demonstrated.

Final assignment for Module 1

You are required to prepare a plan/blueprint for a two-day workshop on the **Concept and Practices of OER**. In your plan, outline topics and the concepts that you will include for your workshop. Submit your blueprint to three of your peers for written evaluation and feedback. Based on their feedback, prepare a revised blueprint of your workshop.

Details of the assessment in Module 1

Assessment 1.1

Title: Developing a Concept Map related to Openness in education.

Purpose: To create a Concept Map to demonstrate your understanding of the concepts of Open access, Open learning, Open scholarship and Open source.

Brief summary of overall task: Now that you have explored and analysed the different concepts related to openness in education, you are required to develop your own concept map in a page. You should also write a description of 1000 words that explains your concept map.

Your concept map should follow the following principles:

1. **KEY/RELATED CONCEPTS...**What are the key/focal concepts? What are the related concepts? Have you identified all of these clearly?
2. **RELATIONSHIPS BETWEEN KEY AND RELATED CONCEPTS...**How do you see the relationships between key/focal and related concepts? Are these labelled clearly? This is the fun bit, and not all of us see relations in the same way, and one is not right or wrong.
3. **LINKS AND CROSS LINKS...**Are the links and cross links between key/focal concepts and related concepts identified? Have you labelled these clearly? This is also going to be interesting.
4. **EXAMPLES...**These are specific events, objects and valid instances of the key/focal concepts represented on your concept map. Are these identified? And what are they?

Individual contribution

1. List one key/main/focal concept of openness in education and at least two related concepts to your key concept.
2. Link the key and related concepts.

Dialogue begins: Post the draft of your key and related concepts in the discussion forum in the first 2 days. In the next 3 days, respond to the posts of at least TWO of your peers with insights on their understanding of key and related concepts and suggestions on how they might be revised.

e-Moderator intervention: The moderator will log into the forum once every day to see the posts and comments from the peers. At the end of the 5th day, the moderator will post the feedback and guidance on the group's understanding of key and related concepts.

Schedule and time: 5 days. The actual activity including responding to the work of your peers should take you no more than 5 hours altogether.

Next: Based on the feedback you receive from your tutor and peers, do the following:

1. Develop your concept map covering all the concepts required.
2. Write a description of 1000 words that explains your concept map.

Credit will be awarded for your concept map and its description.

Assessment 1.2

Title: Designing and developing a graphical representation that shows the historical development of open educational resources.

Purpose: To create a graphical representation (for example flowchart/ maps/series of events chain/diagrams etc.) to demonstrate your understanding of the historical development of open educational resources to date.

Brief summary of overall task: Design a graphical representation that traces the historical development of open educational resources from the beginnings of OER to date. There are many milestones in the timeline of OER development which includes the history of OER, types of OER, OER movements and its logo.

Write a 1000 word summary that explains why you chose specific information to be included or left out of this graphical representation.

Individual contribution

1. Identify at least three milestones that you consider important on the timeline of OER development.
2. Give reasons for your choice.

Dialogue begins: Post the draft of your identified milestones on the timeline of OER development and the reasons for your choice in the discussion forum in the first 2 days. In the next 3 days, respond to the posts of at least TWO of your peers with insights on their understanding of important milestones and reasons.

e-Moderator intervention: The moderator will log into the forum once every day to see the posts and comments from the peers. At the end of the 5th day, the moderator will post the feedback and guidance on the group's choice of milestones and their reasons.

Schedule and time: 5 days. The actual activity including responding to the work of your peers should take you no more than 5 hours altogether.

Next: Based on the feedback you receive from your tutor and peers, do the following:

1. Create a graphical representation that shows all the milestones in the historical development of open educational resources.
2. Write a 1000 word summary that explains why you chose specific information to be included or left out of this graphical representation.

Credit will be awarded for your graphical representation and the reasons for your choice of milestones.

Assessment 1.3

Title: Developing an OER Dossier.

Purpose: To develop an OER Dossier containing an overview of ongoing initiatives in the creation and implementation of OER worldwide.

Brief summary of overall task: You are required to develop an OER Dossier (a complete file containing detailed information about OER initiatives) containing an overview of ongoing initiatives in the creation and implementation of OER worldwide to serve as a resource for the capacity building workshop you are planning.

Then you are required to pick 6 initiatives representing both the government and institutions from the OER Dossier you have already prepared (from your earlier activity) to carry out a SWOT analysis of Open Educational Resource initiatives in the creation and implementation of OER worldwide.

You must consider the following:

1. What are the major strengths and weaknesses of the initiatives taken by Governments and institutions in the creation and implementation of OER?
2. What are the challenges in the initiatives taken by Government in the implementation of OER by various institutions?

Individual contribution

1. Identify at least three ongoing initiatives; one from the Government and two from the institutions in the creation and implementation of OER worldwide.

Dialogue begins: Post the draft of your identified ongoing initiatives in the creation and implementation of OER worldwide in the discussion forum in the first 2 days. In the next 3 days, respond to the posts of at least TWO of your peers with insights on their identified initiatives.

e-Moderator intervention: The moderator will log into the forum once every day to see the posts and comments from the peers. At the end of the 5th day, the moderator will post the feedback and guidance on the group's choice of initiatives in the creation and implementation of OER worldwide.

Schedule and time: 5 days. The actual activity including responding to the work of your peers should take you no more than 5 hours altogether.

Next: Based on the feedback you receive from your tutor and peers, do the following:

1. Develop an OER Dossier containing an overview of ongoing initiatives in the creation and implementation of OER worldwide to serve as a resource for the capacity building workshop you are planning.
2. Then you are required to pick 6 initiatives representing both the government and institutions from the OER Dossier you have already prepared (from your earlier activity) to carry out a SWOT analysis of Open Educational Resource initiatives in the creation and implementation of OER worldwide.

Credit will be awarded for your OER Dossier and the SWOT Analysis.



Module 2

**Designing Learning
Experiences for
OER-based eLearning**

Badge Requirements



What it means?

This badge means, the learner has demonstrated a reasonable understanding about designing and developing learning experiences for an eLearning course, integrating Open Educational Resources (OER). This includes competencies in the development of learning outcomes, design of authentic and meaningful learning experiences and development of learning activities and assessment tasks.

Who is eligible to earn this badge?

You can earn this badge, if you have done the following:

1. Complete the Module 2 of the OER-based eLearning professional development programme of CEMCA.
2. Actively participate in all three online learning activities (e-tivities) of the Module.
3. Contribute to each of the discussion forums by posting the responses for the tasks.
4. Provide analytical feedback to the posts of at least two of your peers in each of the discussion forums.
5. Submit all three assignments, including your reflections.
6. Demonstrate achievement of the three learning outcomes of the module.

Module 2: Designing Learning Experiences for OER-based eLearning

Introduction

In this module, you will learn how to design and develop appropriate learning experiences for an eLearning course based solely on Open Educational Resources (OER). This module adopts a ‘scenario-based learning approach’ in order to situate your learning activities in an authentic learning context. In this scenario, you will be required to assume a goal-based role. The pursuit of this goal will entail the satisfactory completion of a number of learning activities, some of which will contribute to your assessment in this module, and others that will serve as formative learning tasks. A wide range of OER has been collated to help you perform these learning activities satisfactorily. It is expected that in completing these learning activities with the help of OER, you will have developed the knowledge and critical skills required to achieve the intended learning outcomes of this module.

Learning outcomes

This module will enable you to:

1. Develop learning outcomes for an OER-based eLearning course.
2. Design and develop authentic and meaningful learning experiences for the selected course.
3. Design and develop assessment tasks for the selected course.

Learning scenario

In the context of the rapid development of higher education in China, there is growing interests in supporting higher education in the rural areas with the help of high speed broadband Internet. The Chinese government has recently funded efforts to initiate an eLearning programme called ‘NiLearn’ (YouLearn) with the participating village Wah Tong in Guandong, China.

In the face of no physical infrastructure such as buildings, classrooms and library, NiLearn is a pilot programme designed to use OER materials for learning and teaching. Fortunately, the village has Wi-Fi Internet access and the learners are equipped with laptops and Internet connectivity. The learners, who are keen to learn, are diverse in terms of their age, gender and educational background. But all of them possess basic computer and Internet skills as well as adequate English language skills.

Different institutions from around the world have been invited to put together a team of educators to offer a course in the programme. The educators are initially given a timeframe of one month to design a course. Educators are required to use Open Educational Resources (OER) creatively to facilitate the eLearning programme.

You are one of the educators who have been selected by your institution to participate in the *NiLearn* project to design an OER-based eLearning course for learners in the village. Your role is to design the learning experience for an OER-based eLearning course.

Commence this process by carrying out the following learning activities.

Activity 2.1

(part of the assessment)

Title: Developing Learning Outcomes

Purpose: To get you start planning and developing learning outcomes for a selected subject area for an OER-based eLearning course.

Brief summary of overall tasks: The goal of this learning activity is to help you start planning the learning experiences for an OER-based eLearning course. To develop a learning experience, first you need to develop learning outcomes/learning objectives.

Learning Outcomes/Learning Objectives (LOs) are specific statements that describe what the learners will be able to demonstrate by the end of the course. It is important for you to realise that the focus of LOs should be on what the learners will do, instead of what the teacher does. Remember the **ABCDs** of LOs: **A**udience, **B**ehaviour, **C**ondition, and **D**egree.

Through this activity, you will be able to develop LOs for your course, by identifying the expected behavioral changes in your targeted audience, defining the conditions under which these behaviours will be demonstrated by them, and deciding on the standards/criteria for judging the degree of success of that performance.

Individual contribution

Study the given resources to complete the following tasks.

1. Specify what is the expected change you wish to bring about in your learners. (in relation to one LO.)
2. Specify the conditions/circumstances under which this change will happen.

3. Define the standards/criteria for judging the degree of change.
4. Develop a learning outcome comprising the above three components.

Dialogue begins: Post the developed learning outcome in the discussion forum within the first two days of the week.

During the first three days of the week, respond to the posts of at least two of your peers and comment on the appropriateness of the three components of each LO, with suggestions on how they might be improved.

e-Moderator interventions: The moderator will log into the forum once every day to offer feedback and guidance.

Schedule and time: One week (spread over 5 days). Posting your work should happen during the first two days of the week. Responding to work of your peers should be done within the first three days of the week.

Learning resources: The OER essential resources and additional resources given below will help you write your learning outcomes. You need to study the relevant sections/pages indicated in the weblinks given.

Next: Based on peer feedback and tutor comments, you can now revise and refine the developed LOs and then finalise all required learning outcomes for your course, along the same lines.

Upload your finalised learning outcomes for your course, together with a reflection on this process, as Assignment — Part I, by the due date.

Learning Resources — Developing learning outcomes

The OER resources below will help you write your learning outcomes. You need to study the relevant sections/pages indicated in the links given.

OER Essential Resources:

Teaching Methodology by Caroline W. Ndirangu
<p>Weblink: http://oer.avu.org/bitstream/handle/123456789/74/Teaching%20Methodology.pdf</p> <p>Section and pages: Unit 2 — 2.2 Learning Objectives — Pages 44 to 55.</p>

Formulating Learning Objectives by Wikibooks

Weblink:

http://en.wikibooks.org/wiki/Developing_Learning_Objectives

Section and pages:

Please read the entire content in the webpage.

Weblink:

http://en.wikibooks.org/wiki/Contemporary_Educational_Psychology/Chapter_9:_Instructional_Planning/Formulating_Learning_Objectives

Section and pages:

Chapter 9, please read the entire content in the webpage.

Weblink:

http://en.wikibooks.org/wiki/Bloom%27s_Taxonomy

Section and pages:

Please read the entire content in the webpage.

Resources in Merlot.org

Web link: <http://pedagogy.merlot.org/LearningObjectives.htm>

Study the following materials given as resources on this webpage:

Why Do We Need Learning Objectives at <http://ets.tlt.psu.edu/learningdesign/objectives/basicinfo>

Developing Course Objectives at <http://www.ion.uillinois.edu/resources/tutorials/id/developObjectives.asp>

Creating Learning Outcomes at <http://distance.fsu.edu/instructors/creating-learning-outcomes>

Additional resources:

Designing Online Learning by Sanjaya Mishra

Weblink:

http://www.col.org/SiteCollectionDocuments/KS2001-02_online.pdf

Section and pages:

Building Online Learning Environments — Pages 3 to 5

<http://toolkit.goodpractice.com/mdt/resources/development-cycle/training-cycle-design/designing-learning-and-development-activities/robert-f-mager-effectiveLearning-objectives>

<http://www.oucom.ohiou.edu/fd/writingobjectives.pdf>

Learning scenario continued ... Designing learning experience

You have successfully developed and finalised the learning outcomes for your course for the 'NiLearn' pilot programme. You are now ready to design the learning experience for your selected course and develop its learning activities/tasks. But before you can do that, you need to study the approach to teaching and learning which you would want to take.

Your team has decided to work in small groups to study the different approaches to teaching and learning. Your goal is to select an appropriate approach/method which will guide the design of authentic and meaningful learning experiences for your students.

In developing the learning experiences, you and your team have to take into consideration how to strategise the development with limited resources in the village. Bear in mind that only Internet access has been set up with no physical infrastructure constructed in the village. With the limitations of the situation, you have to solely depend on OER to design the learning experiences.

The learning experiences designed are to be in line with the learning outcomes which your team has already developed.

Continue with the design process by engaging in the following learning activities:

Activity 2.2

(part of the Assessment)

Title: Designing Authentic and Meaningful Learning Experiences

Purpose: To enable you to design authentic and meaningful learning experiences for the selected topic on the OER-based eLearning course.

Brief summary of overall tasks: This learning activity will help you commence designing and developing of learning experiences for your learners, in line with the learning outcomes already developed by you.

In order to ensure a “meaningful” learning, the learners should be provided with “authentic” learning experiences integrated with “real-life” situations.

Through this activity, you are encouraged to develop a habit of designing a variety of **authentic and meaningful** learning experiences, by studying different approaches and methods of teaching and learning.

Individual contribution

1. Study the given resources and review different approaches/methods of teaching and learning.
2. Summarise key features of the different approaches/methods in tabular form as given below:

Approaches/Methods of Learning and Teaching (e.g., Cognitivist/Constructivist/Situated Learning/PBL/SBL... etc.)	Key Features identified

3. Identify a suitable approach/method for the developed LOs of your course.
4. Design an authentic and meaningful learning experience based on the selected teaching-learning approach/method.
5. Develop learning activities/tasks for the designed learning experience, with the use of OERs.

Dialogue begins: Post the first draft of the design of your learning experience in the online discussion forum along with a justification, within the first two days of the week.

Respond to the posts of at least two of your peers and critically comment on the extent to which they do or do not represent an authentic and meaningful learning experience, with suggestions on how they might be improved. This should happen during the first three days of the week.

e-Moderator interventions: The moderator will log into the forum once every day to offer feedback and guidance.

Schedule and time: One week (spread over 5 days). Posting your work should happen during the first two days of the week. Responding to work of your peers should be done within the first three days of the week.

Resources: The OER essential resources and additional resources will help you to study different approaches of teaching and learning, in order to identify suitable methods to design authentic and meaningful learning experiences. You need to study the relevant sections/pages indicated in the links given.

Next: Based on peer feedback and tutor comments, you can revise, refine and finalise your learning experience design, and the developed learning activities.

Upload your finalised learning experience design including the learning activities/tasks, together with a reflection on this process, as Assignment — Part II.

OER materials

The following OER materials on different approaches to teaching and learning will help you to identify suitable methods to design authentic and meaningful learning experiences.

Essential resources

Teaching Methodology by Caroline W. Ndirangu

Weblink:

<http://oer.avu.org/bitstream/handle/123456789/74/Teaching%20Methodology.pdf>

Section and pages:

Unit 2 — 2.3 Teaching Approaches and Methods — Pages 71 to 84.

Teaching Approaches by Orbit

Weblink:

http://orbit.educ.cam.ac.uk/wiki/Teaching_Approaches/Introduction

Section and pages:

Introduction, please read the entire content in the webpage.

eLearning Methodologies: A guide for designing and developing eLearning courses by Som Naidu

Weblink:

<http://www.fao.org/docrep/015/i2516e/i2516e.pdf>

Section and pages:

Quality of eLearning — Pages 14 to 26.

Additional resources

The Experiential Learning Cycle by J. S Atherton

Weblink:

<http://www.learningandteaching.info/learning/experience.htm>

Section and pages:

Experiential Learning Cycle and Learning Styles, please read the entire content in the webpage.

Open Educational Resources Infokit — Learning and Teaching Considerations by JISC

Weblink:

<https://openeducationalresources.pbworks.com/w/page/25024702/Learning%20and%20Teaching%20considerations>

Section and pages:

Learning and Teaching Considerations, please read the entire content in the webpage.

Learning scenario continued ... Designing and Developing Assessment Tasks

Your team has now successfully designed an authentic and meaningful learning experience and developed learning activities for your learners with the support of OER.

The team further discussed that the learners should be assessed to know whether they are achieving the intended learning outcomes.

Then they decided to develop strategies for assessing the achievement of these learning outcomes by the learners.

You can continue with this process by engaging in the following learning activities.

Activity 2.3

(part of the assessment)

Title: Designing and Developing Assessment Tasks

Purpose: To enable you to design and develop assessment tasks to assess the achievement of the intended learning outcomes of the OER-based eLearning course.

Brief summary of overall tasks: Assessment is a critical component of any teaching-learning experience. Different types of assessment strategies are present to serve different purposes. The important thing is to develop your skills in selecting appropriate assessment strategies, to match with the intended purposes.

Through this learning activity, you will identify a variety of assessment strategies and design specific assessment tasks suitable for the intended purposes.

It is also important for you to ascertain the relationship between teaching, learning and assessment, and ensure **constructive alignment** of learning outcomes, learning experiences/activities and assessment tasks.

