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## Open Educational Resources in Malaysian Higher Learning Institutions



*Editor:*  
Mohamed Amin Embi

# **Open Educational Resources in Malaysian Higher Learning Institutions**

*Editor:*  
**Mohamed Amin Embi**

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## **Foreword**

### **Minister of Higher Education Ministry of Higher Education Malaysia**

*Assalamualaikum wbt, Greetings to all and Salam 1Malaysia*

The idea of Open Educational Resources (OER) was first introduced in 2002 during a UNESCO Forum on Open Courseware. Recently, in June 2012, the Paris Declaration was acclaimed at the World OER Congress attended by more than 250 people, with many governments represented including Malaysia. At the end of the Congress, governments pledge to take this declaration further within their capacities to among others; (i) foster awareness on the use of OER, (ii) reinforce the development of strategies and policies on OER, (iii) encourage the development and adaptation of OER in a variety of language and cultural contexts, (iv) encourage research on OER, and (iv) facilitate finding, retrieving and sharing of OER. In line with the National Higher Education Strategic Plan (PSPTN), in which widening access and enhancing equity as well as enculturation of lifelong learning are two of the seven strategic thrusts, Malaysia is committed to this OER movement.

With this regards, the effort to compile this edition entitled ‘Open Educational Resources in Malaysian Higher Learning Institutions’ by the Council of the Malaysian Public HEIs e-Learning Coordinators (MEIPTA) is very timely and commendable. The contents of this book demonstrate the initiatives and commitments of Malaysian higher education institutions in promoting lifelong learning using various OER platforms. I would also like to take this opportunity to congratulate Professor Dr. Mohamed Amin Embi, Chairman of MEIPTA, for taking the leading role in making the publication of this important compilation a success.

In addition, I wish to express my gratitude to all the HEIs involved that have shared their OER initiatives in this compilation. Indeed, these efforts are very significant to MOHE in order to further formulate suitable strategies and policies on OER in line with the Ministry’s PSPTN strategic thrusts that also support the Paris Declaration.

Wassalam.

**DATO’ SERI MOHAMED KHALED BIN NORDIN**

## **Foreword**

**Secretary General  
Ministry of Higher Education Malaysia**

*Assalamualaikum wbt and Greetings to all*

I am thankful to Allah S.W.T that with His grace, I am given the opportunity to pen a few words in this edition entitled ‘Open Educational Resources in Malaysian Higher Learning Institutions’.

This book which is the compilation of Open Educational Resources (OER) initiatives implemented so far at various Malaysian HEIs is an indication of Malaysia’s commitment to the worldwide OER movement catalysed by the recently proclaimed Paris Declaration. In addition, I am certain that this book would contribute to the success of the implementation of one of the 21 Critical Agenda Projects (CAP), that is Lifelong Learning which is also one of the strategic thrusts of the National Higher Education Strategic Plan (PSTPN).

Lastly, I would like to congratulate MEIPTA for compiling this edition after having successfully published three earlier editions on e-Learning, Web 2.0 and Mobile Learning respectively. Such effort is very much commended and should be continued to promote the culture of knowledge sharing and dissemination among Malaysian institutions of higher learning.

Wassalam.

**DATUK AB. RAHIM BIN MD. NOOR**

## **Foreword**

**Director General  
Department of Higher Education  
Ministry of Higher Education Malaysia**

*Assalamualaikum wbt and Greetings to all*

Since its conception about a decade ago, the Open Educational Resources (OER) movement has reached many parts of the world including Malaysia. This is true when OER initiatives existed in some Malaysian higher learning institutions as early as 1998. Many universities in Malaysia including UTM, UKM, USM and OUM are now aggressively developing and sharing OER with the rest of the world.

The publication of this edition, ‘Open Educational Resources in Malaysian Higher Learning Institutions’ is very timely and in line with the aspiration of the Ministry of Higher Education (MOHE) to promote the acculturation of lifelong learning which is one of the strategic thrusts of the PSTPN.

With this regard, MEIPTA has been playing a key role in assisting MOHE in ensuring the success of the implementation of e-Learning and Lifelong Learning in all Malaysian HEIs. Hence, MEIPTA’s effort in documenting these OER initiatives undertaken so far by various higher learning institutions in Malaysia in this book is very much appreciated.

On behalf of MOHE, I would like to express my sincere thanks to all the HEIs for their willingness to share their experiences related to OER. I hope, such efforts can be continued from time to time to make Malaysia a key player of OER in line with the recently proclaimed Paris Declaration.

Wassalam.

**PROF. DATO’ DR. RUJHAN BIN MUSTAFA**



## **Table of Contents**

### **Foreword**

<b>Chapter 1</b> Overview of Open Educational Resources (OER)	<b>1</b>
<b>Chapter 2</b> Finding, Creating & Sharing OER	<b>19</b>
<b>Chapter 3</b> Malaysian OER Initiatives	<b>33</b>
<b>Chapter 4</b> OER@UTM	<b>45</b>
<b>Chapter 5</b> OER@UKM	<b>53</b>
<b>Chapter 6</b> OER@USM	<b>67</b>
<b>Chapter 7</b> OER@UPM	<b>75</b>
<b>Chapter 8</b> OER@UiTM	<b>87</b>
<b>Chapter 9</b> OER@IIUM	<b>99</b>
<b>Chapter 10</b> OER@UMS	<b>115</b>
<b>Chapter 11</b> OER@UNIMAS	<b>123</b>
<b>Chapter 12</b> OER@USIM	<b>137</b>



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# Chapter 1

## Overview of Open Educational Resources (OER)

*Mohamed Amin Embi & Zaid Ali Alsagoff*

---

### Introduction

Open Education ‘...is the simple and powerful idea that the world’s knowledge is a public good and that technology in general and the Worldwide Web in particular provide an extraordinary opportunity for everyone to share, use, and reuse knowledge’.

—The William and Flora Hewlett Foundation

([http://wiki.creativecommons.org/What\\_is\\_OER%3F](http://wiki.creativecommons.org/What_is_OER%3F))

Over the last decade, the Open Education or Open Educational Resources (OER) movement has spread to every corner of the world. In the process, we have also witnessed some significant educational innovations, and some have even argued that the open (online) education movement is the most significant transformation in education since the printing press. For example, Coursera (<http://www.coursera.org/>) today offers more than 200 free online courses from 33 top universities around the world; many of these courses have attracted thousands of students, and some courses have attracted more than 100,000 participants (registrations). Besides Coursera, there are hundreds of other innovative OER projects out there in many unique forms, including repositories, portals, Massive Open Online Courses (MOOC), Open CourseWare (OCW), open textbooks (e-books), and tutorials.

In this chapter, we will briefly explore OER and introduce you to some of the different types of OER initiatives taking shape around the world. Finally, we will examine Creative Commons (CC), which is a more flexible and suitable licensing standard for using, re-using, and remixing OER compared to the traditional copyright standards for publishing.

### What are Open Educational Resources (OER)?

According to Wikipedia ([http://en.wikipedia.org/wiki/Open\\_educational\\_resources](http://en.wikipedia.org/wiki/Open_educational_resources)), OER are teaching, learning, and research resources that reside in the public domain or that have been released under an intellectual property licence that permits their free use and/or re-purposing by others. The licensing makes provision for others to re-use, remix, and re-distribute it freely. In other words, the term OER describes any form of educational resources, such as textbooks, course materials, learning objects, curricula, and lesson plans that have been designed for use in teaching and learning that are openly available for use by the public for free. The idea of OER was originally adopted during a UNESCO Forum on Open CourseWare in 2002. At a later follow-up discussion, OER was defined as ‘technology-enabled, open provision of educational

resources for consultation, use and adaptation by a community of users for non-commercial purposes’.

### **Types of OER**

The term OER is sometimes used interchangeably with OCW or Open CourseWare. However, OER is not synonymous to OCW. OCW can be considered a type of OER. According to Wikipedia ([http://en.wikipedia.org/wiki/Open\\_CourseWare](http://en.wikipedia.org/wiki/Open_CourseWare)), Open CourseWares are course lessons created at universities and published for free via the Internet. These materials are organised as courses and often include course planning materials and evaluation tools. Also, according to Wikipedia, other OER include MOOC, content modules, open textbooks, course materials, learning objects, learning repositories, and open access journals. OER also comprise tools for delivering educational content, for example, software that supports the creation, delivery, use, and improvement of open learning content, searching and organisation of content, content and learning management systems, content development tools, and online learning communities.

### **Pros & Cons of OER**

Because of its nature, OER offers many benefits to institutions, teachers, and students. The Wikieducator OER Handbook for Educators suggests the following benefits of OER:

1. Freedom of access; both for yourself and others
2. Freedom from proprietary systems and corporations
3. Contributes to the local and global community
4. Encourages pedagogical innovation (beyond the textbook)
5. Sharing development costs of learning resources among institutions
6. Co-creation empowers more collaboration, creativity, and critical thinking
7. Accessibility of resources previously unavailable to specific group of people
8. Save time and efforts through the re-using and remixing of resources
9. Potentially beneficial to developing nations
10. Lowers costs to students

On the other hand, there are some issues related to OER. The Wikieducator OER Handbook for Educators also lists the following shortcomings of OER:

1. Quality varies
2. Varying degrees of time commitment
3. Teachers sometimes not rewarded by the system for their efforts
4. May not meet accessibility requirements for person with disabilities
5. Need to check accuracy before use
6. May need a high degree of customisation (or localisation)
7. Technical requirements vary and some require you to use a particular software
8. Requires varying degrees of continual financial support
9. Licensing and obtaining copyright clearance can be difficult
10. Some institutions may be concerned about ‘giving it away’

## Worldwide OER Initiatives

Over the past ten years, there have been a lot of efforts undertaken on OER at the international level, including OER Commons and Curriki. OER Commons (see Fig. 1.1) was started in 2007 by a non-profit education research institute called ISKME dedicated to innovation in open education content and practices to aggregate, share, and promote OER to educators, parents, and students. Later, in 2008, ISKME established the OER Commons Teacher Training Initiative to further promote the sharing of these resources among educators. One of the first OER for education is Curriki (see Fig. 1.2) which provides an Internet site for open source curriculum (OSC) development for students up to the age of 18. By applying the open source process to education, Curriki empowers educational professionals to become an active community in the creation of good curricula. In 2006, WikiEducator (see Fig. 1.3) was launched to provide a venue for planning education projects built on OER, creating and promoting OER. Its Wikieducator's Learning4Content (see Fig. 1.4) project builds skills in the use of MediaWiki and related free software technologies for mass-collaboration in the authoring of free content and claims to be the world's largest wiki training project for education. Another project is the Free Education Initiative (see Fig. 1.5) from the Saylor Foundation, which makes use of university and college faculty members and subject experts to provide peer reviews of each course to ensure its quality. In 2006, the African Virtual University (AVU) (see Fig. 1.6) released several modules of its Teacher Education Programs as OER to make the courses freely available for all. In 2010, the AVU developed the OER Repository, which has contributed to increase the number of Africans that use, contextualise, share, and disseminate the existing as well as future academic content. The modules are available in three different languages, namely, English, French, and Portuguese, making the AVU the leading African institution in providing and using OER.