Individual contribution

1. Study the given resources and review different types of assessment strategies. (e.g., Formative/Summative; Criterion-Referenced/Norm Referenced)
2. Summarise the key features of different assessment strategies in tabular form as given below.

Assessment strategies (e.g., Formative/Summative; Criterion-Referenced/Norm Referenced...etc.)	Intended purposes and key features identified

3. Identify suitable assessment strategies for the intended purposes.
4. Design and develop assessment tasks for different assessment strategies identified, ensuring **constructive alignment** of assessment tasks with the learning outcomes and learning experiences already developed by you in the previous two e-tivities.

Dialogue begins:

1. Post the first draft of the assessment tasks designed by you, in the online discussion forum, within the first two days of the week.
2. You need to justify the choice of each assessment task with its intended purpose.

3. Also, you need to indicate the constructive alignment of your assessment tasks, with the learning outcomes and the learning experiences of your course.
4. Respond to the posts of at least two of your peers and critically comment on the assessment tasks and the constructive alignment with the learning outcomes and learning experiences. Provide suggestions on how they might be improved. This should happen during the first three days of the week.

e-Moderator interventions: The moderator will log into the forum once every day to offer feedback and guidance. Marks will be awarded for your own posts and critical commentary on the posts of your peers.

Schedule and time: One week (spread over 5 days). Posting your work should happen during the first two days of the week. Responding to work of your peers should be done within the first three days of the week.

Resources: The OER essential resources and additional resources will help you to identify and design suitable assessment tasks for your learners. You need to study the relevant sections/pages indicated in the links given.

Next: Based on peer feedback and tutor comments, you can revise, refine and finalise your assessment tasks.

Upload the finalised assessment tasks, indicating their constructive alignment with the learning outcomes and the learning experiences, together with a reflection on this process, as Assignment — Part III.

OER materials

The following OER materials on assessment strategies (e.g., Formative/Summative; Criterion-Referenced/Norm Referenced, etc.) will help you to identify and design suitable assessment tasks for your learners.

Teaching Methodology by Caroline W. Ndirangu

Weblink:

<http://oer.avu.org/bitstream/handle/123456789/74/Teaching%20Methodology.pdf>

Section and pages:

- Unit 4 — Keywords — Page 115
- 4.1 Assessment and Evaluation — Pages 116 to 131.

ELearning Methodologies: A guide for designing and developing eLearning courses by Som Naidu

Weblink:

<http://www.fao.org/docrep/015/i2516e/i2516e.pdf>

Section and pages:

Identifying and Organising Course Content — Pages 28 to 43.

Assessment Strategies by Foundation of Education and Instructional Assessment

Weblink:

http://en.wikibooks.org/wiki/Foundations_of_Education_and_Instructional_Assessment/Assessment_Strategies

Section and pages:

- Should I give a multiple-choice test, an essay test, or something entirely different?
- How can student journals be used for assessment?
- How can classroom discussions be used for assessment?
- How can conferences be used for assessment?
- What is the best way to write good multiple-choice questions?
- What are the benefits of essay tests?
- How can portfolios be used for assessment?
- Please read the entire content in the links of the webpages provided.

Teacher-made Assessment Strategies by Wikibooks

Weblink:

http://en.wikibooks.org/wiki/Contemporary_Educational_Psychology/Chapter_9:_Instructional_Planning/Formulating_Learning_Objectives

Section and pages:

Chapter 10, please read the entire content in the webpage.

Online Assessment Strategies: A Primer by Jeanne P. Sewell

Weblink:

http://jolt.merlot.org/vol6no1/sewell_0310.htm

Section and pages:

The complete article, please read the entire content in the webpage.

Additional resources

Designing Online Learning Assessment through Alternative Approaches: Facing the Concerns by Joan Mateo

Weblink:

http://www.eurodl.org/materials/contrib/2007/Mateo_Sangra.htm

Section and pages:

The complete article, please read the entire content in the webpage.

Teaching in an Online Learning Context by Terry Anderson

Weblink:

http://cde.athabascau.ca/online_book/ch11.html

Section and pages:

Chapter 11: Assessment in Online Learning, please read the entire content in the webpage.

Teaching and Learning Online Communication, Community, and Assessment: A Handbook by Umass Faculty

Weblink:

http://www.umass.edu/oapa/oapa/publications/online_handbooks/Teaching_and_Learning_Online_Handbook.pdf

Section and pages:

Chapter 4: Assessing Student Learning — Pages 35 to 39.

Summative Assessment Guidelines

The three assessment tasks which you have uploaded will comprise your summative assessment for this module.

It should constitute the following sections:

- Part I:** Final learning outcomes of the OER-based eLearning course, and a Reflection.
 - Part II:** Authentic and meaningful learning experiences designed and developed for the selected course and a Reflection.
 - Part III:** Assessment activities designed and developed for the selected course, and a Reflection.
-

Appendix 1: Guidelines on Writing Reflections

As an assessment requirement, you need to produce a Reflective Report at the end of the whole process of designing learning experiences for OER-based eLearning. As a part of this, you are required to write a short reflection, at the end of each of the following stages of the process.

1. Developing learning outcomes for an OER-based eLearning course.
2. Designing and developing authentic and meaningful learning experiences for the selected course.
3. Designing and developing assessment tasks for the selected course.

Reflection allows us to learn from our experiences leading to greater self-awareness. The aim of reflection is to identify areas that need improvement, and identify approaches that worked well to reinforce good practice.

After completing each stage, recall the learning/assessment activities you were engaged in. Make self-critical notes on your feelings, ideas, successes/failures and problems that may have arisen, related to each activity.

Write a short reflection (a single page) focusing on the following:

1. Analysing the importance of the activities
2. How this experience has affected you/others?
3. What were the issues arisen and how were they overcome?
4. What were the successes/failures?
5. What impact this experience had on you?
6. Could you have done certain things in a different manner, and if so, how?

Your reflective notes are your own ideas. The important thing is to write your reflections clearly and meaningfully.

Appendix 2: Suggested Module Workflow

Learning Outcome	Module Outline	Learning Activities	Online Assessment Tasks	OERs (Essential Resources)
Develop learning outcomes for an OER-based eLearning course	<ol style="list-style-type: none"> Identifying the subject area for the course. Developing learning outcomes. 	Develop appropriate learning outcomes to be achieved by your learners within the duration of the course.	<p>Study the given resources to complete the following tasks.</p> <p>Specify what is the expected change you wish to bring about in your learners (in relation to one LO).</p> <p>Specify the conditions/circumstances under which this change will happen.</p> <p>Define the standards/criteria for judging the degree of change.</p> <p>Develop a learning outcome comprising the above three components.</p> <p>Post the developed learning outcome in the discussion forum within the first two days of the week.</p> <p>During the first three days of the week, respond to the posts of at least two of your peers and comment on the appropriateness of the three components of each LO, with suggestions on how they might be improved.</p>	<p>OERs (Essential Resources)</p> <p>OER on Learning Outcomes http://en.wikibooks.org/wiki/Developing_Learning_Objectives Section and pages: Please read the entire content in the webpage.</p> <p>http://en.wikibooks.org/wiki/Contemporary_Educational_Psychology/Chapter_9:_Instructional_Planning/Formulating_Learning_Objectives Section and pages: Chapter 9, please read the entire content in the webpage.</p> <p>http://en.wikibooks.org/wiki/Bloom%27s_Taxonomy Section and pages: Please read the entire content in the webpage.</p> <p>http://pedagogy.merlot.org/LearningObjectives.htm</p>

Learning Outcome	Module Outline	Learning Activities	Online Assessment Tasks	OERs (Essential Resources)
Design and develop authentic and meaningful learning experiences for the selected course.	<ol style="list-style-type: none"> 1. Studying different approaches to teaching and learning. 2. Design meaningful authentic learning experiences. 	<ol style="list-style-type: none"> 1. Design meaningful authentic learning experiences, by studying different approaches to teaching and learning. 	<p>Based on peer feedback and tutor comments, you can now revise and refine the developed LOs and then finalise all required learning outcomes for your course, along the same lines.</p> <p>Upload your finalised learning outcomes for your course, together with a reflection on this process, as Assignment — Part I.</p>	<p>Why Do We Need Learning Objectives http://ets.tlt.psu.edu/learningdesign/objectives/basicinfo</p> <p>Developing Course Objectives http://www.iun.uillinois.edu/resources/tutorials/id/developObjectives.asp</p> <p>Creating Learning Outcomes http://distance.fsu.edu/instructors/creating-learning-outcomes</p>
Design and develop authentic and meaningful learning experiences for the selected course.	<ol style="list-style-type: none"> 1. Studying different approaches to teaching and learning. 2. Design meaningful authentic learning experiences. 	<ol style="list-style-type: none"> 1. Design meaningful authentic learning experiences, by studying different approaches to teaching and learning. 	<p>Study the given resources and review different types of assessment strategies. Summarise the key features of different assessment strategies in tabular form. Identify suitable assessment strategies for the intended purposes. Design and develop assessment tasks for different assessment strategies identified, ensuring constructive alignment of assessment tasks with the learning outcomes and learning experiences already developed by you in the previous two e-tivities.</p>	<p>Teaching Methodology http://oer.avu.org/bitstream/handle/123456789/74/Teaching%20Methodology.pdf — page 116 to page 131.</p> <p>eLearning Methodologies: A guide for designing and developing eLearning courses http://www.fao.org/docrep/015/i2516e/i2516e.pdf — page 14 to page 26 (examine the case study given)</p>

Learning Outcome	Module Outline	Learning Activities	Online Assessment Tasks	OERs (Essential Resources)
	<p>3. Develop a learning scenario to facilitate learners to achieve the intended learning outcomes.</p> <p>4. Develop appropriate learning activities with OER integration.</p>	<p>2. Develop a learning scenario that will facilitate learners to achieve the intended learning outcomes.</p> <p>3. Develop appropriate learning activities with OER integration for your course.</p>	<p>Post the first draft of the assessment tasks designed by you, in the online discussion forum, within the first two days of the week. You need to justify the choice of each assessment task with its intended purpose. Also, you need to indicate the constructive alignment of your assessment tasks, with the learning outcomes and the learning experiences of your course.</p> <p>Respond to the posts of at least two of your peers and critically comment on the assessment tasks and the constructive alignment with the learning outcomes and learning experiences. Provide suggestions on how they might be improved. This should happen during the first three days of the week.</p> <p>Based on peer feedback and tutor comments, you can revise, refine and finalise your assessment tasks.</p> <p>Upload the finalised assessment tasks, indicating their constructive alignment with the learning outcomes and the reflection on this process, as Assignment — Part II.</p>	<p>Teaching Approaches http://orbit.educ.cam.ac.uk/wiki/Teaching_Approaches/Introduction — Introduction, webpage.</p> <p>The Experiential Learning Cycle http://www.learningandteaching.info/learning/experience.htm — Article, webpage.</p> <p>Open Educational Resources Infokit — Learning and Teaching Considerations https://openeducationalresources.pbworks.com/w/page/25024702/Learning%20and%20Teaching%20considerations — Learning and Teaching Considerations, webpage.</p> <p>Authentic Learning http://en.wikibooks.org/wiki/Constructivism_%26_Technology/Authentic_Learning</p> <p>Meaningful Learning http://en.wikibooks.org/wiki/Instructional_Technology/Utilizing_Technology_for_Meaningful_Learning</p>

Learning Outcome	Module Outline	Learning Activities	Online Assessment Tasks	OERs (Essential Resources)
Design and develop assessment tasks for the selected course	<ol style="list-style-type: none"> 1. Designing assessments 2. Selecting appropriate assessment strategies 3. Designing assessment tasks 4. Integrating assessment tasks in the course 	<ol style="list-style-type: none"> 1. Select appropriate assessment strategies and design assessment tasks integrating OER. 2. Integrate learning assessment tasks in your course. 	<p>Study the given resources and review different types of assessment strategies.</p> <p>Summarise the key features of different assessment strategies in tabular form.</p> <p>Identify suitable assessment strategies for the intended purposes.</p> <p>Design and develop assessment tasks for different assessment strategies identified, ensuring constructive alignment of assessment tasks with the learning outcomes and learning experiences already developed by you in the previous two e-tivities.</p> <p>Post the first draft of the assessment tasks designed by you, in the online discussion forum, within the first two days of the week.</p> <p>You need to justify the choice of each assessment task with its intended purpose.</p> <p>Also, you need to indicate the constructive alignment of your assessment tasks, with the learning outcomes and the learning experiences of your course.</p>	<p>OER Materials on Assessment</p> <p>ELearning Methodologies: A guide for designing and developing eLearning courses, http://www.fao.org/docrep/015/i2516e/i2516e.pdf — Page 28 to page 43.</p> <p>Designing Online Learning Assessment through Alternative Approaches: Facing the Concerns, http://www.eurodl.org/materials/contrib/2007/Mateo_Sangra.htm — Article, webpage.</p> <p>Online Assessment Strategies: A Primer Jeanne P. Sewell, http://jolt.merlot.org/vol6no1/sewell_0310.htm — Article, webpage.</p> <p>Teaching and Learning Online Communication, Community, and Assessment: A Handbook for UMass Faculty, http://www.umass.edu/oapa/oapa/publications/online_handbooks/Teaching_and_Learning_Online_Handbook.pdf — Chapter 4.</p>

Learning Outcome	Module Outline	Learning Activities	Online Assessment Tasks	OERs (Essential Resources)
			<p>Respond to the posts of at least two of your peers and critically comment on the assessment tasks and the constructive alignment with the learning outcomes, and learning experiences. Provide suggestions on how they might be improved. This should happen during the first three days of the week.</p> <p>Based on peer feedback and tutor comments, you can revise, refine and finalise your assessment tasks.</p> <p>Upload the finalised assessment tasks, indicating their constructive alignment with the learning outcomes and the learning experiences, together with a reflection on this process, as Assignment — Part III.</p>	<p>Teaching in an Online Learning Context http://cde.athabascau.ca/online_book/ch11.html — Chapter 11.</p>



Module 3

**Searching and
Evaluation of
OER Materials**

Badge Requirements



What it means?

This badge recognises that the learner has demonstrated a sufficient understanding on the knowledge and skills on how to search and select relevant types of OER materials and apply appropriate methods of evaluation to ensure the selected OER materials matches the intended learning outcomes.

Who is eligible to earn this badge?

You will be awarded this badge, subject to your:

1. Successful completion of 'Module 3 — Search and Evaluation of OER Materials' of the OER-based eLearning professional development programme offered by CEMCA.
2. Satisfactory completion of all the three learning activities featured in this module.
3. Active participation, engagement and meaningful contribution to the discussion forum.

Module 3: Searching and Evaluation of OER Materials

Introduction

Open Educational Resources (OER) are educational materials that are made available under an open license framework. They may include full courses, modules, syllabi, lectures, assignments, and a whole variety of learning activities. The term OER was first popularised within the context of open access to educational resources. One of the earliest examples of this was MIT's OpenCourseWare initiative which provided open access to around 1800 MIT courses via the Internet. At that time, it was a revolutionary concept and initiative. Since then of course, many more individuals and organisations have opened up access to their resources on the web, and at no cost to its users. Licensing frameworks such as the Creative Commons Licenses have been developed to provide alternative approaches to copyright. Under these new licensing frameworks, developers of educational resources can distribute educational resources with varying levels of access and use. However, with this exciting development in access to educational materials has come a level of deterioration in the peer-review process and quality control of what is made available as a resource. In this module we will learn how to separate the wheat from the chaff, i.e., how to evaluate their quality and find good quality OER.

Learning outcomes

This module will enable you to:

1. Identify the different types of OER.
2. Search for OER materials using basic search engines.
3. Evaluate OER materials for teaching and learning purposes.

Learning scenario

In a recent Town hall meeting, the Vice Chancellor of the Open University expressed concerns over the rising cost of course materials for students. He encouraged all academic and academic support staff to consider using open educational resources (OER) instead. The Dean of your Faculty, Professor Rani was one of the first Deans to explore the use of OER and seek answers to several questions including how to search for relevant OER, and how to identify good OERs? She has asked you to chair a small working party to investigate the use of OER and report back to the faculty.

Activity 3.1

Prepare a 30 minute presentation to the faculty group to help members better understand the various types of OER and how best to search for and evaluate OER.

In order to prepare your 30 minute presentation to the faculty group, study the following information and explore further various types of OER. In your presentation, discuss why you would choose the type of OER from the following categories. Post your PowerPoint slides in the LMS and generate discussion around it among your peers.

Types of OER materials

OER based on media

1. **Text/Print:** These are printable books or materials available online. The text can be accessed openly by anyone in digitised format over the Internet. The texts can also be procured in printed version.
2. **Visual/Photograph:** Some open educational resources are available in visual or photographic format. These can be made openly available and freely accessible to anyone. The visuals or photographs can be posted on a website or provided in print form, CD, DVD etc. e.g., Flickr, Pixabay, Wikimedia Commons, **Open Clip Art Library, Fotopedia** etc. Pixabay and **Open Clip Art Library** images are public domain images which can be used freely for personal and commercial use without giving attribution to the original author.
3. **Audio:** Some OER are available in the audio format. It allows the general people to discover works of thousands of artists, of all genres, who have chosen to distribute their music independently outside the traditional system of collecting societies. E.g., **Jamendo, ccMixter, Internet Archive, Free Music Archive, SoundCloud** etc.
4. **Video/Audio-Visual:** Videos, audio-visual programmes or video lectures are uploaded in websites by some organisations. These organisations record on-campus lectures and publish them as OER, licensed with Creative Commons. Short video tutorials on a particular subject are also available. e.g., Open. Michigan, Al Jazeera, YouTube, **Vimeo, Internet Archive, Open Yale Courses, MIT, UC Berkeley, Khan Academy** etc. **Open Yale courses, MIT and UC Berkeley provide selected video lectures, notes, class lectures, syllabi, etc., online which are available as downloadable videos along with audio-only versions.** The Khan Academy has a large library of videos, consisting of 10-minute long tutorials featuring an instructor covering various subjects including humanities, finance and history.

5. **Animation:** There are some types of OER available in simulation and animation format. These types of OER are entertaining and interactive where the students attain knowledge through exploration e.g., PhET. Such animations are available in JAVA and FLASH and are available in the PhET website.

OER based on quality

1. **Self-published:** Individuals or groups tend to publish materials in blogs, and social networking sites such as Facebook or LinkedIn. Leading blogs such as Huffington Post, TMZ etc., receive monthly visitors around 54,000,000 and 19,000,000 respectively.
2. **Peer-reviewed:** These are open educational resources reviewed by members of peer groups. Texts contributed by individuals or groups are peer-reviewed to ensure that they meet the scope and requirements of courses e.g., **Merlot**, **Open Stax College**, **College Open Textbooks**. MERLOT provides a collection of peer reviewed online learning materials, catalogued by registered members and a set of faculty development support services. Most of the resources in Merlot are licensed under Creative Commons. **College Open Textbooks provide peer reviews of open textbooks**.
3. **Option of post-review:** There are some open educational resources which are published in various websites and one can post their reviews whenever they go through the resources. The resources are post reviewed after they get published online e.g., Sparknotes.

OER based on authorship

1. **Individual:** OER that come under individual authorship include abstracts or articles contributed in ignca.nic.in, Stanford.edu etc.
2. **Open authoring:** These are OER that are the effort of several contributors e.g., Wikipedia.
3. **Collaborative work:** This is the work which is the result of collaborative work e.g., a *Review of the Open Educational Resources (OER) Movement: Achievements, Challenges, and New Opportunities* uploaded at www.hewlett.org. is a collaborative work of Daniel E. Atkins, John Seely Brown and Allen L. Hammond.

OER based on presentation

1. **Slide sharing:** Individuals can share their presentation slides developed for seminars, workshops etc., for public use on slideshare.net according to the attribution.

2. **Class presentation:** These presentations can include notes, syllabi, suggested readings, problem sets, probable questions, tutorials e.g., **Open Yale Courses, MIT** etc. **These organisations upload selected class presentations in the websites which can be viewed and downloaded easily.**
3. **E-content presentation for OER:** Similar to class lectures, individuals and organisations can upload presentations on e-content. E-content presentations can act as relevant open educational resources e.g., presentation on 'eLearning papers' at slideshare.net.
4. **Formal public presentations:** These types of OER are formal public presentations by dignitaries, public officials etc., for the benefit of the public e.g., Dr. APJ Abdul Kalam's presentation on 'Save Water' in YouTube, slideshare.net etc.

OER based on licensing

1. **Copyright protected:** These are open educational resources available for read only. They are copyright protected and cannot be reproduced or copied from the original source e.g., books, journals, research papers etc.
2. **Creative Commons:** Creative Commons is a non-profit organisation which offers a framework for different kinds of open access licenses such as, Attribution Share Alike (CC BY-SA), Attribution No Derivatives (CC BY-ND) etc.
3. **Public domain:** These OER are made available publicly. The learning materials provided under this category do not possess any reserved rights and can be used by anyone without any permission from the authors or publishers. E.g., Pixabay, **Open Clip Art Library** etc.

OER based on purpose of usage

1. **Text/Units:** Organisations provide texts, reading materials or units over Internet e.g., **College Open Textbooks, Open Stax College, Siyavula, CK-12, Boundless** etc.

Assessment 3.1

Title: Different Types of OER Materials

Purpose: To appraise the different types of OER materials

Brief summary of overall tasks: The goal of this activity is to help you to identify and appreciate the different types of OER materials which best suit the needs of your use. There are different types of OER materials available online such as video, audio, texts, etc., and these OER materials can be categorised into media, authorship, quality, style of presentation and other relevant categories. In this connection, it is imperative that you understand the purpose of each type of OER material and it contributes to your purpose.

Spark



Video led

Professor Walter Lewin's first lecture of the intake on [Classical Mechanics](#) at MIT. This video is supported by a very brief set of notes which offer an overview of the content and the intended audience; first year physics undergraduates.

A video from the University of Glasgow. It is entitled "[Water Conductivity Measurement in Flowing Water](#)" and is hosted as part of the Jorum collection. It has no text offered as a commentary but the context is offered as the description on the Jorum item record.

Professor Russell Stannard discusses the "[Boundaries of the Knowable](#)" in an OU video on YouTube.

Animation led

This resource from the University of Boulder, Colorado, is based on an animation simulating the behaviour of different types of balloons to explore buoyancy. It is part of the PhET project which offers research-based simulations of physics phenomena. No need to download the simulation - simply select "run".

An animated cartoon explaining the Law of Attraction in the context of quantum physics and a BBC/OU collaboration which allows visitors to explore [Leonardo da Vinci's workshop](#). Objects within the workshop lead to further information.

Multiple media

Many OERs use a range of media. This example is from an OpenLearn unit teaching [German pronunciation](#). It uses text and audio. This page from an OpenLearn unit about [working online](#) supports text with two videos and a diagram.

<http://labspace.open.ac.uk/mod/resource/view.php?id=432761> (Accessed on 07/01/2014)

Individual contribution

Basing on a topic of your choice, choose a type of OER material (audio, video, etc.) and how you intend to use in your course. Provide the following in your discussion:

1. Identify the learning outcomes of the course.
2. Explain in which type(s) of OER category you would place the selected OER material.
3. Justify how the OER material is useful to your purpose.

Dialogue begins: Post your views on the discussion forum. You are also required to respond to the posts of at least TWO of your peers with regard to (i) the suitability of the OER material to the intended purpose, and (ii) other possible types of OER materials that could have been used.

e-Moderator interventions: The moderator will offer feedback to your posts and your review of posts on your peers.

Schedule and time: This activity will spread over 3 days. The actual activity including responding to the work of your peers should take you no more than 3 hours altogether.

Resources: Some literature on the usefulness of different types of OER, and examples of various forms of integration that have been used with different types of OER.

Next: Based on the feedback received, reflect on whether you still agree with your selected type of OER material or you would like to modify your choice.

Searching for OER materials

1. **Modular course:** These comprise OER on **Connexions, Wikiversity, WikiEducator, Jorum, Merlot, Curriki** etc. These are community projects or services devoted to offering modularised resources of all levels and types.
2. **Complete courses:** These comprise textbooks, syllabi, course activities, readings, and assessments online, e.g., **Carnegie Mellon University Open Learning Initiative, Open Course Library, MIT OpenCourseWare, OpenCourseWare Consortium Search, UK Open University Learning Space, Saylor, NIOS in India.**

3. **References:** These consist of analysed and elaborative materials for better understanding e.g., various links to relevant references mentioned in Wikipedia.
4. **In-depth research:** Such in-depth researches are useful source of open educational resources for aspiring scholars who want to do research in similar fields as well as for a general learner.

Activity 3.2

Develop guidelines on how to search for relevant OER and evaluate their suitability for their teaching.

Boolean search

Internet search engines use the following Boolean strategies to find information on the web.

1. **Specific:** Search for materials using specific keywords. For example, add the keyword “physics” to experiments if you intend to search specifically for physics-related experiments.
2. **The + symbol:** Using the “+” symbol allows you to widen the scope of search. For example, use “journal + education” to search for sites that have both these 2 keywords.
3. **The “Quotation” marks:** Using this quotation symbol allows you to search for phrases that have the exact quoted words.

Advanced search

In addition to basic search, Google also offers the opportunity to narrow and specify the search results using Google Advanced Search. Any forms of advanced search engines allow users to search and retrieve information that has higher matching to the desired purpose.

Watch the YouTube video below:

<http://www.youtube.com/watch?v=7nJ5sPhwQ2Q>

It demonstrates a step-by-step approach to using Google Advanced Search.

Advanced search also uses the Boolean search strategy. The Guyana UNESCO ICT Competency Framework for Teachers (CFT¹) presents elaborate information on Internet Search Engines — Advanced Searching. Additional information can also be found at <http://ccti.colfinder.org/education/ict-international/technology-literacy/curriculum-and-assessment/unit-2-internet-search-engines/materials>.

OER repositories

The OER Information Course by Royal Roads University² gives information about the following:

1. The *BC Campus SOL*R* site is an excellent place to search for OER materials related to your areas of interest with links to a variety of other important sites. Choose 'Guest Access' from the left-hand menu to look for materials.
2. *Free Learning* is the new BC Gateway to Open Educational Resources. Once on the site, select 'Search OER Sites' on the menu and then click on the tags (in the lower portion of the screen) related to your areas of interest.
3. *Merlot*, a California State University OER site, provides an extensive list of peer reviewed OER resource materials. You can search by category and resource type including online courses, case studies and assignments, to name a few.
4. *Connexions*, supported by Rice University, provides free content in two formats: modules (knowledge chunks) and collections (groups of modules structured into books or course notes).
5. *OER Commons* is another great site.
6. *Edudemic* provides a list of the 100 best and free online learning tools for 2010.

The Open Educational Resources Infokit by The Higher Education Academy³ list the following:

1. *DiscoverEd* — "Discover the Universe of Open Educational Resources"
2. *Jorum* — "free learning and teaching resources, created and contributed by teaching staff from UK Further and Higher Education Institutions"
3. *OCWFinder* — "search, recommend, collaborate, remix"

¹ http://ccti.colfinder.org/sites/default/files/tl_m02u02_internet_search_engines_0.pdf

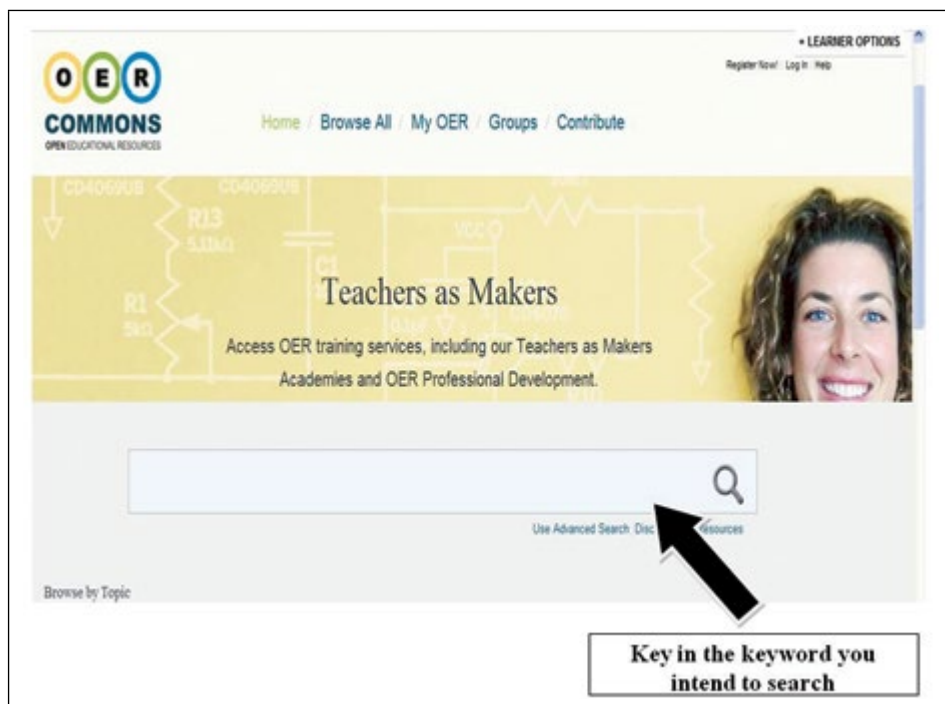
² <http://oer.royalroads.ca/moodle/mod/page/view.php?id=110>

³ <https://openeducationalresources.pbworks.com/w/page/27045418/Finding%20OERs>

4. *University Learning* = OCW+OER = Free custom search engine — a meta-search engine incorporating many different OER repositories (uses Google Custom Search)
5. *XPERT* — “a JISC funded rapid innovation project (summer 2009) to explore the potential of delivering and supporting a distributed repository of eLearning resources created and seamlessly published through the open source eLearning development tool called Xerte Online Toolkits. The aim of XPERT is to progress the vision of a distributed architecture of eLearning resources for sharing and re-use.”
6. *OER Dynamic Search Engine* — a wiki page of OER sites with accompanied search engine (powered by Google Custom Search)
7. *The UNESCO OER Toolkit* links to further useful, annotated resources and repositories.
8. *JISC Digital Media* maintain guidance on finding video, audio and images online, including those licensed as Creative Commons.
9. *OER Glue* — tool aiming to facilitate course building by “stitching” together OERs from a range of sources.

Conducting a search [on OER Commons (<http://www.oercommons.org/>)].

Step 1: Type the keyword — for the purposes of this learning activity, we will search for OER materials on “Action Research”.



Step 2: The keyword “Action Research” has produced a large result. You may also wish to further refine your search results using the criteria listed on the left column. Click on the first search result — Networks of Accountability: HIV/AIDS Action Research in Action on Western Cape Farms.

The screenshot shows a search results page for the keyword "action research". On the left, there is a "Refine Your Search" sidebar with various filters like Subject Area, Grade Level, and Material Type. The main content area lists several search results. The first result is "Networks of Accountability: HIV/AIDS Action Research in Action on Western Cape Farms". Annotations include:

- An arrow pointing to the first search result with the text: "This is the search results using the keyword 'Action Research'".
- An arrow pointing to the "Refine Your Search" sidebar with the text: "You may wish to further refine your search results using these criteria".

Step 3: Identify the important aspects of the OER material, namely, the type of license adopted and the abstract of the OER material. In your search, you may come across materials other than text-based, such as audio, video and images.

The screenshot shows the details page for the OER material "Networks of Accountability: HIV/AIDS Action Research in Action on Western Cape Farms". Annotations include:

- An arrow pointing to the "View Resource" button with the text: "Click here to view the OER material".
- An arrow pointing to the abstract text with the text: "The abstract provides a description of the OER material".
- An arrow pointing to the Creative Commons Attribution-Noncommercial-Share Alike 2.5 South Africa license logo with the text: "The type of license adopted".

Step 4: Click on the link provided to access the OER material. The rating value of the OER material is also provided. You may use this rating as a guideline to select your OER materials. However, it is always a good idea to peruse the material to determine its suitability for your liking.

Click on the link to access the OER material

by Miki van Zyl
Added by incudea on 14 Dec 2011
Funded by Centre for Rural Legal Studies

This case study will be of interest to those students and researchers using action research as a methodology. The case study will also be of interest to those students and researchers HIV/AIDS in rural South African contexts.

Go to Networks of Accountability: HIV/AIDS Action research in action on Western Cape farms

During 2005 Miki van Zyl was contracted as a consultant to do action research on farm dwellers perceptions and experiences of HIV/AIDS in two districts of the Western Cape, South Africa. The research project was the first step in a provisional three - year process to develop and implement integrated strategic interventions for addressing HIV/AIDS on farms through multi-stake holder forums in the two districts. Employing a team of community researchers working in local run NGOs on HIV/AIDS we used individual interviews, focus groups, case studies, researcher field notes, evaluations and workshops for our dataset. The research process is presented as a case study - focusing on the context, dynamics and challenges in conducting the research and preparing the groundwork for setting up the stakeholder forums.

Closed 28 times. Last closed 05/00/2013 - 07:05.

- Faculty: Intercultural and Diversity Studies, Humanities
- Media Types: Text/HTML Webpages
- Material Type: Readings
- Language: English
- Level: Post-secondary
- Tags: Western Cape farms, post-apartheid South Africa, HIV/AIDS

Format details of the OER material

Share / Save

"Networks of Accountability: HIV/AIDS Action research in action on Western Cape farms" is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike license.

Rate this Resource
Average: 1 (1 vote)

The rating value of the OER material.

Open access literature

This is literature that is available for use, reuse and redistribution without restrictions. However, open access literature should not be falsely assumed as OER unless there is a specific indication of a Creative Commons (CC) license that highlights the type of attribution. In the absence of a CC license, users are strongly advised to look for a clause by the author and/or owners that highlight similar attribution and distribution preferences of that material.

Open access publishing is a form of publishing, usually scholarly and on the Web, which provides free online access without any licensing fees. Users may read, download, search, index and link to open access resources without financial, legal or technical barriers. Although journals are the most typical kind of resource classified as open access, the term can also refer to textbooks, databases, monographs, maps, image collections, theses and dissertations, amongst others.

But open access does not necessarily give the right to redistribute without requesting permission, unless the resource also carries a Creative Commons license or some other explicit statement granting this right. Once again, it is essential to read the licensing conditions carefully and contact the author or publisher if there is any doubt about what is allowed.