Figure 1.1: OER Commons



Figure 1.2: Curriki

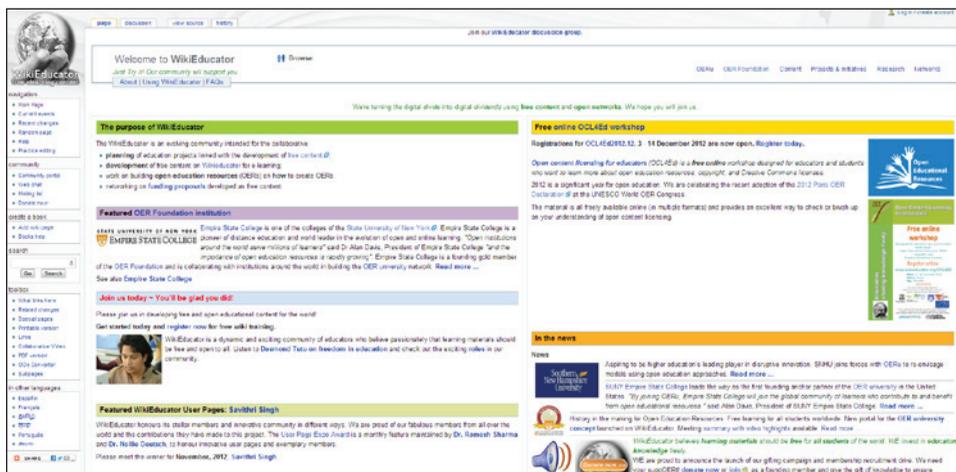


Figure 1.3: WikiEducator

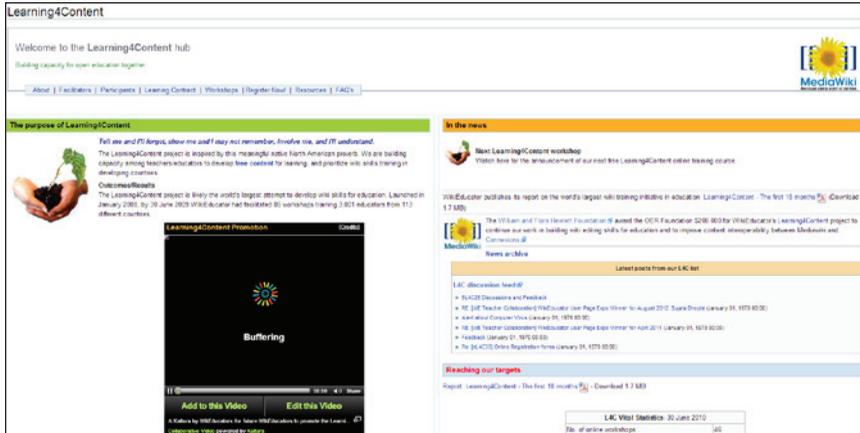


Figure 1.4: Learning4Content



Figure 1.5: Free Education Initiative by the Saylor Foundation

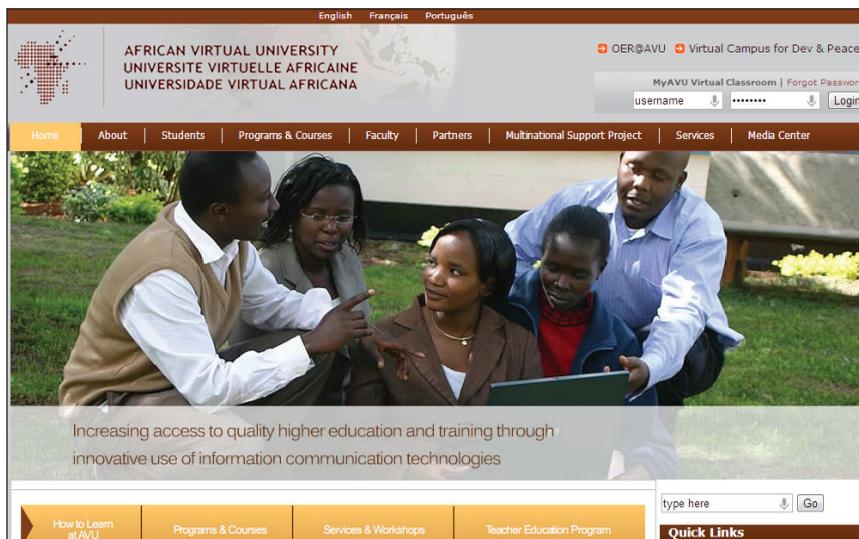


Figure 1.6: African Virtual University

### Open CourseWare (OCW)

As mentioned earlier, Open CourseWare or OCW refers to a free and open digital publication of high-quality university-level educational materials, organised as courses available for use and adaptation under an open license (e.g. the Creative Commons license) and does not usually provide certification or access to faculty. The Open CourseWare movement actually started in 1999 when the University of Tübingen in Germany published videos of lectures online. Nevertheless, it expanded with the launch of MIT Open CourseWare (see Fig. 1.7) in 2002. Since then, a number of universities including Yale, University of Michigan, and University of California, Berkeley, have created OCW projects. In recent years, an establishment known as the OCW Consortium (see Fig. 1.8) was established to coordinate OCW efforts worldwide. Incorporated as an independent non-profit organisation in 2008, the Open CourseWare Consortium is a community of over 260 universities and associated organisations worldwide committed to advancing Open CourseWare sharing and its impact on global educational opportunity. Its mission is to advance formal and informal learning through the worldwide sharing and use of free, open, high-quality education materials organised as courses. Collectively, OCW Consortium members have published materials from more than 13,000 courses in 20 languages. Although Universiti Teknologi Malaysia and Universiti Malaya respectively are members of the consortium, only UTM has published its Open CourseWare. According to its website, UTM Open CourseWare (see Fig. 1.9) is a collection of high-quality digital learning material based on courses offered at the university. The learning material, in a complete course format, may include lecture notes, lesson plans, and exercise questions.

Figure 1.7: MIT Open CourseWare

Figure 1.8: OCW Consortium



Figure 1.9: UTM Open CourseWare

## Open Textbooks

According to Wikipedia ([http://en.wikipedia.org/wiki/Open\\_textbook](http://en.wikipedia.org/wiki/Open_textbook)), an open textbook is a textbook licensed under an open copyright license and is made available online for free to teachers, students, and the public. Many open textbooks are distributed in other printed e-book, or audio formats that may be downloaded or purchased at little or no cost. As part of the broader OER movement, open textbooks are increasingly seen as a solution to challenges with traditionally published textbooks, such as access and affordability concerns. The difference between open textbooks and traditional textbooks is that the copyright permissions on open textbooks allow the public to freely use, adapt, and distribute the materials. Open textbooks either reside in the public domain or are released under an open license that grants usage rights to the public so long as the author is attributed. The copyright permissions on open textbooks extend to all members of the public and cannot be rescinded. These permissions include the right to (i) use the textbook freely, (ii) create and distribute copies of the textbook, and (iii) adapt the textbook by revising it or combining it with other materials. Some open licenses limit these rights to non-commercial use or require that adapted versions be licensed the same as the original (source: [http://en.wikipedia.org/wiki/Open\\_textbook](http://en.wikipedia.org/wiki/Open_textbook)). To date, there are many open textbook initiatives available worldwide including Project Gutenberg, which offers over 40,000 free ebooks (see Fig. 1.10). Other initiatives include the OpenStax College (see Fig. 1.11), Flat World Knowledge (see Fig. 1.12), College Open Textbooks (see Fig. 1.13), and Wikibooks (see Fig. 1.14).

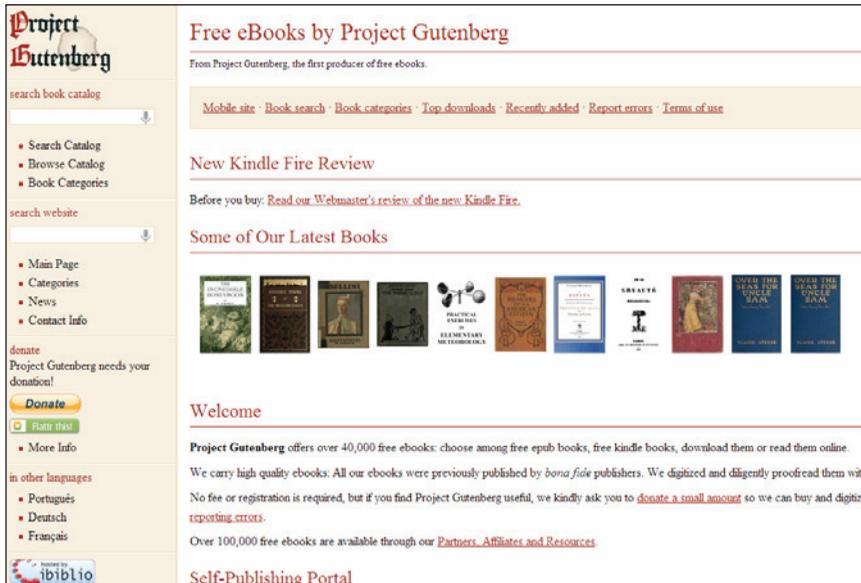


Figure 1.10: Project Gutenberg



Figure 1.11: OpenStax College

Figure 1.12: Flat World Knowledge

Figure 1.13: College Open Textbooks

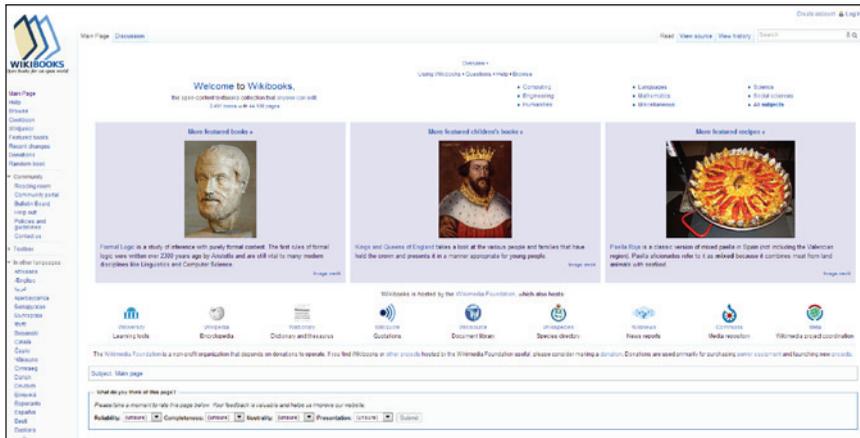


Figure 1.14: Wikibooks

## Massive Open Online Course (MOOC)

According to Wikipedia ([http://en.wikipedia.org/wiki/Massive\\_open\\_online\\_course](http://en.wikipedia.org/wiki/Massive_open_online_course)), MOOC is a type of online course aimed at large-scale participation and open access via the web. MOOCs are a recent development in the area of distance education, and a progression of the kind of open education ideals suggested by OER. Though the design of and participation in MOOC may be similar to college or university courses, MOOCs typically do not offer credits awarded to paying students at schools. However, assessment of learning may be done for certification. MOOCs originated from within the OER movement and connectivist roots. More recently, a number of MOOC-type projects have emerged independently, such as Coursera (see Fig. 1.15), Udacity (see Fig. 1.16), and edX.

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Figure 1.15: Udacity

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**COURSES (204)**

<p><b>Drugs and the Brain</b> California Institute of Technology</p> <p>Starts in 17 days (5 weeks long)</p>	<p><b>Algorithms, Part II</b> Princeton University</p> <p>Starts in 17 days (5 weeks long)</p>	<p><b>Think Again: How to Reason and Argue</b> Duke University</p> <p>Starts in 13 days (3 weeks long)</p>
<p><b>Cryptography I</b> Stanford University</p> <p>Started 9 days ago (5 weeks long)</p>	<p><b>Vaccine Trials: Methods and Best Practices</b> Johns Hopkins University</p> <p>Started 16 days ago (7 weeks long)</p>	<p><b>Introduction to Astronomy</b> Duke University</p> <p>Starts in 13 days (5 weeks long)</p>

Figure 1.16: Coursera

## Learning Repositories

Lastly, there are many learning repositories that can be considered OER. These include EDU YouTube (see Fig. 1.17), Multimedia Educational Resources for Learning and Online Teaching (MERLOT) (see Fig. 1.18), Khan Academy (see Fig. 1.19), Academic Earth (see Fig. 1.20), Connexions (see Fig. 1.21), and Extreme Learning (see Fig. 1.22).

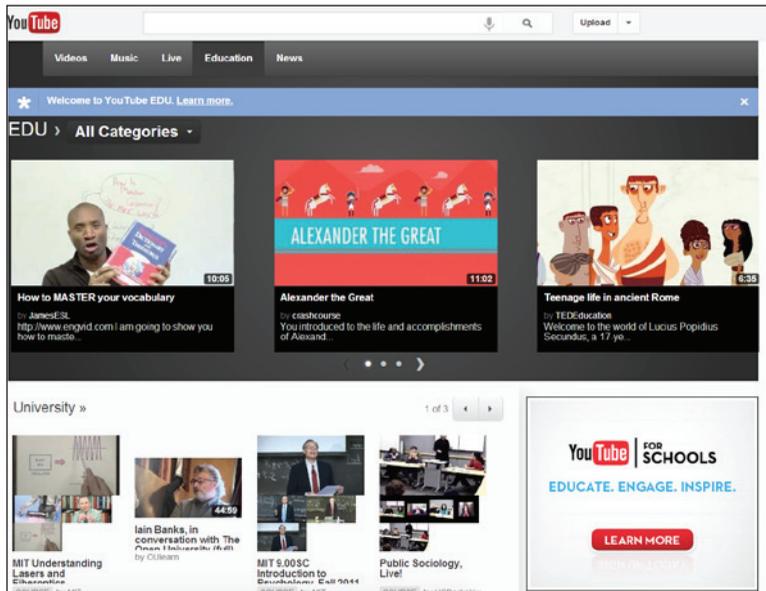


Figure 1.17: Edu YouTube

Figure 1.18: MERLOT

Figure 1.19: Khan Academy



Figure 1.20: Academic Earth

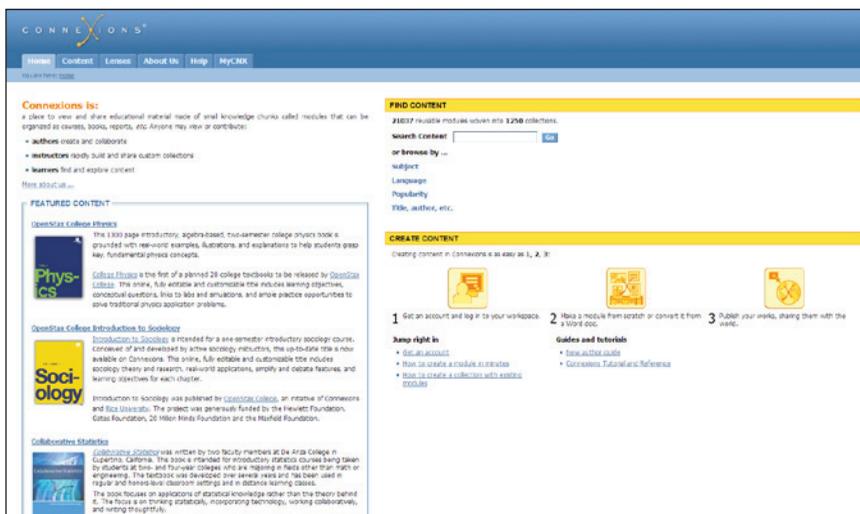


Figure 1.21: Connexions

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**What is Extreme Learning?**

Extreme Learning is defined as using technology for learning purposes in novel, unusual, or nontraditional ways. This includes learning with technology when in various locations such as a park, plane, train, subway, boat, or car. It can also include interactive learning activities when climbing a mountain, visiting a local company, riding a bicycle, working in a war zone, or taking a vacation on a remote island. For some people it involves mobile or interactive learning experiences...

Anyone can learn *anywhere, anytime* with Technology

**What's New**

- ✓ Papers presented at AERA Conference (Vancouver, BC, April 14 and 16, 2012)
- ✓ Dr. Bonk presents at the Cyberlearning Research Summit
- ✓ Extreme Learning Proposals accepted at the AERA Conference
- ✓ Language learning part news
- ✓ Paper presented at Elearn Conference (Honolulu, Hawaii, October 18-21, 2011)
- ✓ Extreme Team goes to SITE Conference (Austin: March 5-9, 2012)

**This Month's Story**

**Changing Education. Changing Lives - DaMarco**

DaMarco, at the end of his junior year at Sexton High School, was 9 credits short of graduating on time. With athletic college scholarships pending, he needed to get back on track to ensure a college education.

Figure 1.22: Extreme Learning

## OER & Copyrights

One of the main challenges confronting the implementation of OER is copyright. Hence, one of the often-sought solutions is to use alternative or open licences. The most developed alternative licensing approach is that developed by Larry Lessig of Stanford University in 2001, called Creative Commons (CC). The CC approach provides user-friendly open licences for digital materials and so avoids the automatically applied copyright restrictions. The popularity of CC licences has grown incrementally since its launch in 2002. Inspired by the free software movement, the CC believes that a large public domain of information and content is a prerequisite to sustained creativity, and there is a need to proactively enrich this public domain by creating a positive rights discourse. This is done by creating a set of licenses to enable open content and collaboration, as well as acting as a database of open content. CC also serves to educate the public about issues of copyright, freedom of speech and expression, and the public domain. In order to make the licensing process as simple as possible for users, the CC site makes use of a licence generator that suggests the most appropriate licence based on a user's response to specific questions regarding how their work can be used (see Fig. 1.23). All CC licences include 'Baseline Rights': the rights to copy, distribute, display, perform publicly, or by digital performance, and to the change the format of the material as a verbatim copy.

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Figure 1.23: Creative Commons Options

## **Conclusion**

The OER movement has come a long way since it bloomed into life after MIT launched its Open CourseWare initiative more than a decade ago. Today, we can enjoy attending MOOCs facilitated by top professors from world-class universities through Coursera, edX, Udacity, etc. If we simply want to access teaching and learning materials for learning and teaching purposes, we now have more than 260 Open CourseWare initiatives to choose from, and hundreds of open textbook portals, learning repositories, and other OER related sites.

For the educator who wants to re-use or remix OER content for their courses, they can now use one of the six Creative Commons licenses (CC) to protect their rights, while sharing their contributions to the world. However, searching for and finding relevant OER among the millions of learning objects hosted or aggregated (curated) by hundreds of OER sites around the world is still a great challenge, especially for newcomers to OER. In the next chapter, we will explore how we can find, create, and share OER to the world.

---

# Chapter 2

## Finding, Creating, & Sharing OER

*Mohamed Amin Embi & Zaid Ali Alsagoff*

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### Introduction

The OER universe has grown tremendously over the last decade, and several initiatives have been carried out to make it easier to find relevant OER for our learning, teaching, and research needs and requirement. However, until today, there is no ideal one-stop federated search, where we can search all OER shared around the world, and then find what we are looking for in an efficient manner.

In this chapter, we will explore several sites that we can use to find relevant OER. We will also explore how to re-use, remix, create, and share OER using a variety of OER sites and social media/Web 2.0 platforms out there.

### Finding OER

There are several ways of searching and finding Open Educational Resources (OER). A good starting point is to use the advanced search facilities of the OER Commons (see Fig. 2.1) which is accessible at <http://www.oercommons.org/advanced-search> and the Open CourseWare (see Fig. 2.2) which is accessible at <http://ocwconsortium.org/en/courses/search>. The OCW Consortium, for example, allows search for free online courses from prestigious higher education institutions around the globe, which currently contains 5,910 courses from 62 sources and 25 languages.

Alternatively, search for OER can be done using (i) Open Tapestry (formerly known as OCW Finder/OER Recommender/OER Glue/folksemantic) accessible at <http://www.opentapestry.com/> (see Fig. 2.3); (ii) temoa (see Fig. 2.4) accessible at <http://www.temoa.info/>; (iii) Curriku; (iv) Knowledge Services (see Fig. 2.5) provided by the Commonwealth of Learning accessible at <http://www.col.org/resources/knowServices/>; (v) Jorum (see Fig. 2.6) accessible at <http://jorum.ac.uk>; and (vi) iBerry (see Fig. 2.7) accessible at <http://iberry.com>. As a matter of fact, anyone can create his/her own customised OER search by using the Google Custom Search Engine (see Fig. 2.8).