Finding relevant OER in higher education: A personal account

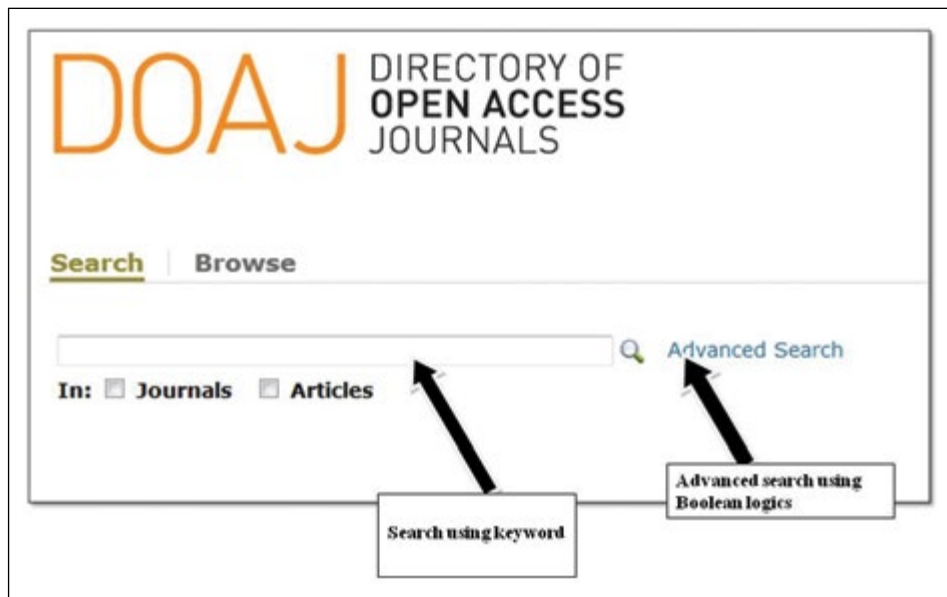
Lisbeth Levey (2012)

http://www.col.org/PublicationDocuments/pub_PS_OER_web.pdf

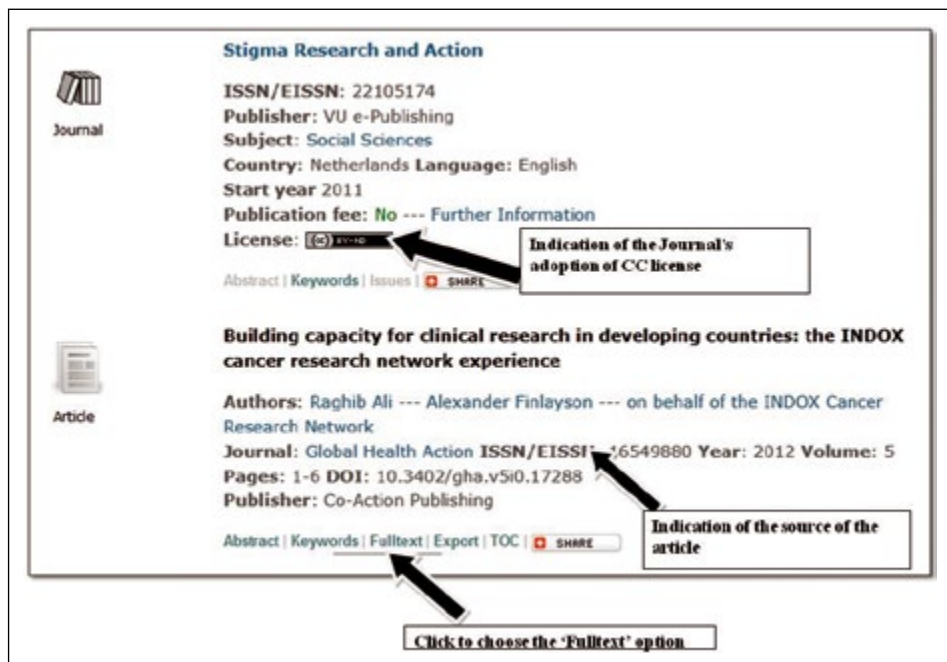
Following are characteristics pertinent to the application of open access literature:

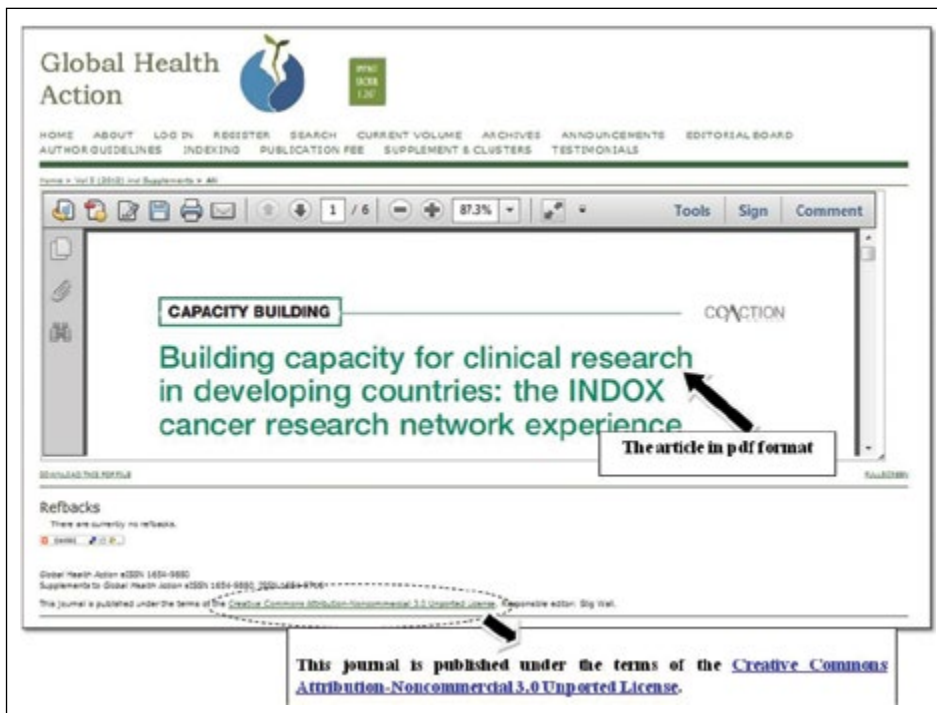
1. OA removes *price barriers* (subscriptions, licensing fees, pay-per-view fees) and *permission barriers* (most copyright and licensing restrictions).
2. There is some flexibility about which permission barriers to remove. For example, some OA providers permit commercial reuse and some do not. Some permit derivative works and some do not. However, all of the major public definitions of OA agree that merely removing price barriers, or limiting permissible uses to “fair use” (“fair dealing” in the UK), is not enough.
3. Here’s how the Bethesda and Berlin statements put it: “For a work to be OA, the copyright holder must consent in advance to let users copy, use, distribute, transmit and display the work publicly and to make and distribute derivative works, in any digital medium for any responsible purpose, subject to proper attribution of authorship...”
4. In addition to removing access barriers, OA should be immediate, rather than delayed, and should apply to full texts, not just abstracts or summaries.

The Directory of Open Access Journals (DOAJ) is one of the major directories of open access journals. The aim of the DOAJ is to increase the visibility and ease of use of open access scientific and scholarly journals, thereby promoting their increased usage and impact. The DOAJ aims to be comprehensive and cover all open access scientific and scholarly journals that use a quality control system to guarantee the content. In short, the DOAJ aims to be the one stop shop for users of open access journals (<http://www.doaj.org/>).



Search in DOAJ provides list of open access journals as well as articles (from journals and proceedings).





Assessment 3.2

Title: Searching for OER Materials

Purpose: The purpose of this task is to expose you to different kind of searches available for searching for relevant OER materials.

Brief summary of overall tasks: There are massive numbers of OER materials available on the Internet but searching for it can be similar to looking for a needle in an 'Internet' haystack. This task will guide you through the process of the different types of searches involved in locating relevant OER materials. In this task, you will obtain different types of OER materials depending on the type of search you use. This task will also sharpen your skills on selecting the types of search in obtaining, for instance, video, audio or text, which best suits your need.

Individual contribution

1. You are to search for an OER-based video on a topic of your choice. In doing this task, choose one type of search (Boolean, Advanced Search or OER Repository) and provide a step-by-step account of your search process.
2. In executing task (1) above, explain why you chose that particular type of search and how it has helped you in your search process.

Dialogue begins: Post and reflect your views on the discussion forum. Your discussion should include a brief account to the purpose of your search. You are to scrutinise the work of at least TWO of your peers and provide critical comments on their posts.

e-Moderator interventions: The moderator will offer feedback to your posts and your review of posts on your peers.

Schedule and time: This activity will spread over 3 days. The actual activity including responding to the work of your peers should take you no more than 4 hours altogether.

Resources: Some literature on searching for different types of OER materials.

Next: Based on the feedback received, now attempt other searches for various OER materials using the different search techniques.

Evaluation of OER materials

Scenario continues...

Searching for OER is one thing — evaluating the value and usefulness of OER is another. Professor Rani and the faculty group have asked you and your working party to develop user-friendly guidelines for evaluating the quality and fitness for purpose of OER.

The choice of methods for the evaluation of OER depends largely on the purpose and context of evaluation. For instance, an instructor would prefer to use rubrics to evaluate the suitability of an OER material (such as, print materials) if he/she wishes to use it as supplementary reading material for the class. On the other hand, experts' rating would be more suitable in cases where new OER materials are being introduced and its usage concerns large audiences.

Study the following resources to develop your guidelines.

The following explication is from South African Institute for Distance Education (SAIDE⁴).

1. *Why evaluate?*

The purpose is often to get an idea of how well the materials are aligned to the intended learning outcomes and how well they support students in achieving these outcomes. Additional questions may be: how accessible the materials are, how the students are using the materials, how up-to-date the content is, whether the learning text is based on sound learning principles.

2. *When to evaluate?*

Evaluation can be conducted during each phase of the design and development process, during the post development period when students are using the learning materials for the first time, and as part of a review of a course or programme. Where the development of the materials has been sponsored, it is normal practice to evaluate the materials and provide the funder with an evaluation report.

3. *What methods can you use?*

The most common methods used are qualitative in nature. The philosophy, which underpins the qualitative approach, is one that stresses the importance of the experience of individuals and their reflection on their experience as ways of constructing social reality. The responses to the materials from the perspective of the learner, the facilitator and an external reviewer can offer a comprehensive insight into the learning value of the materials. Responses are elicited by means of specially designed questionnaires and instruments, which the various parties complete. Evaluation instruments are usually based on an agreed set of criteria.

Interviews with learners, facilitators, and learning materials developers can be used to probe particular areas. Quantitative methods can be useful in pinpointing learner behaviour in specific areas, e.g., learner interaction with the learning activities: how many students complete all the activities, which activities are left out, which activities present difficulties. The purpose of the evaluation determines the kind of methods that are most suitable.

⁴ <http://www.oerafrica.org/materialsdev/EvaluateLearningMaterials/tabid/1288/Default.aspx> (available in CC-BY)

Evaluation using rubrics



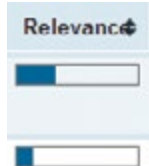

Stephen Pruit, Vice President of Content, Research and Development of “Achieve and the Institute for the Study of Knowledge Management in Education (ISKME)” suggest that “there are millions of open education resources on the web and we now have a way to evaluate their quality.” Educators can use curated lesson plans, courses and learning modules with readily available information about how these materials meet the highest standards for learning.” You may wish to access the following links for more information on rubrics and OER:

<http://www.achieve.org/OER-evaluation-tool>

<http://achieve.org/oer-rubrics>

Evaluation using experts’ rating of OER materials

Another effective way of ascertaining the quality of OER materials is using expert ratings. This is common in OER repositories. Materials in Merlot labelled as Peer Review would suggest that it has been rated by experts using a range indicators covering relevance, frequency of views and personal usefulness. Some examples of the evaluation are given below in the table and in the screenshots from different OER repositories.

OER Source	Illustration of Evaluation	Type of Evaluation												
	Peer Review ★★★★★ Comments (none)	Star rating												
		Level of relevance												
	<table border="1"> <thead> <tr> <th>Total Views</th> <th>Views/Day</th> <th>Percentile</th> <th>Rank</th> </tr> </thead> <tbody> <tr> <td>25038</td> <td>11.38</td> <td>94.91%</td> <td>1185</td> </tr> <tr> <td>4833</td> <td>2.28</td> <td>66.33%</td> <td>7839</td> </tr> </tbody> </table>	Total Views	Views/Day	Percentile	Rank	25038	11.38	94.91%	1185	4833	2.28	66.33%	7839	Frequency of views and percentile ranking
Total Views	Views/Day	Percentile	Rank											
25038	11.38	94.91%	1185											
4833	2.28	66.33%	7839											

Example from MERLOT

The screenshot shows three search results from MERLOT. Each result includes a title, author, description, type, date added, and date modified. To the right of each result are links for 'Peer Review', 'Comments', 'Personal Collections', 'Learning Exercises', and 'Accessibility Info'. Callout boxes with arrows point to the 'Rating' for each item.

- SignWritingSite**: Author: Valerie Sutton. Description: SignWriting is very useful for Deaf children and adults in developing more precise thinking and focus in... Type: Drill and Practice. Date Added: Nov 20, 2000. Date Modified: Jun 21, 2012. Rating: 5 stars.
- Sense About Science: Promoting an evidence-based approach to scientific issues**: Author: Ellen Raphael. Description: Scientific evidence should be central in debates about science, medicine and technology. It is vital for... Type: Reference Material. Date Added: Nov 22, 2005. Date Modified: Oct 11, 2011. Rating: 4 stars.
- Action Research: A Strategy for Instructional Improvement**: Author: Carol Reed. Description: Action Research gives teachers the skills needed to work on problems specific to their classrooms and... Type: Reference Material. Date Added: May 22, 2007. Date Modified: Apr 25, 2011. Rating: not reviewed.

Example from OpenCourseware Consortium

The screenshot shows the OpenCourseware Consortium website. The main heading is 'ADVANCED COURSE SEARCH'. Below the heading is a search form with the following fields: 'find courses about:' (containing 'action research'), 'about:' (containing '* = Required'), and 'in this language:' (set to 'English'). A 'FIND COURSES' button is below the form. Below the button, it says 'Search for action research returned 16 hit(s) in 1.618 second(s)'. Below that is a table of search results with columns for Course Title, Details, Source, Language, and Relevance. An arrow points to the 'Relevance' column header.

Course Title	Details	Source	Language	Relevance
Networks of Accountability: HIV/AIDS Action research in action on Western Cape farms	Course Details	University of Cape Town	English	[Progress bar]
7.341 Brightening up Life: Harnessing the Power of Fluorescence Imaging to Observe Biology in Action (MIT)	Course Details	Massachusetts Institute of Technology	English	[Progress bar]

Rating: Level of relevance

Example from Connexions

The screenshot shows the Connexions search interface. At the top, there is a navigation bar with 'Home', 'Content', 'Lenses', 'About Us', 'Help', and 'MyCNX'. Below this, a search bar contains the text 'action research' and a 'Search' button. To the right of the search bar, there are options to 'Limit search to:' with checkboxes for 'Title', 'Author', and 'Collections', and a dropdown menu set to 'All Subjects'. Below the search bar, there is a table of search results. The table has columns for 'Total Views', 'Views/Day', 'Percentile', and 'Rank'. The first result is 'Disrupting the Status Quo: The Action Research Dissertation as a Transformative Strategy (m14529)' with 25038 total views, 11.38 views/day, a 94.91% percentile, and a rank of 1185. The second result is 'Knowledge Base: Use of Action Research to Improve Schools (m14846)' with 4833 total views, 2.28 views/day, a 66.33% percentile, and a rank of 7839. The third result is 'Action Research on Conversations About Quality Instruction (m36009)' with 726 total views, 0.78 views/day, a 15.40% percentile, and a rank of 19498. The fourth result is 'Teaching as Research and Action (m13324)' with 4216 total views, 1.58 views/day, a 51.27% percentile, and a rank of 11346. A callout box with an arrow pointing to the '51.27%' percentile value contains the text 'Rating: Frequency of views and percentile ranking'.

	Total Views	Views/Day	Percentile	Rank
Disrupting the Status Quo: The Action Research Dissertation as a Transformative Strategy (m14529)	25038	11.38	94.91%	1185
Knowledge Base: Use of Action Research to Improve Schools (m14846)	4833	2.28	66.33%	7839
Action Research on Conversations About Quality Instruction (m36009)	726	0.78	15.40%	19498
Teaching as Research and Action (m13324)	4216	1.58	51.27%	11346

Characteristics of good OER materials

Along with being able to search for OER and evaluate their quality, comes the skill to recognise OER with good characteristics. This improves with experience — that is, the more experience you get in searching for relevant OER materials, the better you will get at being able to recognise OER materials with good characteristics. Characteristics of a good OER include:

1. Clear adoption of Creative Commons license (or other forms of license) and/or a clause that addresses how the OER material should be used.
2. Easy adaptation to suit different learning needs.
3. Quality content with reliable referencing (from a reliable source).
4. Recommended by experts and other members of the community.

The importance of recognising OER materials with good characteristics lies in deliberately selecting OER materials from a pool of OER materials. This is a process that is relatively subjective to your needs. For instance, a video would be the best option if you wish to teach hands-on skills in using the Internet. The video would allow students to self-pace their learning as they actually use the Internet. Alternatively, an open access textbook and journal articles would be the best option if you are looking for materials that serve as a reference text to supplement the students' learning. The following information provides some tips in selecting OER materials with relevance to your needs.

E-textbooks

E-textbooks give learners the option of having thousands of textbook pages compressed into a very *portable* laptop. Having e-textbooks on a computer also provides other conveniences. For example, many e-textbooks offer search functions, which make searching for specific information swift and easy. Taking notes can be a much cleaner process electronically, as opposed to scratching some notes into the margins of a page. E-textbooks are available in two basic forms. Some e-textbooks are available only while online. Others allow you to download the e-textbook to your computer for use while not connected to the Internet. However, e-textbooks are not without flaws. While you can download free textbooks, it does not mean that you will be able to find everything on the free e-textbooks sites.

Here are some examples of where e-textbooks may be found.

1. **Flatworld Knowledge**⁵

This publisher offers open access textbooks primarily in business, but in other subjects as well. It makes its profit from selling supplemental materials and alternative book formats to students.

2. **Global Textbook Project**⁶

An international initiative, this project seeks to provide access to free, quality textbooks to students in developing nations. The project is led by a team of university faculty members whose global staff create a growing collection of open textbooks.

3. **National Academies Press**⁷

Most books published by the National Academies Press can be downloaded for free in PDF format. Just find the book you want, bypass the print price, and click the “Download Free PDF” button. This site requires that you provide a name and email address.

4. **WikiBooks**⁸

Offering more than 2,000 titles, WikiBooks offers access to open textbooks written collaboratively (much like Wikipedia entries). Peer reviewers are any users who wish to contribute.

⁵ <http://www.flatworldknowledge.com>

⁶ <http://globaltext.terry.uga.edu>

⁷ <http://www.nap.edu>

⁸ http://en.wikibooks.org/wiki/Main_Page

Video

With video, learners are able to view things at their own pace and in their own time. Learners can stop, pause, rewind, and fast forward material so that they can examine things in their own way. The biggest setback today to the method is that not all learners have access to technologies [i.e., *high speed* Internet to view/download the video] that can really work for this method. Here are some examples.

1. **Academic Earth**⁹

This independent non-profit organisation collects videos from the lecture-halls of universities around the country. Watch a semester's worth of video lectures from a given university course, or find a curated collection of lectures from the archive on a particular theme. No other course materials are offered. While the website lists 30 partner institutions, several only provide informational videos or links to their online degree programs. However, overall, hundreds of instructors' lectures are provided.

2. **Khan Academy**¹⁰

A widely popular example of open educational resources, the Khan Academy began in 2004 as a way for the founder, Salman Khan, to begin creating short tutorials to teach his cousin and others mathematics. The tutorials were eventually posted on YouTube, and their success of these resulted in the creation of the Khan Academy. Currently the Khan Academy offers open educational resources primarily in mathematics and science but has expanded to include other subject areas. These 3,000 plus online videos are self-paced and allows students to focus on the specific lessons they need help with.

Repositories

Sharing OER in a central online repository can be a highly effective way to support collaborative content development and distribution both within institutions, across institutions, and among the individual scholar/expert in the content fields. Often repositories are categorised into its respective fields or topics of interest. However there is no "one repository" out there that "will fit all" need. Here are some.

1. **Merlot**¹¹

This massive resource was begun by a consortium of state higher education systems. Today it offers access to learning objects, full course curricula, open access journals, assessment tools, open textbooks, discipline-specific pedagogical resources, and more. Material is peer reviewed, and reviewer and

⁹ <http://academicearth.org>

¹⁰ <http://www.khanacademy.org>

¹¹ <http://www.merlot.org>

user comments are accessible to all. Academic discipline is represented by communities, each with their own editorial board of faculty from disparate institutions. Browsing through users' "personal collections" can provide insight into how others use the materials.

2. **OER Commons**¹²

Comprising contributions of individuals, universities, cultural institutions, and online initiatives, OER Commons allows educators to access open online content based on a useful, faceted search function. Outside links are displayed within an OER Commons frame, which makes navigation easier or more cumbersome, depending on your preferences. Registered users can comment on items.

Community-based consortium

The consortium aims to empower people throughout the world through provision of free access to educational materials. Many language groups are represented by member institutions, thus enabling the provision of learning opportunities in a wide range of different languages to a global audience. Its potential drawback is that the quality of the materials is still largely unregulated. The consortium is in the process of setting up a ratings system for its content, but note that because it requires a school's name to be attached to its materials, the onus is on the participants to ensure they are releasing a sound product.

1. **Open Courseware Consortium**¹³

With a more global perspective, Open Courseware Consortium seeks to make an impact on accessibility to education on an international scale. Rather than a simple repository of courseware, the Open Courseware Consortium offers its members the tools and resources to develop their own content.

2. **Open Education**¹⁴

Opensource.com devotes a section of its site to news and insight from the world of open education resources. Contributors include librarians, college faculty members, and other open-source and open-access enthusiasts. Updates appear every few days. Opensource.com is a publication of Red Hat, a for-profit, open source technology developer.

¹² <http://www.oercommons.org>

¹³ <http://www.ocwconsortium.org>

¹⁴ <http://opensource.com/education>

3. **Open Educational Resources Blog**¹⁵

Written by Cable Green, director of global learning at Creative Commons, Open Educational Resources covers the international world of open educational resources. The blog offers the latest news on conferences, Webinars, and collaborative activities in the United States and around the world.

Full-package courses

The main advantages of this are that it's free and available to anyone with Web access. Most courses are high-in-quality from the respective instructors who are well versed in the field or content expert. The drawbacks of these full packages courses are that they are not available for credit and interaction with the professors who created the materials are also unavailable. Examples of these are:

1. **Connexions**¹⁶

Launched in 1999 by Rice University, Connexions offers users the ability not only to create content but to repurpose others' content to include in a course. Currently Connexions includes more than 17,000 learning objects in a range of disciplines. The benefit of Connexions is the ability of an instructor to pull from a range of learning objects and organise the material to create his or her own course. Once organised, the material can be viewed as either a PDF or EPUBS document for distribution to students.

2. **MIT OpenCourseWare**¹⁷

A pioneering initiative in the open educational resources movement, MIT OpenCourseWare currently offers approximately 2,000 courses in a range of disciplines. These full courses can include lecture notes, online textbook material, assignments and exams with answers, and multimedia. The course content is downloadable, with the exception of the video materials, through iTunes. Like any open educational resource, these materials are freely available for educators to reuse with attribution.

3. **MITx**¹⁸

Building on the success of MIT OpenCourseWare, the Massachusetts Institute of Technology joined the Massively Open Online Course (MOOC) movement with the announcement of MITx. This initiative makes courses available to students attending MIT, and is open to anyone interested in taking a course. These courses will include recorded lectures, course material, and assessments, which can be organised in a student portfolio. After completing a determined

¹⁵ <http://blog.oer.sbctc.edu>

¹⁶ <http://cnx.org>

¹⁷ <http://ocw.mit.edu/index.htm>

¹⁸ <http://mitx.mit.edu>

sequence of courses, a student will be awarded a certificate indicating completion. The MOOC movement represents a recent progression of the open educational resources movement by offering recognition of students' completed work. Access: <http://mitx.mit.edu/>.

4. **Saylor Foundation**¹⁹

Founded by a corporate CEO, the Saylor Foundation offers complete, freely accessible packages for college-level courses in business, science, math, engineering, the humanities, and the social sciences. Courses are designed to be easily used by students who are working entirely on their own, outside of any formal educational system. Each course is made up of a syllabus, links to free online readings, multimedia resources and tutorials, assignments, and exams. Quantitative assessment is available for those who have set up an account. A student enrolled in a course must take a graded final exam, and scores and grades are recorded in the student's account. Qualitative assessment is trickier. For example, assessment of the final essay assignment for English Composition 1 is completed by the student reading his or her essay aloud to a friend and revising it based on feedback. Together, these courses comprise curricula, which include core, prerequisite, elective, and subfield courses.

Activity 3.3

Prepare a 30 minute presentation to outline the content and scope of your guidelines. You may also include other points that you deem critical to evaluating OER materials. Post your report in the LMS and create a discussion covering various aspects of this activity.

Assessment 3.3

Title: Evaluation of OER Materials

Purpose: To explain the purpose and techniques of evaluating OER materials

Brief summary of overall tasks: You have familiarised yourself with the different types of OER materials and how to search for them from an array of resources on the Internet. However, not every OER material will be relevant to your intended purpose and thus, it is imperative to evaluate the relevance of the materials. The aim of this activity is to help you understand the importance of evaluating OER materials, and subsequently choose a method of evaluation that best suit your needs.

¹⁹ <http://www.saylor.org>

Individual contribution

1. Search and choose a type of OER material (audio, video, etc.) that you intend to use for your course. Evaluate it in terms of its relevance and effectiveness to the course learning outcomes.
2. Explain how you evaluate the OER material in terms of its relevance and effectiveness.
3. Prepare a write-up on the characteristics of a good OER material based on your evaluation.
4. Develop a functional checklist based on the characteristics of a good OER material.

Dialogue begins: Post your write-up on the characteristics of a good OER material and checklist on the discussion forum. You may also wish to consider your peers' comments on characteristics of a good OER material in developing your checklist.

e-Moderator interventions: The moderator will offer constructive feedback on the write-up and checklist in terms of the following:

1. To what extent the outcome of the evaluation reflects the characteristics of a good OER material.
2. Comprehensiveness of the checklist.

Schedule and time: This activity will spread over 4 days. The actual activity including responding to the work of your peers should take you no more than 5 hours altogether.

Resources: Some literature on the characteristics of a good OER material will be provided.

Next: Based on the feedback received, reflect on your prepared checklist as compared to your peers.



Module 4

**Licensing
and
Copyright**

Badge Requirements



What it means?

This badge means that the learner is having knowledge of various copyrights and licenses associated with Open Education Resources.

Who is eligible to earn this badge?

In order to earn this badge,

1. You must participate in Activity 4.1 and Activity 4.2 of Module 4 online by contributing at least one meaningful posting.
2. You should have given critical comments to at least 2 postings by your peers in each of the activities and engage in the learning process.
3. You must have completed the 15 minute presentation in Activity 3 which demonstrates your analysis of the copyright and licensing concerns in your organisation.
4. You should demonstrate understanding of the module upon achievement of the learning outcomes through your participation.

Module 4:

Licensing and Copyright

Introduction

The William & Flora Hewlett Foundation describe OER as “teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license which permits their use and/or re-purposing freely by others”.

OER may include full courses, modules, textbooks, tests, software, and any other materials or techniques used to support access to knowledge. Through appropriate licensing, these resources can be accessed and used based on the principles of openness namely, reuse, revise, remix and redistribute without permission and/or payment (see <http://bit.ly/1hjwb7O>). This module explores the concept of open license and current practices in the licensing of OER.

Learning outcomes

After completion of this module, you will be able to:

1. Define and describe different types of copyright licenses.
2. Develop a framework for open educational practices at your organisation.
3. Select and apply appropriate open license to course material and discuss their implications.
4. Discuss how the evolution of media and technologies can affect issues in licensing and copyright.

Learning scenario

There has been growing interest in your organisation in open education. As chair of one of the working groups that is responsible for facilitating this transition to open educational practices, your role is to develop frameworks around the licensing of OER at your institution. What recommendations for an open license framework do you have for your organisation? After studying the information here, post your recommendations in the discussion forum, PLUS review and comment on the recommendations of at least two by your peers.

Activity 4.1

Go to the following links, and study the resources:

1. <http://www.col.org/resources/publications/Pages/detail.aspx?PID=323>
 2. [http://www.jisc.ac.uk/publications/programmerelated/2013/Openeducationalresources.aspx#Open licensing](http://www.jisc.ac.uk/publications/programmerelated/2013/Openeducationalresources.aspx#Open%20licensing)
 3. http://www.youtube.com/watch?v=O8Fp_4GhEYo
-

Licenses and content protection

Copyright

The Merriam-Webster online dictionary defines copyright as “the exclusive legal rights to reproduce, publish, sell, or distribute the matter and form of something such as a piece of literary, musical, or artistic work”. Today, copyright sits under the general umbrella of “Intellectual Property” and may not be able to be traced back to any particular community or specific time of origin. For more on the history and background of the concepts and philosophies behind current copyright laws, see WikiEducator page¹.

Copyright began with the need to protect the written word and eventually other tangible forms of expressions including ideas and also products which came from ideas and turned into physical artefacts. The complications of modern copyright came about when intangible forms of ideas, communication and products began to emerge, most glaringly softcopies of songs, pictures, stories and the many forms of communication technology.

The World Intellectual Property Organization (WIPO) is responsible for everything to do with protecting intellectual property. Some of the international regulations and standards pertaining to intellectual property are available at WIPO website². WIPO treaties that set the benchmark for regulation of copyright in the world of network communications were developed in 1996 and were known as the WIPO Internet Treaties. Although these treaties are not globally welcome, they have become a standard internationally for copyright policy.

¹ http://wikieducator.org/Copyright_for_Educators/History#Orientation

² <http://www.wipo.int/standards/en/>

For a detailed discussion on copyright and OER, download the following two documents and read:

1. Introducing Copyright: A plain language guide to copyright in the 21st century by Julien Hofman³.
2. Copyright and Open Educational Resources by Achal Prabhala⁴.

Creative Commons

Creative Commons is an organisation set up to “enable the sharing and use of creativity and knowledge through free legal tools”. This comprises a set of copyright licenses that facilitate creators of pieces of intellectual property to classify the level of access they will allow others to their material. Visit the Creative Commons website⁵ to explore about the organisation and its activities.

Activity 4.2

Quiz: Test your knowledge about copyright for educators in the following:

1. http://wikieducator.org/Copyright_for_Educators/Introduction#Getting_started:_Test_your_knowledge
2. http://wikieducator.org/Copyright_for_Educators/History#Orientation

Work on a Case Study at: http://wikieducator.org/Copyright_for_Educators/Case_study

Assessment 4.1

Title: The need for copyrights and types of licensing

Purpose: Get the student to start thinking about current available licenses and the need for an institutional framework when using OER.

³ http://www.col.org/PublicationDocuments/pub_Introducing_Copyright_online_edition.pdf

⁴ http://www.col.org/PublicationDocuments/pub_copyright_and_OERs.pdf

⁵ <http://creativecommons.org/>

Brief summary of overall tasks: This is the first activity for the module and the objective is that the learners are expected to make the student aware of the reasons for copyright in general and licensing in particular as well as the available resources and licenses in the Open Education environment currently especially Creative Commons as a benchmark. It utilises the forum to allow students to post their thoughts on the importance of copyrights, licensing and OER. It is then used to compare and review others' answers on the same topics.

Individual contribution

1. Do the online self-assessment tests to enhance your knowledge of copyright, CC & licensing.
2. Prepare the following:
 - a. 3 reasons for the need for copyright
 - b. 3 reasons for the need for licensing
 - c. 3 reasons for the need for OER
3. The above should be in point form but full sentences, any examples or illustration is good.

Dialogue begins: Put up your post onto the discussion forum. During the week, review at least TWO of the responses to your post from your peers with critical insights on their feedback.

e-Moderator interventions: The moderator will log into the forum once every day to offer feedback and guidance or to prompt response to the students' initial post.

Schedule and time: 4 days. The actual activity of coming up with a recommendation and then reviewing the feedback of your peers should take you no more than 4 hours altogether.

Resources: As given in this module.

Next: Based on the feedback received, consider the issues surrounding the development of an institutional framework.

Creative Commons License

Scenario continues...

As the chair of the subcommittee on OER licensing, you have to bring your team up to speed on the various types of Creative Commons (open) licenses and the options available for an academic institutions contemplating adopting open educational practices. This is important so that members of your team are able to suggest suitable categories of licensing for the resources being produced by the institution.

Creative Commons has designed a collection of licences to ensure that there is a suitable licence for every purpose. The advantages of using a Creative Commons licence are as follows:

1. There is almost certainly a ready-made licence that will suit the publisher's requirements, saving time and effort in drawing up a custom licence.
2. Creative Commons licences are easily understood and commonly used, so that a potential reader or re-user of a work will immediately understand the conditions of the licence.
3. The licences have machine-readable metadata, simplifying processes where applications such as harvesters and text-mining tools carry out automated tasks: these tools can recognise, by the machine-readable licence, which content they are permitted to gather and work upon.

The Creative Commons licenses are easy to use, as they are based on the following:







1. Legal Code: expansive legal languages tested in several cases.
2. Commons Code: Simple icon-based approach to explain what you can do and what you can't.
3. Digital Code: Enables search engines to search and locate through CC Rights Expression Language.

Creative Commons licenses are based on the following components:

1. Attribution: the original creator/author to be attributed.
2. Share Alike: when a derivative is created out of another work, it has to be shared with the identical conditions/license of the original.

3. Non-Commercial: Use of the work for commercial purpose is prohibited.
4. Non-Derivative: While access is free, no derivative can be produced out of the original.

Using the above four components, Creative Commons have identified the following six types of licenses:

 <p>Attribution-CC BY</p>	<p>This license lets others distribute, remix, tweak, and build upon your work, even commercially, as long as they credit you for the original creation. This is the most accommodating of licenses offered. Recommended for maximum dissemination and use of licensed materials.</p>
 <p>Attribution-ShareAlike CC BY-SA</p>	<p>This license lets others remix, tweak, and build upon your work even for commercial purposes, as long as they credit you and license their new creations under the identical terms. This license is often compared to “copyleft” free and open source software licenses. All new works based on yours will carry the same license, so any derivatives will also allow commercial use. This is the license used by Wikipedia, and is recommended for materials that would benefit from incorporating content from Wikipedia and similarly licensed projects.</p>
 <p>Attribution-NoDerivs CC BY-ND</p>	<p>This license allows for redistribution, commercial and non-commercial, as long as it is passed along unchanged and in whole, with credit to you.</p>
 <p>Attribution-NonCommercial-ShareAlike CC BY-NC-SA</p>	<p>This license lets others remix, tweak, and build upon your work non-commercially, as long as they credit you and license their new creations under the identical terms.</p>
 <p>Attribution-NonCommercial CC BY-NC</p>	<p>This license lets others remix, tweak, and build upon your work non-commercially, and although their new works must also acknowledge you and be non-commercial, they don't have to license their derivative works on the same terms.</p>
 <p>Attribution-NonCommercial-NoDerivs CC BY-NC-ND</p>	<p>This license is the most restrictive of our six main licenses, only allowing others to download your works and share them with others as long as they credit you, but they can't change them in any way or use them commercially.</p>

(Source: <http://creativecommons.org/licenses/>)

License conditions

Creative Commons specifically recommends an author to address the following issues before considering categorisation of their work (see also http://wiki.creativecommons.org/Before_Licensing):

1. Ensure that the work produced is copyrightable.
2. Confirm that the author has the legal rights to claim authority over the work.
3. Be certain that they are aware of the full workings, terms and aptitude of a CC license.
4. Know for sure what the author is licensing.
5. Verify that any affiliation the author has with any other party that may be related to the classification of CC license has no other issue with the chosen license.