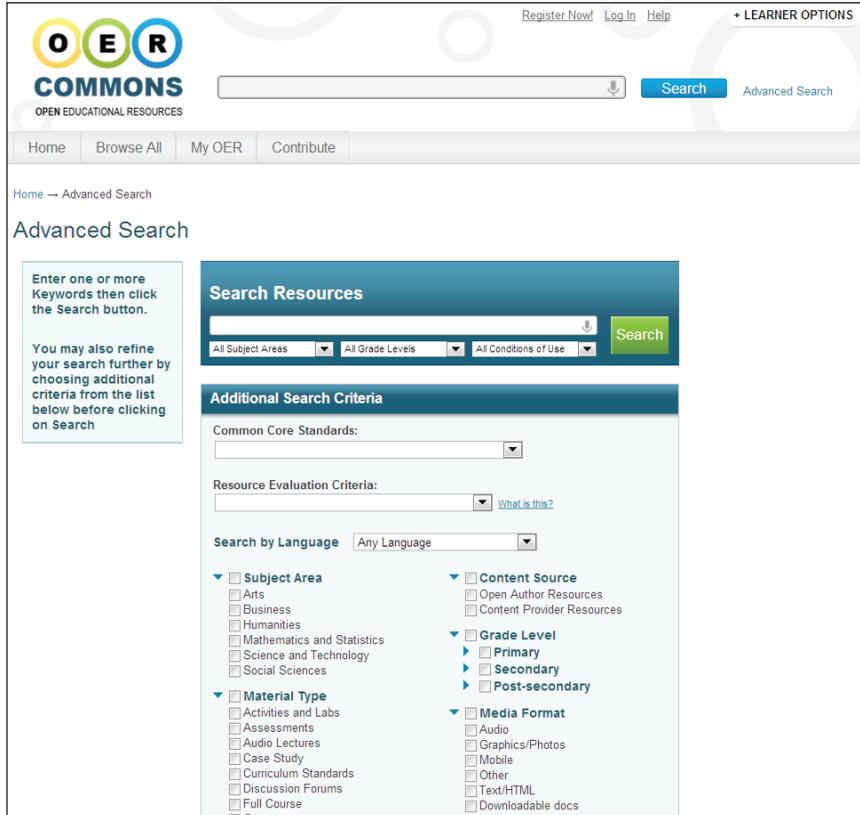


Figure 2.1: OER Commons Advanced Search

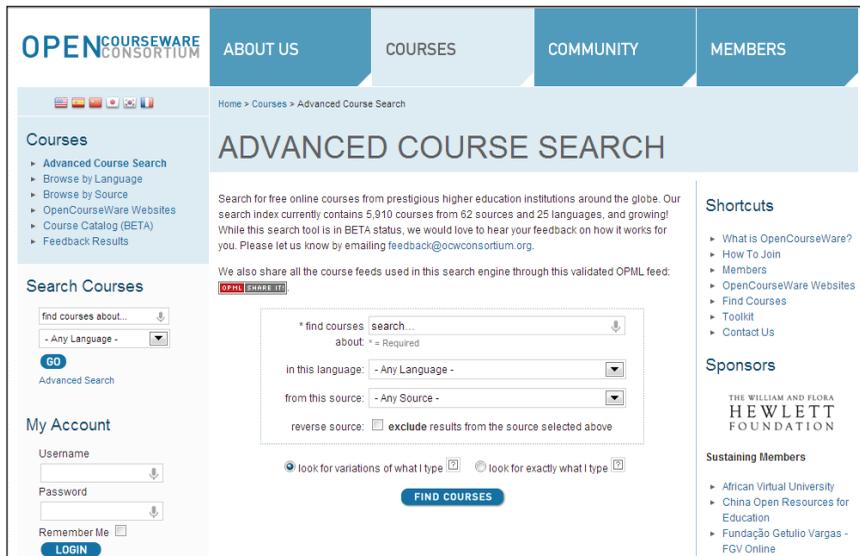


Figure 2.2: OCW Advanced Course Search



Figure 2.3: Open Tapestry

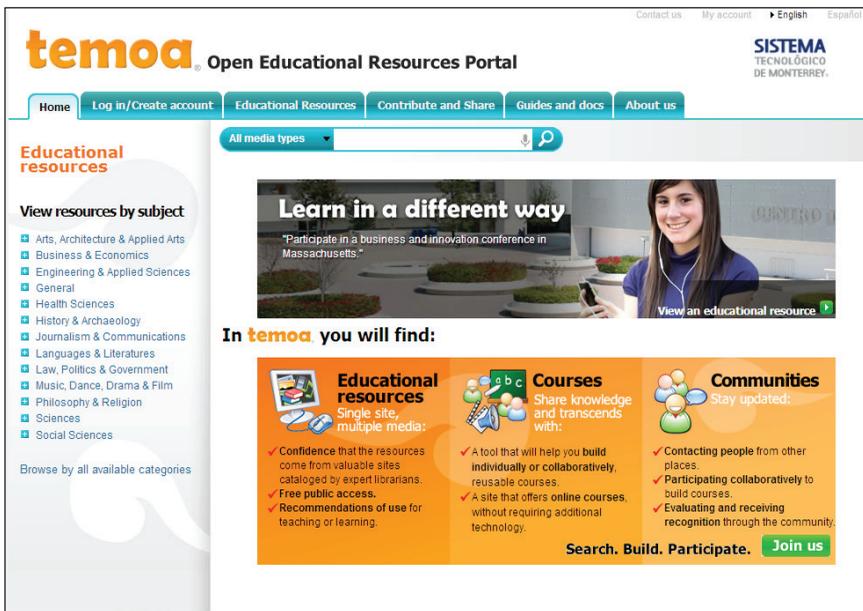


Figure 2.4: temoa (OER Portal)



Figure 2.5: Knowledge Services at COL



Figure 2.6: Jorum

**iBerry**  
The Academic Porthole\*

\*"Everyone has the right to education." - Article 26: Universal Declaration of Human Rights, 10th December 1948  
"Higher education shall be made equally accessible to all, on the basis of capacity, by every appropriate means, and in particular by the progressive introduction of free education." - Article 12: International Covenant on Economic, Social and Cultural Rights, 16th December 1966

**About iBerry**  
iBerry provides information and resources for learners, educators, researchers and anyone else with an interest in adult education.  
The focus is on connection rather than content - we see iBerry as one small part of an emerging and Open Global Education Network that one day will bring inexpensive education to any adult, anywhere in the world, regardless of their circumstances.  
\* Porthole ? - No, not a spelling error - it's a small but cheerful window in the side of the Higher Education ship - for purposes of illumination and enlightenment!

**Open Education Directory**  
The Open Education Directory lists publicly-available educational resources including Open Courseware (OCW) - lecture notes, videos, slides, podcasts, exam questions, software, demonstrations, images etc - selected from the universities and colleges of the world.  
Only OCW covering academic topics in reasonable depth is included in the directory. OCW items are described by a combination of tags according to Subject, Media Type, and academic level so that users can customize their searches.

**News Aggregator**  
The News Aggregator brings together numerous RSS feeds on Education topics.  
News from a variety of sources is grouped in 4 categories. The content can be viewed by anyone but logged in users can also display their preferred categories as blocks of headlines.

**Support for Online Learners**  
Support for online learners is extending beyond currently available Open Courseware to other parts of the educational process.  
Open Courseware (OCW) does not usually come with other desirable parts of the educational process such as expert tuition, interaction among learners or assessment and creation. iBerry is helping to fill the gap between currently-available OCW and its effective use by online learners.

**Community**  
Users are free to login and contact others with similar interests. iBerry relies on the goodwill of its users and anyone else who cares to help - please contact us with your ideas and suggestions!  
Most of iBerry's facilities are freely available to anyone but logged in users also have access to the profiles of other registered users. If you are interested in a particular topic it can be searched to contact others with similar interests or publish from the site directly as a course. This is a free service. All content and software are available under a Creative Commons license.

**Enter iBerry**

- More About iBerry
- The Open Global Education Network

**Open Education Directory**

- Arts, Humanities
- Earth Sciences
- Engineering and Technology
- Health and Life Sciences
- Maths and Computer Science
- Physical Sciences
- Social Sciences

**News Aggregator**

- Educational Technology
- Higher Education News
- Education Blogs etc
- Open Educational Resources (OER)

Figure 2.7: iBerry

Google Custom Search Engine

Try Custom Search Engine

**Make searching your site easy** Sign in to Custom Search Engine

With Google Custom Search, add a search box to your homepage to help people find what they need on your website.

**Sign up for the basics - it's free**

- Get fast and relevant search results
- Customize the look of the search results to match your site's design
- Make money off the ads we show using AdSense for Search

**More control, if you need it**

- Starting at \$100 a year, increase the ways you can fine-tune the design (like opting out of the ads or the Google branding)
- Get additional powerful features for small and large businesses
- Learn more

Introduction to Google Custom Search

Figure 2.8: Google Custom Search Engine

## Creating OER

There are many ways of creating OER. In fact, any existing educational materials can easily be turned into OER. The following YouTube video (see Fig. 2.9), accessible at <http://youtu.be/CUVW5fhQP2k>, provides a good guide on how to turn an existing resource into an OER. Actually, anyone can easily share, remix, and re-purpose existing OER (see Fig. 2.10 for a graphical representation of this simple concept). According to WikiEducator (<http://>

[wikieducator.org/OER\\_Handbook/educator/OER\\_Lifecycle](http://wikieducator.org/OER_Handbook/educator/OER_Lifecycle)), the OER lifecycle begins with a desire or need to learn or teach something. The following sequence of steps illustrates a typical development process.

**1. Find:**

Start by looking for suitable resources which contribute to meeting the need or satisfying the desire. This may include using general search engines, searching specific repositories, and finding individual websites. Some potential components may be available offline, including last year's lecture notes, class projects, handouts for learners, and other resources prepared previously.

**2. Compose:**

With a collection of resources at your disposal, start piecing them together to form a learning resource for yourself, your fellow educators, and/or learners. This is a creative design process of building an educational resource from scratch and/or using components you have found.

**3. Adapt:**

While composing OER, it will nearly always be necessary to adapt components to your local context. This may involve minor corrections and improvements, remixing components, localisation, and even complete reworking for use in diverse contexts.

**4. Use:**

The actual use of OER in the classroom, online, during informal learning activities, etc.

**5. Share:**

Once an OER is finished, make it available for the open education community to re-use and begin the lifecycle again.

In fact, the OER Educator Handbook (see Fig. 2.11), accessible at [http://wikieducator.org/OER\\_Handbook/educator](http://wikieducator.org/OER_Handbook/educator), is a good guide on how to get started finding, composing, adapting, using, and sharing OER. Alternatively, there are many Web 2.0 tools and guides related to Web 2.0 tools that can be used to create OER. Prof. Dr. Mohamed Amin Embi from UKM has actually published a number of ebooks in a series called 'Web 2.0 Tools in Education Series' that can be used to create OER. Among others, the ebooks, which are accessible at scribd.com, include (i) Web 2.0 Content Creation Tools (see Fig. 2.12), (ii) Web 2.0 e-Publishing Tools (see Fig. 2.13), and (iii) Web 2.0 Tools in Education (see Fig. 2.14).