Details of different license conditions

While the detail conditions of the licenses can be found at the Creative Commons website, we reproduce these here for comparison:

CC License	Conditions
CC BY ⁶	<p>You are free to:</p> <p>Share — copy and redistribute the material in any medium or format.</p> <p>Adapt — remix, transform, and build upon the material for any purpose, even commercially.</p> <p>The licensor cannot revoke these freedoms as long as you follow the license terms.</p> <p>Under the following terms:</p> <p>Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.</p> <p>No additional restrictions — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.</p>

⁶ <http://creativecommons.org/licenses/by/4.0/legalcode>

CC License	Conditions
	<p>Notices: You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation. No warranties are given. The license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material.</p>
CCBY-SA ⁷	<p>You are free to: Share — copy and redistribute the material in any medium or format. Adapt — remix, transform, and build upon the material for any purpose, even commercially. The licensor cannot revoke these freedoms as long as you follow the license terms.</p> <p>Under the following terms: Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use. Share Alike — If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original. No additional restrictions — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.</p> <p>Notices: You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation. No warranties are given. The license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material.</p>
CCBY-ND ⁸	<p>You are free to: Share — copy and redistribute the material in any medium or format for any purpose, even commercially. The licensor cannot revoke these freedoms as long as you follow the license terms.</p>

⁷ <http://creativecommons.org/licenses/by-sa/4.0/legalcode>

⁸ <http://creativecommons.org/licenses/by-nd/4.0/legalcode>

CC License	Conditions
	<p>Under the following terms:</p> <p>Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.</p> <p>No Derivatives — If you remix, transform, or build upon the material, you may not distribute the modified material.</p> <p>No additional restrictions — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.</p> <p>Notices: You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation. No warranties are given. The license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material.</p>
CC BY-NC ⁹	<p>You are free to:</p> <p>Share — copy and redistribute the material in any medium or format.</p> <p>Adapt — remix, transform, and build upon the material. The licensor cannot revoke these freedoms as long as you follow the license terms.</p> <p>Under the following terms:</p> <p>Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.</p> <p>NonCommercial — You may not use the material for commercial purposes.</p> <p>No additional restrictions — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.</p> <p>Notices: You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation. No warranties are given. The license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material.</p>

⁹ <http://creativecommons.org/licenses/by-nc/4.0/legalcode>

CC License	Conditions
CC BY-NC-SA ¹⁰	<p>You are free to:</p> <p>Share — copy and redistribute the material in any medium or format</p> <p>Adapt — remix, transform, and build upon the material.</p> <p>The licensor cannot revoke these freedoms as long as you follow the license terms.</p> <p>Under the following terms:</p> <p>Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.</p> <p>NonCommercial — You may not use the material for commercial purposes.</p> <p>Share Alike — If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original.</p> <p>No additional restrictions — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.</p> <p>Notices:</p> <p>You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation.</p> <p>No warranties are given. The license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material.</p>
CC BY-NC-ND ¹¹	<p>You are free to:</p> <p>Share — copy and redistribute the material in any medium or format.</p> <p>The licensor cannot revoke these freedoms as long as you follow the license terms.</p> <p>Under the following terms:</p> <p>Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.</p> <p>NonCommercial — You may not use the material for commercial purposes.</p>

¹⁰ <http://creativecommons.org/licenses/by-nc-sa/4.0/legalcode>

¹¹ <http://creativecommons.org/licenses/by-nc-nd/4.0/legalcode>

CC License	Conditions
	<p>No Derivatives — If you remix, transform, or build upon the material, you may not distribute the modified material.</p> <p>No additional restrictions — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.</p> <p>Notices: You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation. No warranties are given. The license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material.</p>

Some further explanations:

1. What does “conditions can be waived” mean?

CC licenses anticipate that a licensor may want to waive compliance with a specific condition, such as attribution.

2. What does “Public Domain” mean?

A work is in the public domain when it is free for use by anyone for any purpose without restriction under copyright.

3. What does “Fair use” mean?

All jurisdictions allow some limited uses of copyrighted material without permission. CC licenses do not affect the rights of users under those copyright limitations and exceptions, such as fair use and fair dealing where applicable.

4. What are “Moral Rights”?

In addition to the right of licensors to request removal of their name from the work when used in a derivative or collective they don't like, copyright laws in most jurisdictions around the world (with the notable exception of the US except in very limited circumstances) grant creators “moral rights” which may provide some redress if a derivative work represents a “derogatory treatment” of the licensor's work.

5. What are “Publicity Rights”?

Publicity rights allow individuals to control how their voice, image or likeness is used for commercial purposes in public. If a CC-licensed work includes the voice or image of anyone other than the licensor, a user of the work may need to get permission from those individuals before using the work for commercial purposes.

Choosing appropriate license

Creative Commons provide a tool¹² to choose appropriate license, which is allowing you to decide on sharing of the adaptation and its commercial use. Based on these, the tool gives us the appropriate license to be used. It also allows us to add metadata to the resources for easy discovery and then provides a set of code for embedding in any digital resources as a frame. In case of doubt, you can use this to get the license for your offline publications as well. For your clarity in choice of license, a simple flowchart is given in **Figure 4.1**.

The conditions of the licenses also restrict the possibility of a work to be used and re-mixed in other publications. While using CC licenses, it is important to take note of the re-mix rules to be compliant with the conditions of the licenses. Creative Commons provide the following compatibility charts (**Figure 4.2** and **Figure 4.3**) for re-mix of CC licensed materials.

PD denotes materials in public domain, which means that the author has either released the materials explicitly in public domain or the copyright has expired. Normally, the term of copyright is life of the author plus 70 years. However the year post death of the author differs from country to country.

It may be noted that, if any CC license user violates the license conditions, it is treated as breach of trust, and the person concerned is liable to face legal consequences. Therefore, responsibility of adhering to the conditions of the use is with the user.

¹² <http://creativecommons.org/choose/>

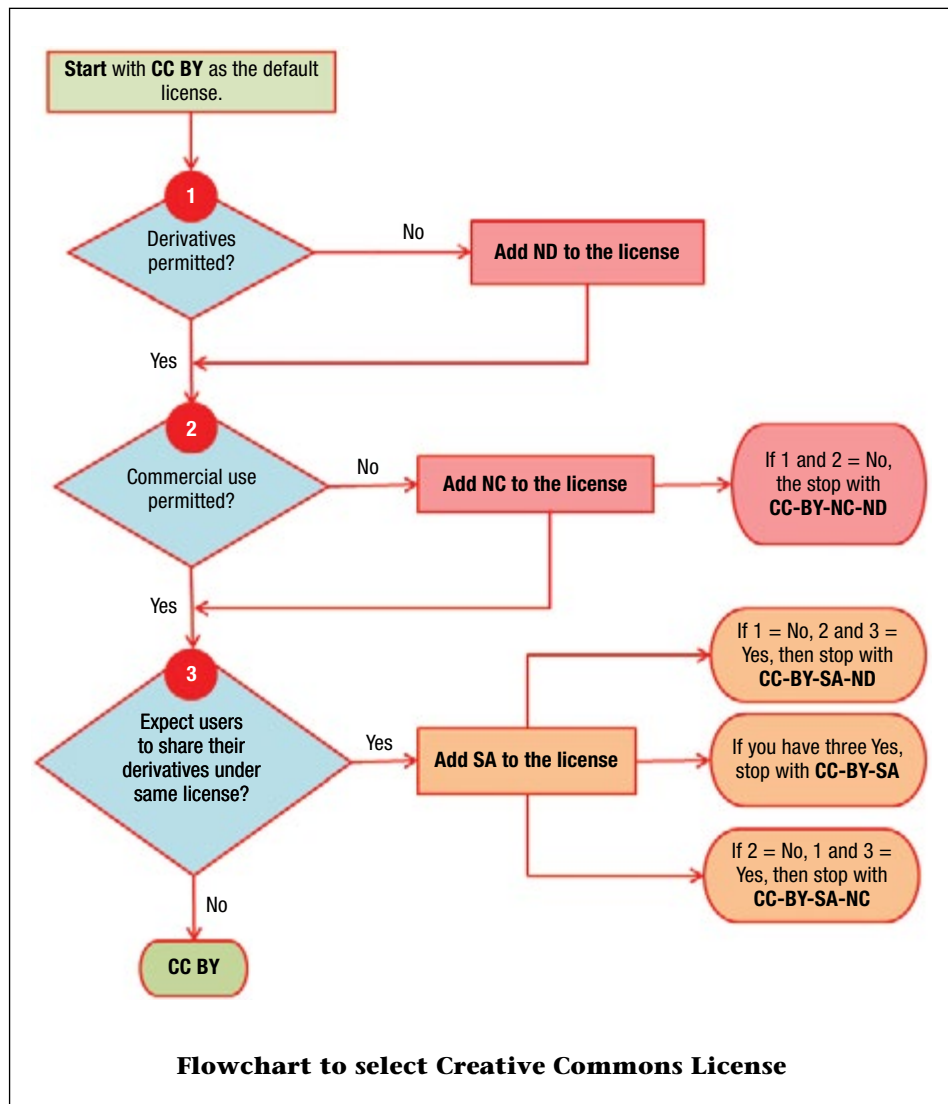


Figure 4.1 Steps to CC license

Compatibility chart		Terms that may be used for a derivative work or adaptation						
		BY	BY-NC	BY-NC-ND	BY-NC-SA	BY-ND	BY-SA	PD
Status of original work	PD							
	BY							
	BY-NC							
	BY-NC-ND							
	BY-NC-SA							
	BY-ND							
	BY-SA							

Figure 4.2 All license compatibility chart

Original work	Commercial collection	NonCommercial collection
PD		
BY		
BY-NC		
BY-NC-ND		
BY-NC-SA		
BY-ND		
BY-SA		

Figure 4.3 Commercial compatibility chart

For additional familiarity about CC and the licenses, go through the following links:

1. Test your knowledge of the CC licenses by trying out this web activity:

http://wikieducator.org/Creative_Commons_unplugged/The_CC_licenses#Test_your_knowledge:_choose_a_license

2. Play the remix game in taking your creative use of existing OER one step further:

http://wikieducator.org/Creative_Commons_unplugged/Remix_game

Activity 4.3

Presentation

Prepare a 15-minute presentation on the makings of a framework around the adoption of open educational practices at your institution. Include the key concerns and factors that will need to be considered in the adoption of open education practices in your organisation. What protocols for licensing would you recommend?

Assessment 4.2

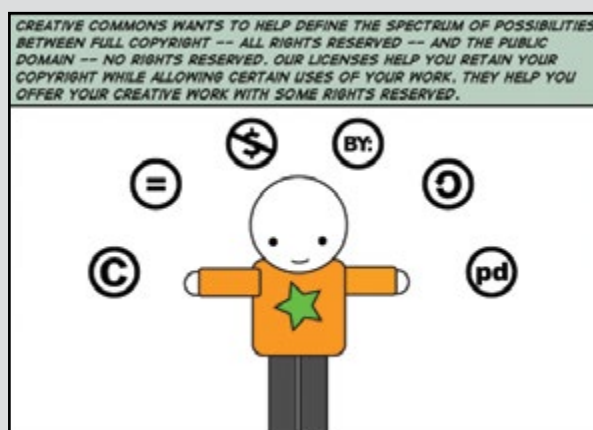
Title: Understanding types of a CC license and implications of the various permutations

Purpose: To get peer and moderator feedback regarding the post you made regarding types of a CC license and implications of the various permutations and revise your work.

Brief summary of overall tasks:

1. Write a posting (about 500 words) on the types of a CC license (BY, NC, ND and SA) as well as the implications of the various permutations that exist.
2. Your posting should cover your responses to the following key questions:
 - a. What is meant by BY, NC, ND and SA.
 - b. What are the implications of BY, NC, ND and SA.
3. Start a discussion forum in Moodle and share your post.
4. Invite your peers to comment on your post. Then you should revise your posting based on the comments you get.

Spark:



This file is licensed under the Creative Commons Attribution 3.0 Unported license.

Source: http://wiki.creativecommons.org/Spectrumofrights_Comic1

Individual contribution

1. Upload your post about CC license.
2. Review and comment on the presentations of at least TWO of your peers.
3. Revise your posting based on the feedback received and upload.

Dialogue begins: After posting to the discussion forum, respond to at least TWO of your peers with critical insights on the strengths and weaknesses of their posts.

e-Moderator interventions: The moderator will log into the forum once every day to offer feedback and guidance.

Schedule and time: 3 days for posting ideas and giving comments. 2 days for revising and come with a finalised version. The actual activity including responding to the work of your peers should take you no more than 3 hours altogether.

Resources: Literature related to Creative Commons licenses

1. <http://creativecommons.org/licenses/>
2. <http://www.youtube.com/watch?v=AeTIXtEOplA>
3. <http://www.youtube.com/watch?v=U-cCuBZofxA>
4. <http://creativecommons.org/choose/>
5. http://wiki.creativecommons.org/Before_Licensing

Next: Based on the feedback received, now develop a list of issues concerning the development of a framework for your organisation.

Licensing policies

National level policy is naturally preferable as this gives a wider benchmark and uniform approach to all parties involved in sharing resources. The Commonwealth of Learning (COL) and UNESCO have been advocating for national OER policies. The Creative Commons has a policy tracker registry¹³.

¹³ http://wiki.creativecommons.org/OER_Policy_Registry

On the other hand, while waiting for a nation-wide policy, most academic institutions have begun to put together their own policy to safeguard and streamline their and others' resources for the good of all. The Commonwealth Educational Media Centre for Asia (CEMCA) has developed an institutional OER policy template¹⁴ to be adopted by academic institutions and universities.

David Bornstein¹⁵ (of The New York Times) claims free education seems to be the solution to bridge the digital and economic divide globally but only if it is channeled with a proper direction and purpose toward those who need it most. So, while it is very noble to offer a source of free and bottomless educational material — how are we to ensure that it is not just sitting out there, or worse, being misused?

What we have looked at in this module so far will give you a guideline on how to expect to classify your work if and when you choose to share it. It will also allow you to look at the protection currently available to you as an author and then work toward the kind of material that you feel you may want to share. Either way, it is the current standards in OER but with the involvement of bigger and more important parties, we may find that these standards will become more beneficial to users and creators while incorporating changes in technology and educational needs. You can use the template of CEMCA and your understanding of the copyrights and licensing to develop your institutional framework for OER.

Assessment 4.3

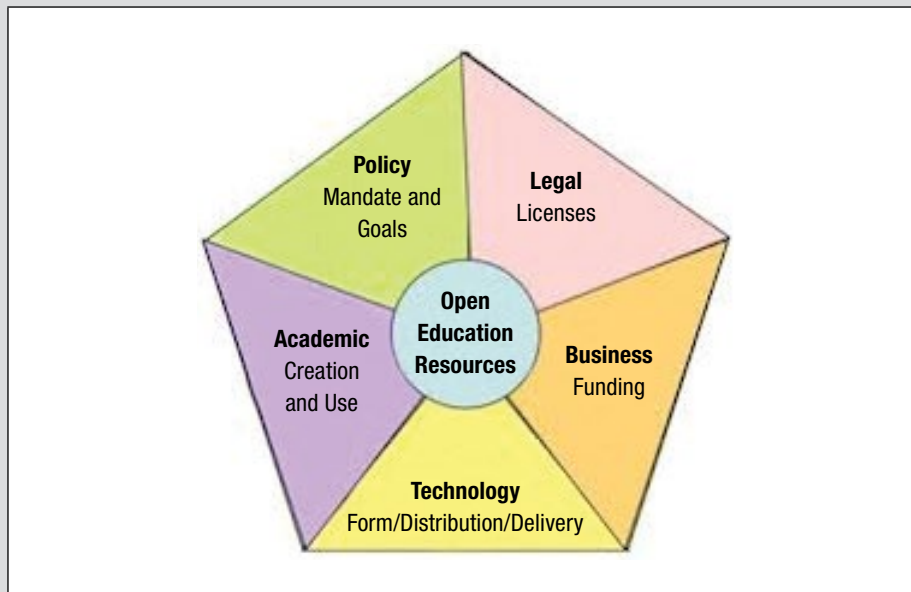
Title: Issues concerning the development of a framework for the formulation of OER policy by your institution

Purpose: To consider all possible factors within the organisation and in the environment that could possibly have an impact in the development of the Institutional OER Policy.

Brief summary of overall tasks: The overall goal of the activity is to recommend components of a framework that will lead to the formulation of OER policy for the institution. The learner should study the existing copyright and licensing policy of the institution, if any OR that of another institution/organisation. The components will be determined based on internal organisational factors as well as external environmental factors. It will also help if the factors influencing the components are compiled as possible criteria for future policy. The learner may also propose a draft OER policy which must have already addressed the possible concerns of the institution regarding contribution and usage of OERs.

¹⁴ http://www.cemca.org.in/ckfinder/userfiles/files/DRAFT%20OER%20POLICY%20template_revised.odt

¹⁵ <http://opinionator.blogs.nytimes.com/2012/07/11/open-education-for-a-global-economy/>

Spark

Courtesy: Paul Stacy Blog¹⁶

Individual contribution

1. The learner will submit the existing copyright and licensing policy of his/her own institution or any other institution/organisation.
2. Compile a list of internal organisational factors that contribute to the components of the final framework.
3. Compile a list of external environmental factors that contribute to the components of the final framework.
4. Based on 1–3 above, suggest suitable components that should make up the institution's OER framework and future policy.
5. Prepare a 15-minute presentation to communicate the components decided with justification.
6. Develop a draft OER policy document (not assessed, optional)

Dialogue begins: Post 1–3 as listed in the section above to the discussion forum. Gather any feedback you receive from your peers that will help to refine the lists and culminate in your final recommended components. Compile the information gathered and your criteria which will be used to justify the recommended components. Come up with a presentation that will take approximately 15 minutes to communicate it.

¹⁶ <http://edtechfrontier.com/tag/wikiwijs/>

e-Moderator interventions: The moderator will log into the forum once every day to offer feedback and guidance.

Schedule and time: 1 week. The actual activity including checking on the feedback of your peers, compiling the information and preparing the presentation should take you no more than 13 hours in total.

Resources:

1. Portal of the institution which may include the existing copyright and licensing policy document.
2. Existing OER policy documents of institutions.
3. Guidelines from COL
 - a. <http://unesdoc.unesco.org/images/0021/002136/213605E.pdf>
 - b. http://www.unesco.org/new/en/communication-and-information/resources/news-and-in-focus-articles/all-news/news/unescocommonwealth_of_learning_oer_policy_guidelines_to_be_launched_at_the_unesco_general_conference/#.Us4opvuBLIU
 - c. <http://oerworkshop.weebly.com/>
 - d. <http://edtechfrontier.com/tag/oer-framework/>
4. Any other material consisting of information that provide insight into various steps taken by the institution to relieve itself from any possible issues that arise due to formulation and implementation of OER policy.