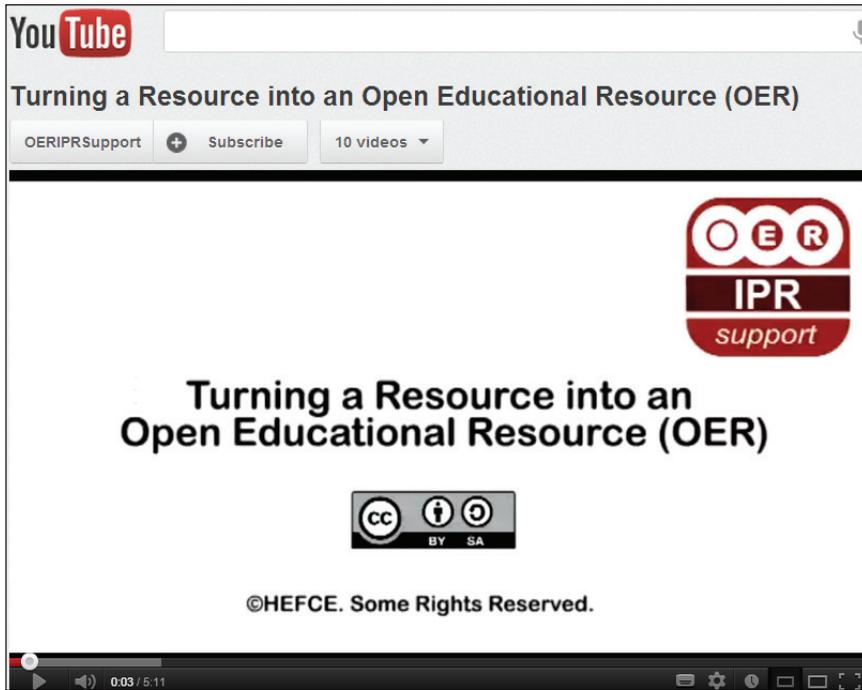
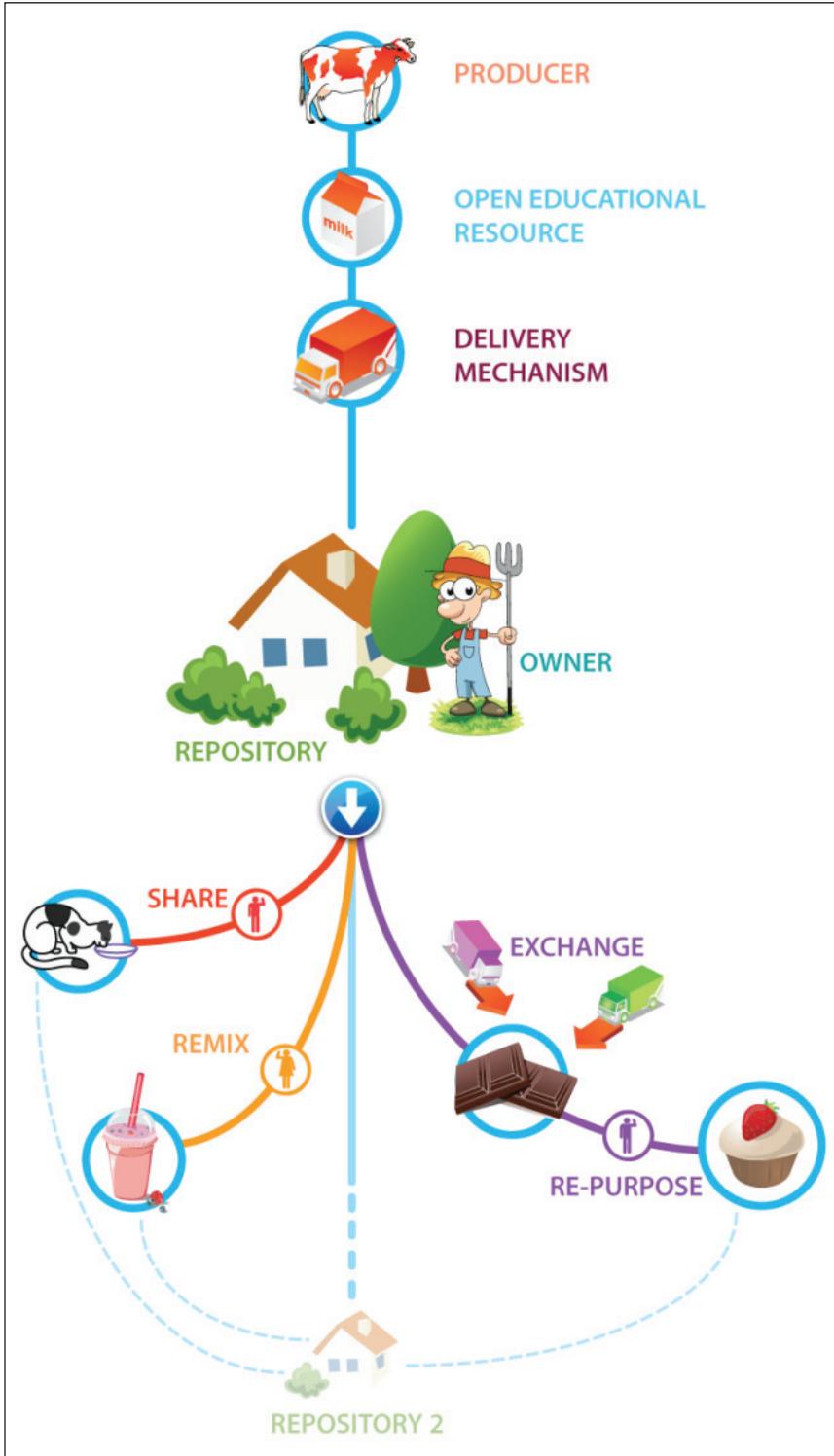


Figure 2.9: YouTube Video on OER



Source: <https://openeducationalresources.pbworks.com/w/page/25228307/OER%20Myths>  
Figure 2.10: Graphical Representation of Sharing, Remixing, and Re-Purposing OER

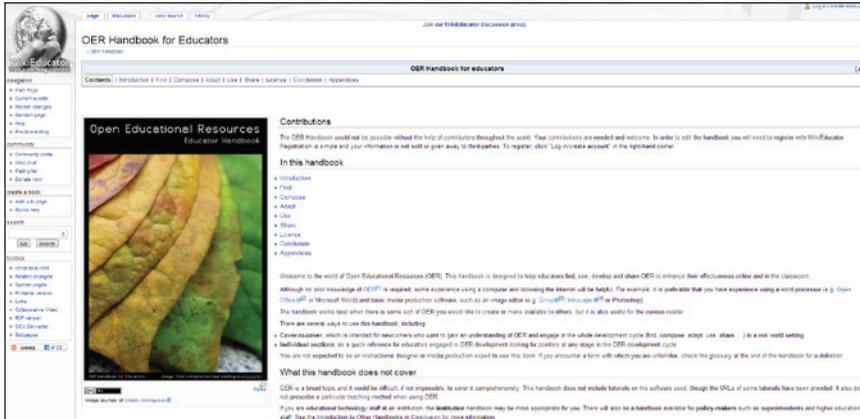


Figure 2.11: OER Handbook for Educators



Figure 2.12: Web 2.0 Content Creation Tools

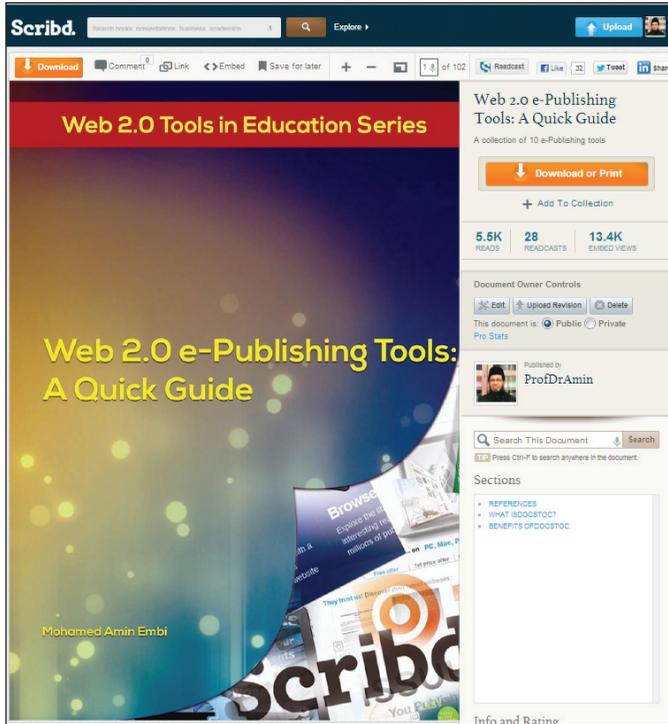


Figure 2.13: Web 2.0 e-Publishing Tools



Figure 2.14: Web 2.0 Tools in Education

## Sharing OER

There are many ways of sharing OER. One way is to deposit them in established OER repositories like OER Commons, Open CourseWare, and MERLOT. Alternatively, one can utilise existing sharing, collaborating, and networking to Web 2.0 tools and social media like YouTube, Udemy, Slideshare, Scribd, Issuu, Flickr, Pinterest, Scoop.it, and Wikispaces. Some easy guides on how to utilise selected Web 2.0 tools to share OER are published by Prof. Dr. Mohamed Amin Embi from UKM in his Web 2.0 Tools in Education Series. Among others, the ebooks, which are accessible at scribd.com, include (i) Web 2.0 Sharing Tools (see Fig. 2.15), (ii) Web 2.0 Collaboration Tools (see Fig. 2.16), and (iii) Web 2.0 Social Networking Tools (see Fig. 2.17).

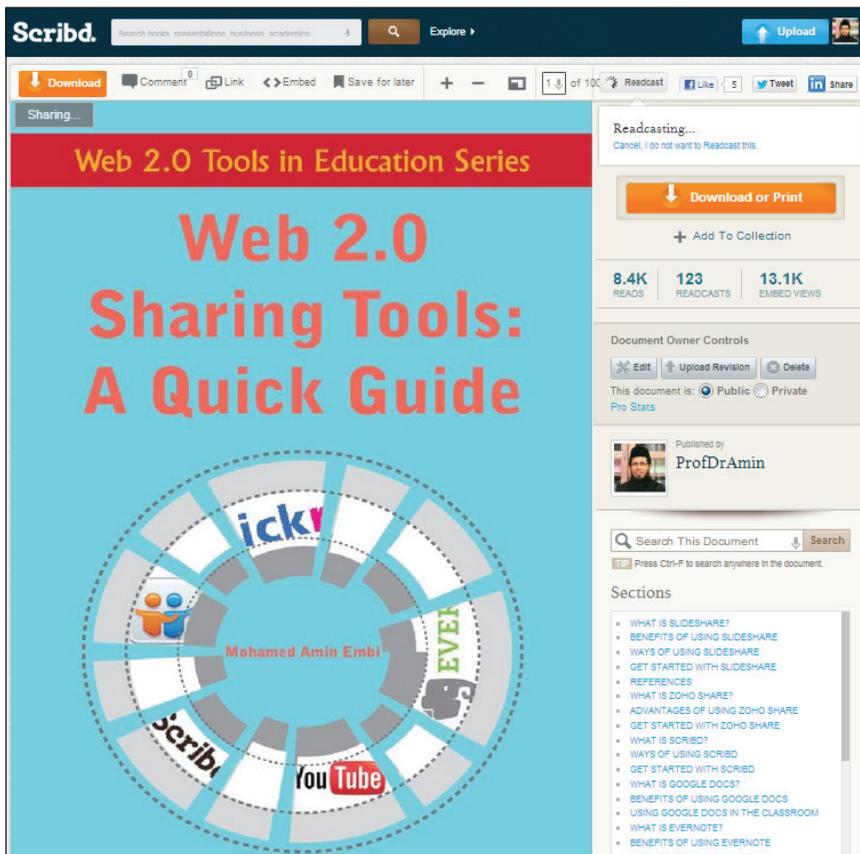


Figure 2.15: Web 2.0 Sharing Tools

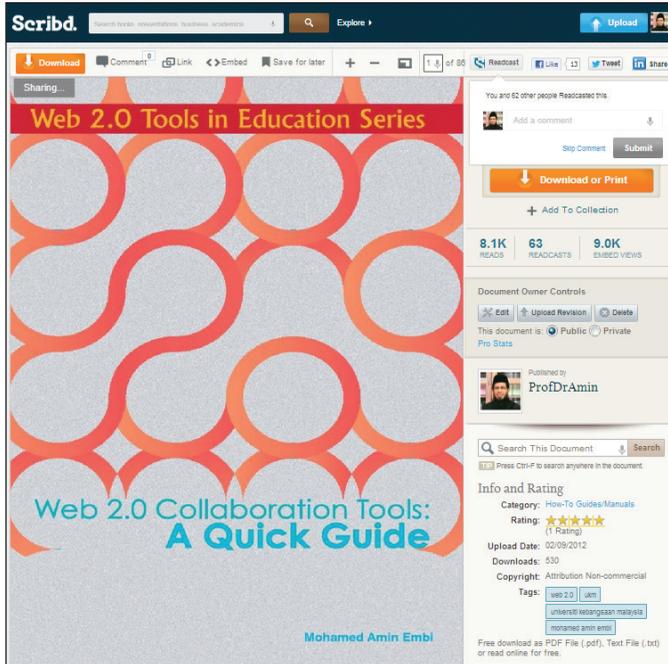


Figure 2.16: Web 2.0 Collaboration Tools

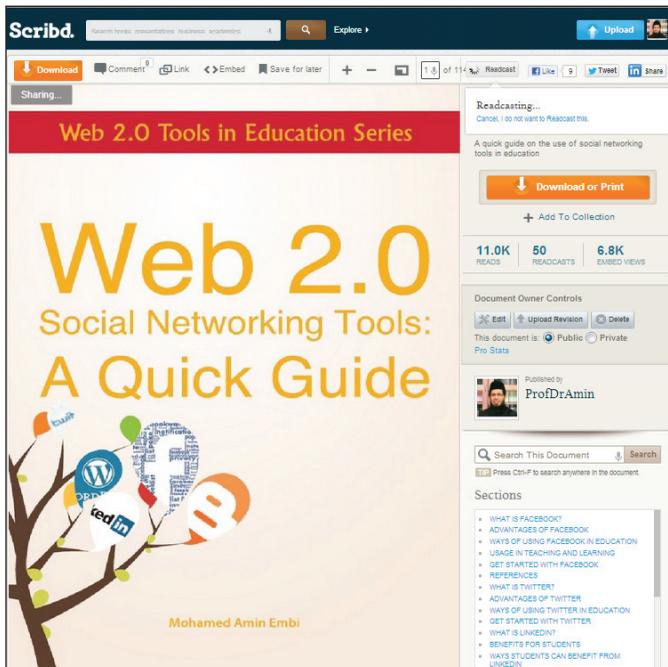


Figure 2.17: Web 2.0 Social Networking Tools

## **Conclusion**

Discovering the OER universe can be an overwhelming experience, but the sites and tips shared in this chapter should make your introduction less confusing and painful. As you explore the OER universe, you will increasingly improve your skills in navigating it to find what you are looking for. Besides the existing integrated (or federated) OER search initiatives, there are many more new innovative search initiatives on the way; so, we have a lot to look forward to in the future.

As for reusing, remixing, creating, or sharing OER, we have today plenty of Social Media/ Web 2.0 tools and platforms to choose from. If you are stuck on how to use these tools, there are plenty of useful tool guides to refer to, including Prof. Dr. Mohamed Amin Embi's wonderful collection, which is highly recommended.

Finally, we should use OER to benchmark our content and practices with the top in the world. Surely, we can learn a few tricks and tips, which we can adapt with our own unique flavour to transform our students' learning environments and experiences.



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# Chapter 3

## Malaysian OER Initiatives

*Mohamed Amin Embi & Zaid Ali Alsagoff*

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### Introduction

In the first two chapters, we explored the world of Open Educational Resources (OER) and how to find, create and share them. While reusing or remixing OER can have a positive impact in improving many areas of education in Malaysia, it is not sufficient if we aspire to become a leading country in the areas of knowledge creation, creativity and innovation. To be a leading nation in these areas, we must go beyond knowledge consumption to embrace the willingness to create, innovate and share with the growing OER world.

In this chapter, we will zoom in on Malaysia and explore some of the most prominent OER initiatives taking place here from both an institutional and an individual perspective.

### Institutional-Initiated OER

#### Wawasan Open University & OER Asia

The Wawasan Open University or WOU (<http://www.wou.edu.my>) is the youngest among Asia's 70 open universities engaged in open distance education. As a new university, it wishes to take advantage by leapfrogging three or four generations of distance teaching practice by using all of the technological assets available to it. The Institute of Research and Innovation (IRI) of the university is committed to exploring innovations in teaching and learning, especially in the new technology enabled and enriched environment. The IRI was launched in mid 2010 and is presently mobilising funds to support its mission as well as develop a network of Asian researchers studying OER and Open CourseWare (OCW) development on the continent. Currently, WOU maintains an OER website known as OER Asia (see Fig. 3.1). OER Asia is an Asian forum dedicated to sharing information, views, opinion, research studies and knowledge resources on OER. In addition, it also provides guidelines and toolkits on good practices related to OER in the Asian region. One of its greatest contributions to the public is the OER Training Toolkit (see Fig. 3.2) accessible at <http://www.oerasia.org/oer-workshop>.

Figure 3.1: OER Asia

Figure 3.2: OER Training Tool

## OUM OER

Open University Malaysia (OUM) is Malaysia's premier open and distance learning university established in 2001, which has since offered more than 70 programmes comprising over 900 courses with a cumulative enrolment of over 90,000. OUM OER (see Fig. 3.3), accessible at <http://oer.oum.edu.my/>, is an effort by the Institute of Quality, Research and Innovation (IQRI) meant to share some of OUM's learning resources with the general public. It is managed by OUM's Institute of Teaching and Learning Advancement (ITLA).

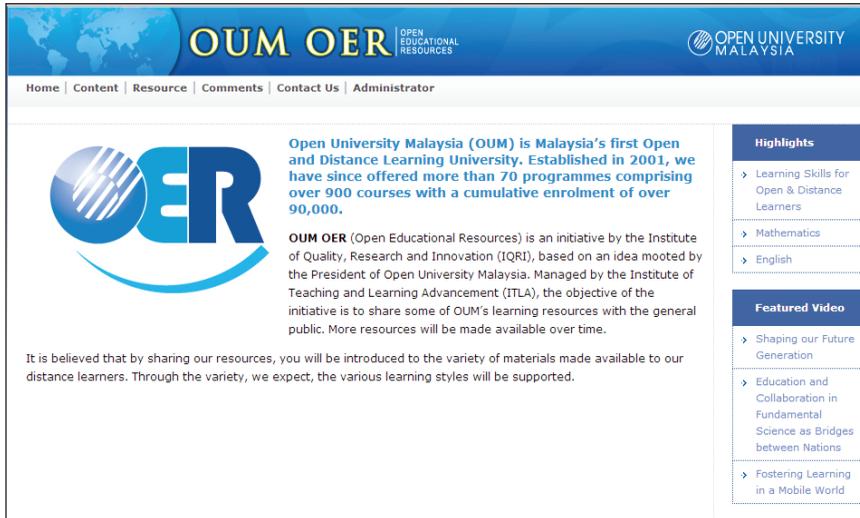


Figure 3.3: OUM OER

## UTM Open CourseWare

As mentioned in Chapter 1, presently, only Universiti Teknologi Malaysia and Universiti Malaya respectively are members of the global Open CourseWare Consortium. More importantly, only UTM has published its Open CourseWare. UTM Open CourseWare (see Fig. 3.4) is a collection of high-quality digital learning materials based on courses offered at the university. The learning materials, in a complete course format, often include lecture notes, lesson plans, and exercise questions.



Figure 3.4: UTM Open CourseWare

### IMU Webinar Learning Series

International Medical University (IMU) Webinar Learning Series (see Fig. 3.5) is an initiative to connect inspiring and exceptional educators around the world to share their knowledge, best practices, experiences and wisdom related to learning and e-learning with educators attending the series from Malaysia and around the world. Anyone is free to attend the live webinar sessions, and all the sessions are recorded, and made available online as OERs (<http://imuelearning.blogspot.com/p/imu-learning-webinar-series-2012.html>). A total of 14 webinars have been successfully completed since the series was launched late 2011, and it has attracted many world-renowned learning experts as shown in Table 3.1.

Date	Time	Speaker	Online Talk	Registration	Recording
11 Dec (2011)	2:30 PM	Zaid Ali Alsagoff & Fareeza Marican	Facebook for Teaching & Learning	Closed	View
11 Jan	2:15 PM	Zaid Ali Alsagoff & Fareeza Marican	Web Conferencing for Teaching & Learning	Closed	View
8 Feb	10:00 AM	Tom Kuhlmann	How to Become a Rapid E-Learning Pro	Closed	View
22 Feb	10:00 AM	Stephen Doumes	Facilitating a Massive Open Online Course (MOOC)	Closed	View
21 Mar	10:00 AM	Karl M. Kapp	Games, Gamification and the Need for Engaging Learners	Closed	View
10 Apr	10:00 AM	Curtis Bonk	From Tinkering to Tottering to Totally Extreme Learning	Closed	View
25 Apr	10:00 AM	Prof. Mohamed Amin Embi	e-Learning in Malaysian Institutions of Higher Learning: Lessons Learnt, Issues & Challenges	Closed	View
16 May	4:00 PM	Jane Hart	Social Learning Revolution	Closed	View
30 May	10:00 AM	Prof. Rozhan M. Idrus	Using Technology for Engaging and Effective Learning	Closed	View
6 Jun	10:00 AM	Jeff Cobb	10 Ways to Be a Better Learner	Closed	View
27 Jun	10:00 AM	Jane Bozarth	Instructional Design for the Real World	Closed	-
11 Jul	4:00 PM	Steve Wheeler	Social media & Mobile Technology: Learning in a Digital Age	Closed	View
12 Sep	10:00 AM	Connie Malamed	Your Brain on Graphics	Closed	View
2 Nov	10:00 AM	Dr. Nellie Deutsch	Authenticity & WizIQ	Closed	View

Table 3.1: Presenters and Topics of the IMU Webinar Learning Series



Figure 3.5: Screenshot from a Webinar Session

## Individual & SIG Group Initiatives

### Web 2.0 OER

One of the most prominent contributors of OER in Malaysia is Prof. Dr. Mohamed Amin Embi from UKM who has pioneered the creation and dissemination of materials on the use of Web 2.0 tools for teaching and learning. In 2011, he initiated the publication of a series known as

the ‘Web 2.0 Tools in Education Series’. These materials are available in the form of e-books which are accessible at scribd.com (see Fig. 3.6) and in the format of downloadable PowerPoint presentations accessible at <http://www.slideshare.net/ProfDrAmin> (see Fig. 3.7). Presently, there is also a one-stop centre on these Web 2.0 Open Educational Resources accessible at <http://www.scoop.it/t/web-2-0-learning-teaching> (see Fig. 3.8).