Next: Module 5 — INTEGRATING OER IN eLearning is recommended. The preceding modules should have been completed prior to Module 4.



Module 5

**Integrating OER
in eLearning**

Badge Requirements



What it means?

This badge means that the learner has demonstrated reasonable knowledge of the eLearning environment, open educational resources and the ability to integrate OER in an eLearning context.

Who is eligible to earn this badge?

In order to earn the badge, you should be able to:

1. Demonstrate knowledge of the eLearning environment.
2. Demonstrate knowledge of integrating OER in the eLearning environment.

And, you have

1. Studied all the necessary readings provided in Module 5.
2. Logged on to the LMS at least once every day to post your comments.
3. Completed all tasks given in Module 5.
4. Actively participated in all discussions in the Learning Management System and responded to all posts in the forums.
5. Submitted the presentation slides of a maximum of 8 slides by the end of week 1.
6. Submitted the strategic plan of the integration of OER in eLearning environment with a maximum of 1000 words by the end of week 2.

Module 5: Integrating OER in eLearning

Introduction

In this module, we explore the affordances of eLearning and online learning. A major focus of the module is on how to integrate open educational resources (OER) in eLearning and online learning. So far you have studied different approaches to open education, the developments and different initiatives of OER, designing experiences for OER-based eLearning, searching and evaluating OER, and licensing and copyright. In order to use OER within the context of eLearning environment, we believe, it is necessary to understand the context and nature of OER, and therefore, we strongly recommend you to complete the other modules. We also expect that you have a basic understanding of technology and Learning Management System (LMS), and therefore, this module does not cover basic technology issues related to networks, servers, and LMS.

Learning outcomes

After going through this module, you should be able to:

1. Demonstrate your understanding of the affordances of eLearning.
2. Integrate open educational resources to optimise eLearning.

Learning scenario

The Open University¹ (OU) has embarked on an ambitious journey to revamp its learning and teaching strategy for the next five years. A new strategy is necessary for the university to keep up with the changing landscape of learning and the influence of technology. The cost of educational resources is but one of the many challenges facing the academia.

As the Director of the Centre for University Learning and Teaching, you have been asked to develop a strategic plan for integrating OER in eLearning at the Open University. The Executive Management of the university has asked you to prepare a short presentation which will scope the challenges that the University is confronting, and the affordances of eLearning and OER.

¹ This is not used to denote UK Open University.

Activity 5.1

Study the resources in this module and prepare a half-hour long presentation (using PowerPoint or Prezi) for the next board meeting of the Executive Management group. Your presentation should:

1. Define eLearning and online learning.
2. Identify technologies for eLearning and online learning.
3. Define the affordances of eLearning and online learning.

Include a narrative justification for the choice of concepts, content and resources.

eLearning

eLearning refers to the use of electronic media and information and communication technologies (ICT) in education. eLearning is inclusive of, and is broadly synonymous with technology-enhanced learning and teaching (TEL), computer-based instruction (CBI), computer-based training (CBT), computer-assisted instruction or computer-aided instruction (CAI), Internet-based training (IBT), web-based training (WBT), online education, virtual learning environments (VLE), m-learning and digital learning.

eLearning can occur in or out of the classroom. It can be self-paced, asynchronous learning or instructor-led, synchronous learning. ELearning is suited to distance learning and flexible learning, but it can also be used in the context of contiguous educational arrangements.

Resources:

1. eLearning Framework and Tools programme²
2. Garavaglia, A and Gaiotto, M (2012) Adoption of eLearning solution: selection criteria and recent trends³ (CC BY).
3. Kapp, K M (2003) 'Five Technological Considerations When Choosing an ELearning Solution', E-Learn Magazine⁴.
4. McGreal, R and Elliott, M (2008) Technologies of Online Learning in Anderson, T and Elloumi, F (eds) Theory and Practice of Online Learning⁵.

² <http://www.jisc.ac.uk/whatwedo/programmes/elearningframework.aspx>

³ http://www.docebo.com/landing/assets/Adoption_Elearning_Solution_Selection_Criteria_Recent_Trends_Preprint_EN.php

⁴ https://moodle.org/pluginfile.php/227/mod_forum/attachment/61307/five.pdf

⁵ http://cde.athabascau.ca/online_book/ch5.html

5. Muthusamy, K and Fadzil, M (2005) 'Criteria for ELearning Delivery Platform (ELDP) for ODL', *AAOU Journal*, vol. 1, no. 1, pp. 13–19, Available here⁶.
6. Naidu, S (2006) *ELearning: A Guidebook of Principles, Procedures and Practices*, New Delhi: Commonwealth Educational Media Center for Asia (CEMCA⁷).
7. Semey, I, Dirckinck-Holmfeld, L and Riis, M (2006) Method to select an eLearning platform and discussion of features supporting problem oriented project based learning. Paper presented at the III Conferencia Internacional denominada "Aprendizaje Virtual y Desarrollo Sostenible: El rol de las Universidades", Universidad Nacional, Heredia, Costa Rica on 22nd of February 2006, Available here⁸.

Online learning

Online learning is one form of eLearning, as eLearning can occur offline as well. Online learning uses online tools to support learning and teaching activities. These tools include those for carrying content, supporting communication between students and teachers and among students, and assessing student learning outcomes. Many of those tools come bundled with online learning management systems, of which there is a growing number. Prominent among them are proprietary systems such as Blackboard and Desire2Learn, and open source systems such as MOODLE, SAKAI, Canvas etc.

A Learning Management System (LMS) is a software application for the administration, tracking, reporting and implementation of online learning. A learning management system can come in many forms with differing levels of complexity. Most of them have the usual tools such as discussion forums, messaging systems, blogging and group discussions to support learning and teaching. LMS can do the one thing typical classrooms fail at, and that is to bring learners and educators to a single platform for interaction. In a conventional classroom environment, it is difficult to conduct review or feedback sessions. Using chat functions or forums in LMSs, instructors can provide the necessary feedback to the learners quickly and easily. The LMS was designed specifically to encourage peer-to-peer interaction, be it among students or between educator-learner. A critical feature of LMSs is its ability to carry content. Course materials can be easily uploaded by the instructor and downloaded by the learners at any time.

Choosing an appropriate Learning Management System is vital to ensuring a successful online learning environment. The selected LMS has to be robust and able to absorb the complexities of the eLearning environment. Integration of an LMS in an institutional setting with its broader system is also critical. It is vital that the LMS should be able to be integrated with existing systems. Most institutions would use a Student Information System (SIS) which is basically a database of the learners. There should be ease of transfer of data between these systems. Digital learning objects

⁶ <http://asiapacific-odl2.oum.edu.my/C33/F148.pdf>

⁷ http://cemca.org.in/ckfinder/userfiles/files/eLearning_guidebook.pdf

⁸ http://vbn.aau.dk/files/6281804/Semey_Dirckinck_Riis_eng_fin.pdf

are usually created in a learning content management system. This allows you to import, develop and update your learning objects independent of the course in your LMS. Basically, you can update the learning object in one place and improve on the objects appearance in your LMS.

Resources:

1. Watson, W R and Watson, S L (2007) 'An Argument for Clarity: What are Learning Management Systems, What are They Not, and What Should They Become?', *TechTrends*, 51(2): 28–34. Available here⁹.
2. Kerschenbaum, S (2004) 'LMS Selection Best Practices' (White paper), Adayana Chief Technology Officer, pp. 1–15. Available here¹⁰.
3. Ellis, R K (2009) 'Field Guide to Learning Management Systems', *ASTD Learning Circuits*. Available here¹¹.
4. Connolly, P J (2001) A standard for success, *InfoWorld*, 23(42): 57–58. EDUCAUSE Evolving Technologies Committee (2003), *Course Management Systems (CMS)*. Available here¹².
5. Chung, C H, Pasquini, L A and Koh, C E (2013) 'Web-based Learning Management System Considerations for Higher Education', *Learning and Performance Quarterly*, 1(4). Available here¹³.
6. 3waynet Inc. (2004) 'LMS Evaluation Tool User Guide', Commonwealth of Learning August. Available here¹⁴.

Affordances of online learning

The concept of affordance is widely attributed to James Gibson who coined the term to refer to the possibilities objects and tools in the environment afford (see Gibson, 1977). Take for instance a pathway in a dense forest or a bench by the roadside or under a tree. The pathway in the forest affords/offers one the opportunity to walk along it, just as the roadside bench affords/offers the possibility of sitting or lying down on it. In much the same manner, various technologies, depending on their attributes, have the potential to influence how they get used and the impacts they might have on their users. Attributes of interest here are the possibilities for information storage, retrieval, communication, collaboration, engagement and interaction (see also Naidu, 2008).

⁹ <http://hal.archives-ouvertes.fr/docs/00/69/20/67/PDF/Watson-2007.pdf>

¹⁰ http://www.trainingindustry.com/media/2068137/lmsselection_full.pdf

¹¹ http://www.astd.org/~media/Files/Publications/LMS_fieldguide_20091

¹² <http://net.educause.edu/ir/library/pdf/DEC0302.pdf>

¹³ http://www.sageperformance.com/ojs/index.php/LPQ/article/download/41/pdf_1

¹⁴ <http://www.col.org/resources/publications/Pages/detail.aspx?PID=31>

Information storage and retrieval

ICTs, unlike the conventional printed material, have the potential to capture, store and deliver information to learners and teachers in a variety of formats. These include the integration of text with audio, video and animation. Information and data delivered via ICTs in a variety of formats, such as text with sound, animation, and video offer opportunities for a range of user preferences and approaches to study. Various types of media enhancements also have the potential to influence the appeal and consumption of different types of content. For instance, physical processes such as those in the natural sciences benefit from enhanced presentation with the moving image and with sound.

Not only do ICTs offer greater capabilities and a wider range of possibilities for the presentation of content, they have greater storage capacity as well. Much larger amounts of information and various types of content can be stored using contemporary ICTs, such as is possible with Web 1.0 technology than was possible using conventional media (see Greenhow, Robelia and Hughes, 2009). This information can be easily accessed and more readily updated, which is useful in maintaining its currency.

Communication and collaboration

A further unique feature of contemporary ICTs is their ability to support both synchronous and asynchronous communication. This is especially critical for distance learners who are separated in time and place from their teachers, tutors and educational organisation. Teachers also find these and the read-and-write attributes of Web 2.0 technologies increasingly valuable in supporting their teaching strategies such as collaborative group work activities among their students (see Greenhow, Robelia and Hughes, 2009). There is also now a substantial body of experience and literature which points to the role of online synchronous and asynchronous communication tools for building and promoting learning communities and communities of practice (see Wenger, 1998, 2007; Wenger, McDermott and Snyder, 2002).

Engagement and interaction

These attributes of ICTs can be organised and harnessed in a variety of ways and combinations to support learning and teaching formats. They include self-paced learning online and offline, and group-based learning synchronously and asynchronously (see Naidu, 2008). These various modes of engagement and interaction oftentimes will also overlap and co-exist (see **Figure 5.1**). Many of these learning and teaching opportunities are simply not possible in conventional campus-based learning arrangements, with large numbers and in distributed or distance education settings.

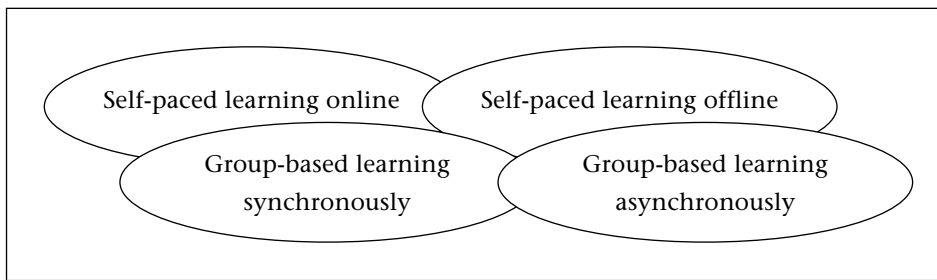


Figure 5.1 Modes of engagement and interaction

Self-paced learning offline is possible with the help of CDs and DVDs, PDAs, and laptop computers which enable learners to readily access and use large amounts of information and rich data at their own time, place and pace, a lot more than what is possible via a printed resource.

Self-paced learning online is possible with the help of a range of computer-mediated communication technologies and networked resources such as online databases and of course, the Internet and Web 1.0 technology. These technologies allow users to engage and interact with subject matter content in a variety of ways and also at a pace that is convenient for individuals.

The dynamics of learning are altered considerably when learners are able to work in groups collaboratively. A wide range of technologies is becoming increasingly available to support group-based collaborative learning synchronously as well as asynchronously. Group-based learning in real time is possible with a range of audio, videoconferencing, and audio-graphic technologies, and i-labs which facilitate remote control of laboratories over the Internet. Asynchronous group-based learning is possible through a plethora of online learning environments, discussion forums and Web 2.0 technologies which enable learners to work together from a place and time, and at a pace that is convenient for them (see Greenhow, Robelia and Hughes, 2009).

Optimising affordances of online learning

The affordances of ICTs offer many exciting possibilities for learning and teaching but they pose many challenges as well. A classic faulty example is found in the use of online discussion forums to foster collaboration and communication among the learners as well as the learners and the teachers. Educators, often erroneously, believe that by making the communication channel accessible to the learners, discussion and debate among them would be raging and hot. More often than not, they are surprised to find that there is silence while they continue to call for learners to engage among themselves. Despite all their exhortations, there is still plenty of silence. The truth is that learners are not going to talk for any reasonable length of time about anything. Their time is precious and most of them will only do what is necessary and required of them. There has to be a purpose for the discussion to ensue in any setting, let alone online, and unless that is carefully designed and orchestrated, no one will be inclined to stick around there for too long (see Salmon, 2000, 2003).

The five stages are access and motivation, online socialisation, information exchange, knowledge construction and development. For example, in stage 1, tutors or e-moderators would welcome students and provide words of encouragement. Setting ground rules about social engagement and netiquette would be taken care of in Stage 2. At the final stage, the e-moderator focuses on encouraging reflection, supporting and responding only when required. Refer to the following for further clarifications on the five stages of this model.

Stage 1: Access and motivation

Participants need information and technical support to get started online, and strong motivation and encouragement to put in the necessary time and effort. Mastering the system can be fairly daunting to start with. Most learners will need some form of individual technical help at this stage as well as general encouragement to overcome their fear of the technology and any frustration they experience when ‘the system’ doesn’t respond as expected. Access to technical support needs to be made available, for example through a telephone helpline, particularly when the participant is struggling to get online on his or her own.

Stage 2: Online socialisation

Some learners are initially reluctant to participate in written discussion forums, and they should be encouraged to read and enjoy others’ contributions for a short while before taking the plunge and posting their own messages. When participants feel at ease with the online culture and reasonably comfortable with the technology, they can contribute more confidently. The e-moderator has an important role to play in helping participants to develop a sense of community.

Stage 3: Information exchange

In this stage, information starts to flow and participants generally become excited about the immediate access and fast information exchange. They also express concern about the volume of information suddenly becoming available and the risk of potential information overload. E-tutors can help participants to develop good time management and organisational skills. Two kinds of interactions are required from participants: interaction with the course content and interaction with people.

Stage 4: Knowledge construction

As interactions unfold and expand, many (but not all) participants engage in some active exploration, and in the process widen their own viewpoints and appreciate differing perspectives. By now, learners should be interacting and starting to collaborate in their knowledge construction. Problem-based and practice-based tasks are appropriate at this stage. E-moderators have an important role to play in building and sustaining groups. The e-tutor now needs to apply ‘weaving’ skills — a bit like weaving a coloured thread through a cloth to create or highlight a pattern. Weaving

involves pulling together the participants' contributions by, for example, collecting statements from a range of individual learners and relating them to concepts and theories from the course. At stage four, participants start to become online authors rather than transmitters of information. Knowledge construction occurs when participants explore issues, take positions, discuss their positions in an argumentative format and reflect on and re-evaluate their positions.

Stage 5: Development

Participants begin to explore their own thinking and knowledge building processes. It is common at this stage for participants to reflect on and discuss how they are networking and to evaluate the technology and its impact on their learning processes. These higher level skills require the ability to reflect on, articulate and evaluate one's own thinking. Learners become responsible for their own learning and need little support beyond that already available.