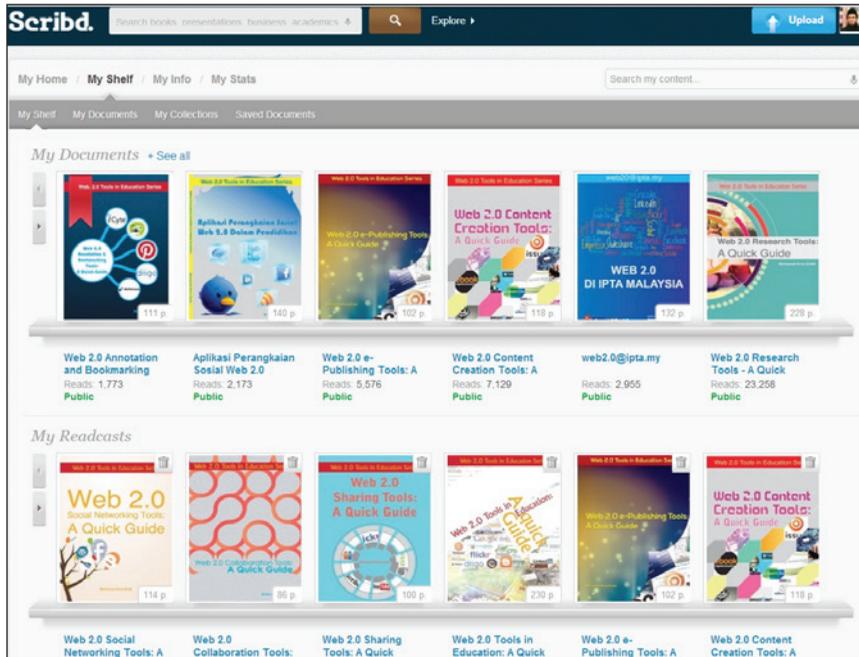


Figure 3.6: Web 2.0 Tools in Education e-Book Series

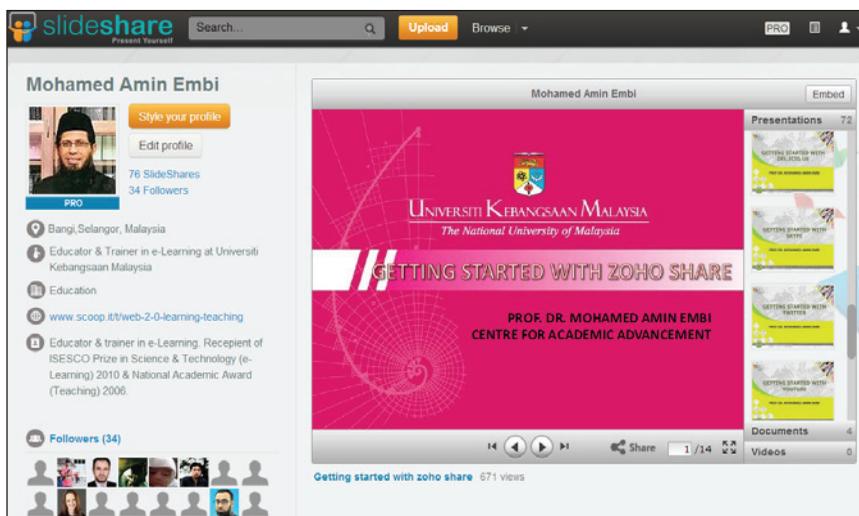


Figure 3.7: Web 2.0 Presentations in Slideshare



Figure3.8: Web 2.0 OER

### Just-in-time Training 2U (JiT2U)

Prof. Dr. Mohamed Amin Embi and Dr. Afendi Hamat from Universiti Kebangsaan Malaysia (UKM) have also pioneered the development and dissemination of OER in the form of mobile content. Recently, in 2011, they launched JiT2U or Just-in-time Training 2U (<http://jitzu.ukm.my/web20>) (see Fig. 3.9). JiT2U, which is accessible across any platform (Apple, Android or Web-browser), is designed to introduce educators worldwide on how to utilise selected Web 2.0 tools in teaching and learning. In JiT2U, tutorials are presented in various formats, including videos, PowerPoint presentations, easy guides or manuals and e-books. JiT2U is designed by combining three simple concepts that suit mobile content: namely, i) 'just-enough', ii) 'just-for-me' and iii) 'just-in-time'.

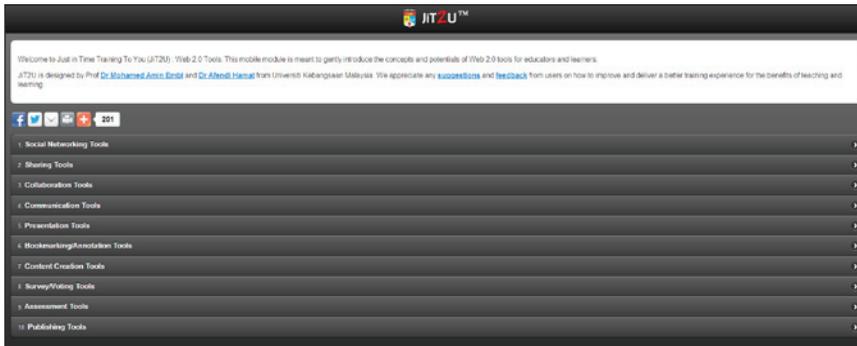


Figure 3.9: Just-in-time Training 2U (JiT2U)

### ZaidLearn

ZaidLearn (<http://zaidlearn.blogspot.com/>) is a blog maintained by Zaid Ali Alsagoff (see Fig. 3.10), the e-Learning Manager and Fellow of Centre for Medical Education at IMU. Since 2007, he has been openly sharing his learning adventures, workshops, talks, discoveries and ideas on how to transform education using technology. All the presentation slides for his workshops and talks have been made available under the Creative Commons license (3.0) on Slideshare (<http://www.slideshare.net/zaid/>).



Figure 3.10: A Snapshot from ZaidLearn’s Learning Adventure

He has been a practitioner and promoter of OER since 2005 ([http://www.unesco.org/iiep/virtualuniversity/forumsfiche.php?queryforumspages\\_id=24](http://www.unesco.org/iiep/virtualuniversity/forumsfiche.php?queryforumspages_id=24)), and is today well known locally and internationally for his expertise in this area. According to Google Analytics, his contributions to the OER movement have been viewed by people from more than 200 countries and 13,800 cities around the world. Here are a few of his most referenced and recognised contributions:

- A Critical Thinking Course (2008) (<http://zaidlearn.blogspot.com/2008/03/coaching-critical-thinking-to-think.html>)
- E-Book: 69 Learning Adventures in 6 Galaxies (2008) (<http://www.scribd.com/doc/4545960/69-Learning-Adventures-in-6-Galaxies>)
- 101 Free Learning Tools (2008) (<http://www.slideshare.net/zaid/101-free-learning-tools-presentation>)
- Use Bloom's Taxonomy Wheel for Writing Learning Outcomes (2009) (<http://zaidlearn.blogspot.com/2009/07/use-blooms-taxonomy-wheel-for-writing.html>)
- DNA of a 21st Century Educator (2012) (<http://www.slideshare.net/zaid/dna-of-a-21st-century-educator-v2>)
- The OER Workshop (2012) (<http://zaidlearn.blogspot.com/2012/11/the-oer-workshop-at-imu.html>)

A collection (100+ resources) of his best contributions can be found at <http://pinterest.com/zaidlearn/zaidlearn/>

### **Learning Innovation Circle (LIC)**

The Learning Innovation Circle (<http://www.facebook.com/groups/t4t2011/>) (see Fig. 3.11) is an open online learning and sharing community initiative, which was initiated by Prof. Zoraini Wati Abbas in 2011. Today it has more than 470 members, and includes many prominent educators from Malaysia and overseas. This interactive and engaging online group is always exploring new ideas and challenging one another to transform education for the better. The most notable contribution to materialise so far from LIC is the 'Learning Innovation Talks' (LIT) series.

### **Learning Innovation Talks (LIT)**

The idea behind LIT (see Fig. 3.12) was to organise 2–3 events per year, whereby educators could get together to share their learning and teaching innovations with one another in a more informal, relaxed, learning enriched, and innovative manner compared to traditional conferences and seminars.

There is no fixed format, and it is up to the organiser to explore and innovate how sharing and learning should take place. The first two LIT events were held at University of Malaya (7 March 2012), and Taylor's University (20 November 2012) respectively.

The 3rd LIT event will be organised by the IMU, and is tentatively scheduled to happen in April 2013. This LIT will be hosted fully online, and it will be interesting to see how this innovation unfolds.



Figure 3.11: The Speakers from Learning Innovation Talks (Round 1)



Figure 3.12: The Speakers from Learning Innovation Talks (Round 2)

## **Conclusion**

Besides the OER initiatives mentioned in this chapter, there are several other Malaysian Universities and many more individuals starting to embrace OER in Malaysia, and it would be no surprise if the Ministry of Higher Education (MOHE) launches a National OER policy in 2013, and this could inspire Malaysia towards becoming a leading nation in this area in the coming years.

Whether this happens or not, educators should embrace OER, and use it as a tool to transform learning and teaching in Malaysia. However, we should not stop there, but challenge ourselves to become an OER creator, too. By embracing the OER movement and contributing to it, we can make a difference in transforming education in Malaysia and around the world.



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# Chapter 4

## OER@UTM

*Mohamed Noor Hasan & Norah Md. Noor*

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### **Introduction**

Open Educational Resources (OER) is a new concept of sharing teaching and learning as well as other scholarly materials produced by academics and students in a university. Although the culture of sharing has long been practised by academics in Universiti Teknologi Malaysia, the first university-wide policy on this perhaps dated back to 2005 in UTM e-Learning policy, which stated that all course outlines (syllabus) of all courses offered by the university must be made available online and can be accessed freely via the Internet. In 2007, UTM officially declared the university's open access policy, which stated that scholarly and research materials published by staff and students of the university must be made available online and can be accessed by anybody via the Internet.