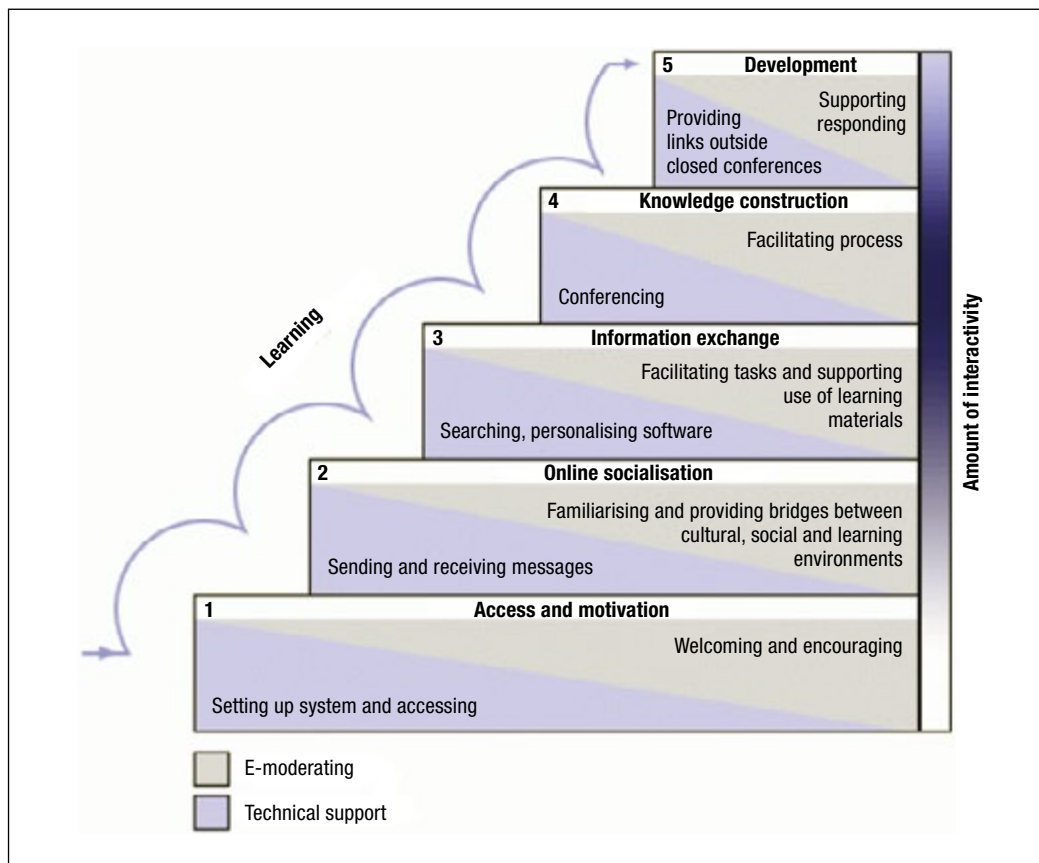


Figure 5.2 Salmon's s five stage model¹⁵

¹⁵ <http://www.gillysalmon.com/five-stage-model.html>

Assessment 5.1

Title: Concepts of eLearning

Purpose: Get learners to start exploring the concepts of eLearning, online learning, eLearning technologies and the affordances of eLearning.

Brief summary of overall tasks: The goal of this learning activity is to be able to explain the various concepts of eLearning and the technologies that are used in an online learning environment. Learners would have to provide explanations in the form of forum discussions in a learning management system (LMS). The moderator of the forum would provide his/her feedback based on the discussions. The tasks outlined will improve the learner's comprehension of the affordances of eLearning and online learning which would assist in completing the assessment in activity 1.

Individual contribution

Respond to the following tasks by providing your understanding and perceptions about learning and online learning.

1. Explain the concepts of eLearning and online learning.
 - a. Has the concept changed much since first introduced?
2. Identify and explain the affordances of online learning.

Dialogue begins: Post the **two** tasks in the discussion forum. Each task will be placed on the 1st and 4th day of the week.

Instructions to learners: Learners are to go through the module carefully and attempt each task. Learners are to post their write-up in the LMS for comments. The write-up can be in full-text or bulleted. The length of the write-up should not be more than 100 words.

All learners must post their write-ups within 24 hours of the date of the original posting. Each learner has to comment on the write-up of TWO other peer learners on the relevance/appropriateness of the responses and the tasks. All comments must be in a threaded discussion format and in simple language for clarity. Comments can be in the form of feedback, requesting further explanation or even a disagreement to the response. Learners may also suggest revisions and improvements where necessary.

e-Moderator interventions: The moderator will log into the forum once every day to offer comments/remarks/guidance within the scope of the module. The learners' posts and critical commentary on the posts of the peers shall be highlighted by the moderator. Moderators need to provide a summary, feedback, critique or concluding remark on the posts of the learners for improvement within 3 days of the original date of posting.

Schedule and time: 1 week (spread over 7 days). The actual activity including responding to the work of your learners should take you no more than 10 hours altogether.

Resources: Provide e-resources on open educational resources and eLearning. Module 5 contains the necessary resources for the completion of this task. [Moderator could provide a list of recommended texts and reading lists.]

Next: Based on the feedback received, provide a descriptive justification for the choice of concepts, content and resources. Prepare a set of presentation slide of not more than 8 slides. Upload the completed work onto the LMS by _____.

Integrating OER in eLearning

Knowledge and understanding is best developed through interaction between the learners, their readiness for learning, the attributes of the learning contexts and its artefacts (see Gibson, 1977). To be effective, learning experiences need to possess the *requisite variety* that exists in real life settings. The concept of requisite variety suggests that the best learning and teaching experiences are those that have the complexity and the variety which the professions present to their workers. When this is the case, learners are deemed to be suitably prepared and as such, there are no surprises for them when they enter the workforce. In this manner, learning and teaching is situated solidly within the context and culture of the profession for which the learners are being prepared.

Nine guiding principles for effective, efficient and engaging teaching (see Naidu, 2008a; 2008b):

1. Teachers and learners are clear about the learning outcomes (see Naidu, 2007).
2. Learning is situated within a meaningful context and within the culture and the community in which learners live and work (Merrill, 2002; Naidu, 2006).
3. Learners are engaged in pursuing and solving meaningful and real-world challenges and problems, and where they have opportunities to work on a variety of problems and tasks of increasing complexity with timely and useful feedback (Barrows and Tamblyn, 1980; Hattie and Timperley, 2007; Merrill, 2002).

4. The learning activities in these learning situations are clearly articulated and explicitly linked to knowledge and skills already mastered (see Merrill, 2002; Naidu, 2007).
5. Learners, while working on learning situations, are required to think for themselves by reflecting in and upon their actions and regulating their own performance (Naidu & Oliver, 1999).
6. The development of understanding is promoted as a social process with learners acting upon authentic situations in groups and with dialogue, discussion and debate (Barrows & Tamblyn, 1980; Vygotsky, 1978).
7. The assessment of learning outcomes is closely aligned with the learning context (Spector & Koszalka, 2004).
8. The assessment of learning outcomes is linked to meaningful problems and tasks, and aimed at helping students further develop their knowledge, skills and problem-solving abilities (Spector & Koszalka, 2004).
9. The assessment of learning outcomes is designed to develop self-regulatory and meta-cognitive skills (Spector & Koszalka, 2004).

Turning principles into teaching models

While few would argue against the spirit behind these guiding principles, many will have problems applying them in their day-to-day teaching activities without operational models. This is why we need robust models of learning and teaching which adequately capture these principles, relieving the teachers from ensuring that all the bases are covered. Commonly used models of learning and teaching that encapsulate situated cognitive perspectives include scenario-based learning, problem-based learning, case-based reasoning and goal-based learning, and adventure learning (see Naidu, 2003).

Scenario-based learning is about using a scenario to situate all learning and teaching activities. A scenario is the encapsulation of one or more events and the context within which these occur. Scenarios can be real or contrived. Their value lies in their affordances — that is, the opportunity they present for situating and contextualising all learning and teaching activities (see Naidu, in press). In doing so, scenarios provide a context to anchor and ground the facts, principles and procedures that need to be learned and taught. Carefully articulated scenarios also provide a scaffold for all learning and teaching activities.

Developing scenario-based learning

The design and development of scenario-based learning for learning and teaching follows the following steps (see also Naidu, 2004) (see **Figure 5.3**).

1. *Identification of the key competencies for learners.* What should they be able to do, almost automatically? Sometimes, these key competencies may be too many. In that case, similar sorts of competencies will need to be clustered so they can be adequately and meaningfully addressed.
2. *Articulation of the learning outcomes for the learners.* These clusters of key competencies once they have been identified will need to be validated in order to ensure that there is agreement on them as a true representation of the skills set.
3. *Identification of key events in the life of a person who has accomplished these outcomes.* The next step in the process is to identify events in the life of the person who demonstrates competency in these skills. What are those things that this person can easily do?
4. *Identification of the main steps or processes that practitioners take to work through these events.* The aim here is to break down the events in the life of an accomplished person or expert, in the form of the processes that they would adopt. This is critical because your goal is to emulate the best practice. You want to teach your students how to do something most efficiently and effectively. This is why you need to get a very clear idea of what expert practitioners do. So how does an expert reflective practitioner go about building a portfolio, if that is the target skill? What comprises that process and what are the steps in that process?
5. *Development of a scenario with the variety that will offer scope for learners to learn the steps and/or processes outlined in Steps 3 and 4.* Now you are ready to develop a scenario that you know will afford the best opportunity for your learners to acquire those same sorts of competencies that you identified for your expert practitioner. The development of a suitable scenario is still not going to be entirely plain sailing even after you have followed the above steps precisely. The development of a great scenario is a creative process and it will only come about with hard work and a great deal of perseverance. Still, do not aim to develop a masterpiece every time you sit down to develop a scenario for your teaching. Once developed, a scenario is open to review and revision based on how you and your students thought about it during your teaching.
6. *Development of the learning tasks and assessment activities that learners will be required to complete within the context of this scenario.* Your learning scenario is not complete until it has embedded in it a clear role or goal for your students. What are your learners required to do in this scenario? Depending on how you may have developed your scenario, you might have prescribed a mentoring role for your students which require them to scaffold the

learning experiences of others in the scenario in order to demonstrate to you their competency in reflective practice. So what does that mentoring role include? It may include developing a framework for a portfolio.

A very critical part of this phase is the identification of learning resources (open educational resources) that learners will need to complete these tasks.

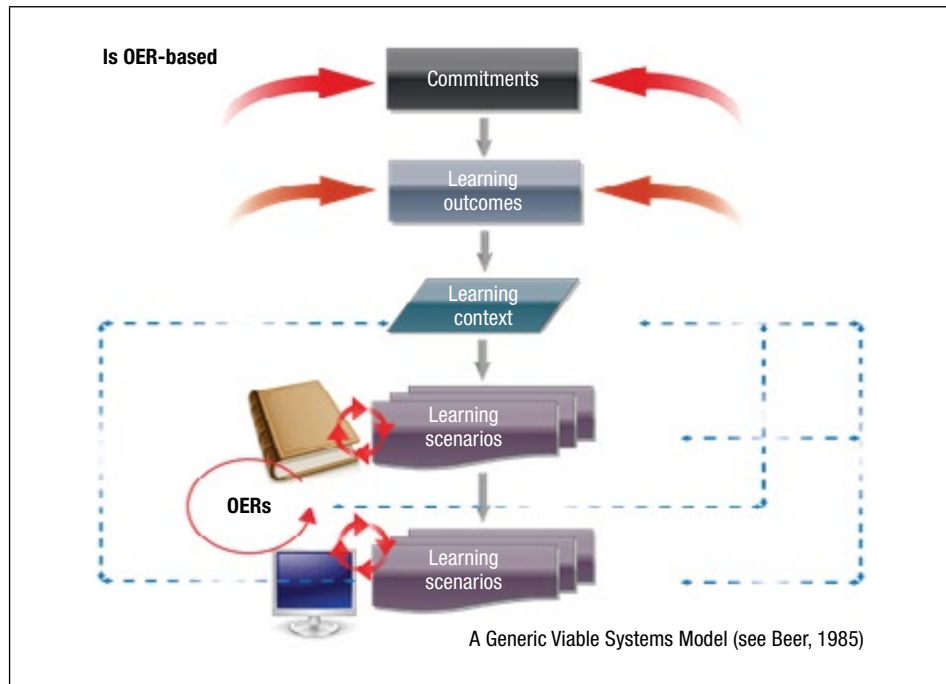


Figure 5.3 Systems view of OER-based eLearning

Some of these activities will be considered as part of the formal assessment requirements for your students, and which would attract marks like that which an assignment would attract. And not all of these learning activities need to be formally assessed. Some of them may be designed to only attract feedback from teachers, tutors and student peers.

Putting it all together

The following **Figure 5.4** shows that OER are the essential fuel that drives the learning engine that orchestrates the learning experience. The careful integration of OER in the learning process is going to be crucial to the development of the competencies and skills and the assessment of the learning outcomes. Some of this are a creative process but much of it has to do with careful selection of each OER to serve the designed activities in the scenario. What happens in the scenario, determines what OER is required and what learners will need to do with those resources. There is therefore (as shown in the figure below) various levels of integration. These include integration of OER with the learning activities in the scenario, and also integration of OERs themselves. Without this kind of integration, the learning experience will lack integrity and coherence. Careful integration of OER will ensure a powerful learning experience on the whole, which is the end game.

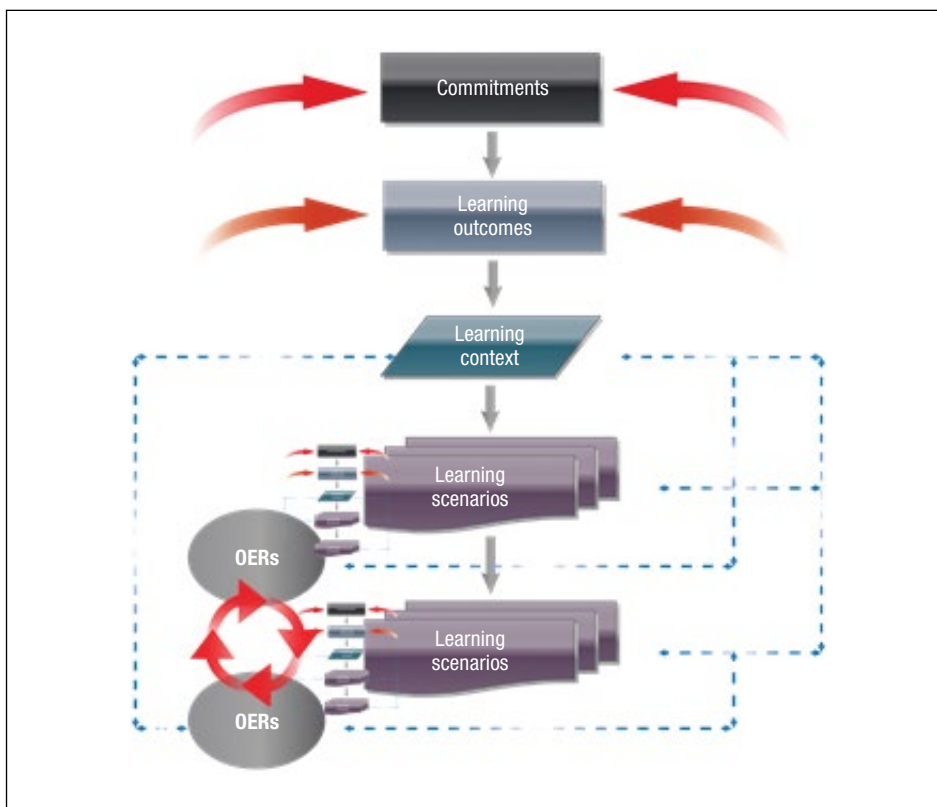


Figure 5.4 OER-based eLearning: integrated view

Resources:

Read and review the following website/documents.

1. Collaborative learning¹⁶
2. Collaborative learning, Curtin Teaching and Learning¹⁷
3. Gokhale, A A (2005) 'Collaborative Learning Enhances Critical Thinking, Journal of Technology Education', vol. 7, no. 1, Fall 1995. Available here¹⁸. [CC-BY-NC-SA]
4. Davidson, C N (2011) 'Collaborative Learning for the Digital Age', The Chronicle of Higher Education. Available here¹⁹.
5. Salmon, G (2001) 'The March of the Moderators', The Higher Education Academy, Briefing Paper: HEA Academy. Available here²⁰.

¹⁶ http://en.wikipedia.org/wiki/Collaborative_learning

¹⁷ http://otl.curtin.edu.au/learning_teaching/philosophy_teaching/student_centred/collaborative.cfm

¹⁸ <http://scholar.lib.vt.edu/ejournals/JTE/v7n1/gokhale.jte-v7n1.html>

¹⁹ <http://chronicle.com/article/CollaborativeLearning-for-the/128789/>

²⁰ http://www.heacademy.ac.uk/assets/documents/resources/database/id454_the_march_of_%20the_moderators.pdf

Assessment 5.2

Title: Integrating OER

Purpose: To learn to integrate OER in teaching and learning in an eLearning environment.

Brief summary of overall tasks: The goal of this learning activity is for the learners to be able to develop/design a learning scenario based on the integration of OER with relevant learning activities. Learners would have to provide explanations in the form of forum discussions in a learning management system (LMS). The moderator of the forum would provide his/her feedback based on the discussions. The tasks outlined will improve the learner's comprehension of the integration process of OER within an eLearning context.

Individual contribution

Respond to the following tasks by providing your understanding and perceptions about open educational resources and eLearning within your discipline.

1. Explain methods of integrating different types of OERs to form a learning object.
 - a. Learners would need to identify different OERs.
 - b. Learners have to explain how the different OERs could be integrated.
2. Integrate the learning object in a learning scenario.
 - a. Design a learning scenario.
 - b. Explain how the learning object can be used in the learning scenario.

Dialogue begins: Post the **two** tasks in the discussion forum. Each task will be placed on the 1st and 4th day of the week.

Instructions to learners: Learners are to go through the module carefully and attempt each task. Learners are to post their write-up in the LMS for comments. The write-up can be in full-text or bulleted. The length of the write-up should be not more than 100 words.

All learners must post their write-ups within 24 hours of the date of the original posting. Each learner has to comment on the write-up of TWO other peer learners on the relevance/appropriateness of the responses and the tasks. All comments must be in a threaded discussion format and in simple language for clarity. Comments can be in the form of feedback, requesting further explanation or even a disagreement to the response. Learners may also suggest revisions and improvements where necessary.

e-Moderator interventions: The moderator will log into the forum once every day to offer comments/remarks/guidance within the scope of the module. The learners' posts and critical commentary on the posts of the peers shall be highlighted by the moderator. Moderators need to provide a summary, feedback, critique or concluding remark on the posts of the learners for improvement within 3 days of the original date of posting.

Schedule and time: 1 week (spread over 7 days). The actual activity including responding to the work of your learners should take you no more than 10 hours altogether.

Resources: Provide e-resources on open educational resources and eLearning. Module 5 contains the necessary resources for the completion of this task. [Moderator could provide a list of recommended texts and reading lists.]

Next: Based on the feedback received, prepare a strategic plan for OER integration to be presented to the management of your institution. Your plan should contain a description on how the integration process would be carried out. Your writing should not be more than 1000 words. Upload the completed work onto the LMS by _____.

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