At present, there are three major projects which can be considered as OER initiatives in UTM. They are the open access UTM Institutional Repository, a video-sharing facility called UTMotion and the latest project is UTM Open CourseWare (OCW). In this chapter, we will describe the three projects as examples of UTM contributions towards enriching the global collection of OER.

### **UTM Institutional Repository**

One of the early initiatives by UTM to provide free access of the scholarly materials published by the university is through a project called UTM Institutional Repository (see Fig. 4.1). The main goal of the initiative is to give free and unlimited access to scholarly publications of academic staff, researchers, and students of UTM through the Internet.

UTM Institutional Repository (UTM-IR) is a collection of scholarly and research publication of the university in digital form. It is a web-based platform which collects and preserves output of university research and publication in compliance with the requirement of open access policy. The other objective is to highlight UTM scholarly works and research output to the global community.

At present, the repository (UTM-IR) consists of theses, journal articles, and conference papers and can be accessed from the following URL: <http://eprints.utm.my/>

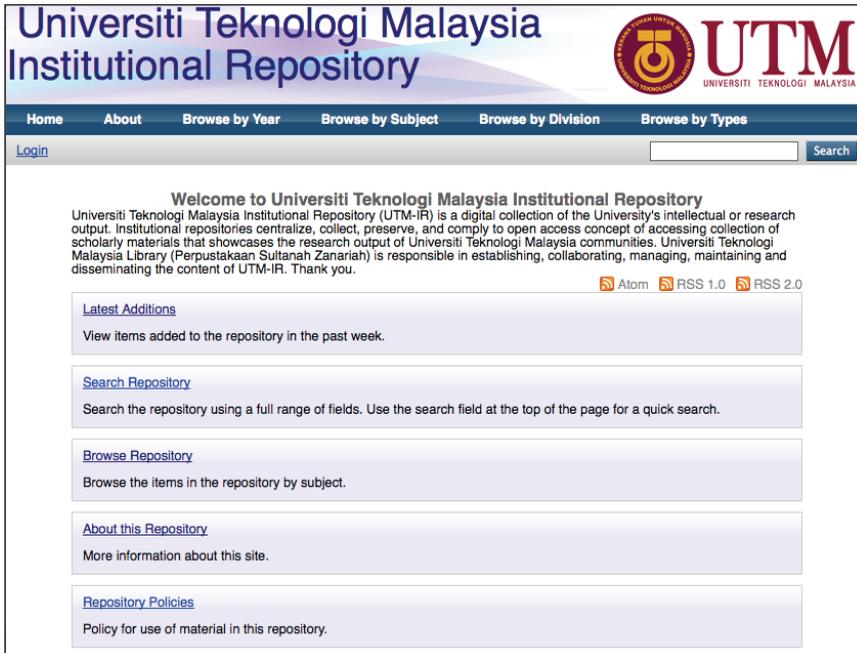


Figure 4.1: UTM Open Access Institutional Repository

Contents of the repository can be browsed by year of publication, by subject matter, by field of study, and by type of publication. A search facility is also available. The latest statistics show that number of records in the database exceeds 24,000.

The repository is also listed in the 'Directory of Open Access Repositories' (OpenDOAR). This allows contents of the repository to be searched from the URL <http://www.opendoar.org/>.

## UTMotion

Initially, UTMotion (see Fig. 4.2) was an initiative by the UTM Centre for Teaching and Learning to facilitate sharing of multimedia resources, in particular, audio and video clips for teaching and learning purposes. Typically, a lecturer would upload a video clip to the server and a link is created in the e-learning portal. Recognizing that this facility can be accessed by users from around the world, the use of UTMotion has been extended to a variety of other purposes such as promoting UTM to the global community, promoting expertise and research findings, archiving important events held in the university, and promoting students and staff activities .

Unlike video service facilities offered by most other institutions, UTMotion is based on the concept of Web 2.0 because it opens up a broader space to encourage creative and innovative thinking among its users. All staff and students of the university are allowed to upload their own videos for sharing with users around the world. Additionally, UTMotion also lets users form groups with similar interests and create playlists. To summarise, the facilities available in UTMotion is very similar to those available in the famous online video sharing, YouTube.



Figure 4.2: UTMotion

UTMotion system can be accessed from <http://utmotion.utm.my> and the audio and video clips are categorized into nine channels, namely

- Creative Works
- Library Resources
- Research and Development
- Student and Staff Activities
- Teaching and Learning
- University Events
- University on Press
- Vice-chancellor Gallery
- Zoom UTM

For example, lecturers will upload videos related to learning in their class to the Teaching and Learning channel (see Fig. 4.3). The uploaded video could be simple animations explaining certain concepts or processes or a recording of their lecture in the classroom. The videos are accessible by users around the world for free. In addition, students are encouraged to upload video or audio recordings that they produce, through a creative works channel. At present, more than 1,200 videos of various categories have been uploaded, and teaching and learning accounted for almost half of these.



Figure 4.3: Examples of Teaching and Learning Videos in UTMotion

## UTM OCW

March 2011 marked the official date of the acceptance of UTM as a member of the Open CourseWare Consortium. Members of this consortium, which consist of more than 250 universities from around the world, have agreed to share digital learning materials developed by their academic staff. As a member of this consortium, UTM has pledged to publish learning materials based on courses offered in the university to users around the world, at no charge. This concept of sharing has long been practised by renowned universities such as MIT, John Hopkins, and the University of Tokyo, which have shared learning materials used in their undergraduate and postgraduate courses. MIT, for example, being the pioneer of this project, has uploaded more than 2,000 courses offered by the university, which can be accessed by anyone free of charge (<http://ocw.mit.edu>).

There are many benefits that can be gained from UTM's involvement in the OCW project (see Fig. 4.4). First, users from around the world can share learning materials developed by lecturers in UTM. This partnership is seen as UTM's contribution towards improving the quality of education among students not only in this country but also worldwide. Second, UTM is often seen as the leading university in the region that offers various programs in science and engineering. Through the learning materials that are distributed through the OCW, the community will be able to assess the strength of UTM in the field. Indirectly, this will attract the good students to pursue their studies here at the undergraduate as well as postgraduate level. According to a study conducted by MIT in 2005, most students who chose to study at the university had used their OCW materials before, thus suggesting that OCW materials play a role in attracting good students to MIT. Third, membership in this consortium which included

leading universities from around the world can enhance UTM's standing in the eyes of the world and will certainly contribute to the university's global ranking.



Figure 4.4: UTM OCW

When UTM participates in such a project, questions have been raised by the academic staff on its implementation. Among the most frequently asked questions is, “Are we giving education for free?” The answer is a definite “No”. What we provide free of charge are the lecture notes, course plans, and exercise questions. Our lecturers do not have to answer questions submitted by the users, they do not need to interact with them, and they do not have to mark the assignments submitted by the users. The second question often asked is the issue of intellectual property (IP). By providing free learning materials, are the lecturers giving away the intellectual property on the material? In fact, lecturer's copyright and intellectual property on the learning materials is still intact as the freedom given to users to manipulate, modify, and redistribute these materials are with certain conditions. The terms and conditions of use of the learning materials are based on the Creative Commons license, (<http://creativecommons.org>) which stress on, first, the material may not be used for commercial purposes; second, in any modification or re-mixing of the material, the original author's name must be specified; and third, distribution to third parties, should use the same license.

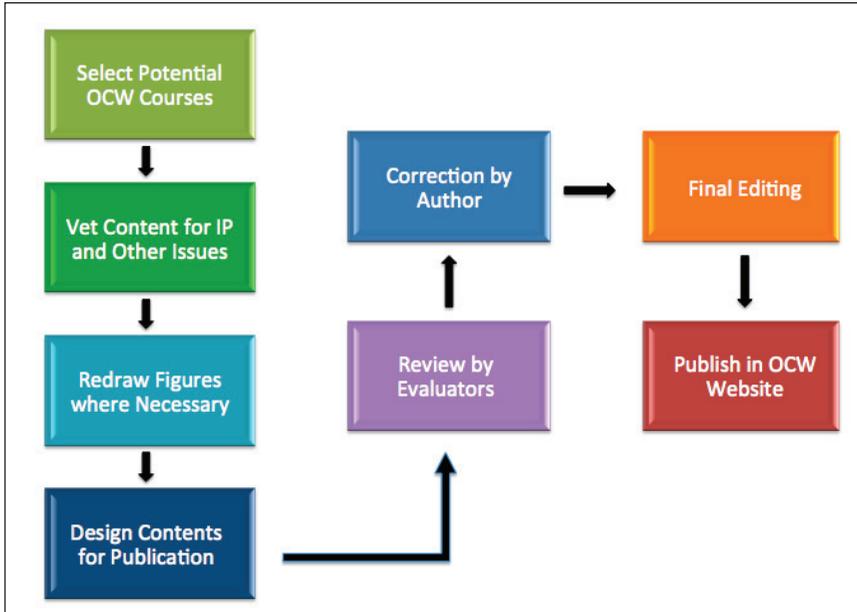


Figure 4.5: Workflow for Development of an OCW in UTM

As a member of this consortium, UTM has promised to upload at least ten courses for the first years. To achieve this, the strategy used to obtain course materials was to invite lecturers who have uploaded their lecture notes in the UTM e-learning system to participate in the project. Most of the invited lecturers agreed to contribute to the OCW project. To ensure a smooth workflow (see Fig. 4.5) for the implementation of the project in UTM, a special workshop was held to allow owners of the learning materials to edit and refine their teaching materials. During the workshop, owners of the materials updated their notes and more importantly all figures or illustrations that appear in their lecture notes were free from any copyrights issue where the illustrations with questionable copyright status were re-drawn and re-designed with the assistance of the designers and graphic artists from CTL. The workshop produced a significant result where more than twenty courses were completed and ready to be uploaded to the University OCW web site. Based on this successful workflow, the same process will be implemented in the next semester. Through this strategy, it is expected that UTM will be able to upload about 100 open courses each year. This will guarantee that the target of 500 courses to be published online within the next five years will be accomplished. At present, 70 courses have been published on the OCW website. The full list of available learning OCW materials can be viewed at the OCW website (<http://ocw.utm.my>).

UTM OCW SSC3533

Administration

Enrol me in this course

Topic outline

## APPLICATION OF COMPUTER IN CHEMISTRY SSC3533



Lecturer: Prof. Dr. Mohamed Noor Hasan  
Dr. Hasmeriya Maarof

Semester: Semester I 2010/11

**Synopsis**  
This course introduces the application of computer methods in chemistry. Topics discussed include computer representation of chemical structures, databases in chemistry, molecular modeling, pattern recognition, optimization, regression analysis, multivariate calibration, artificial intelligence and QSAR. Applications of these methods in data analysis, structural searching, prediction of molecular properties and drug design are discussed.

 This work, SSC3533 Application of Computer in Chemistry by Mohamed Noor Hasan and Hasmeriya Maarof is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License](#)

1 **Introduction**

Overview of computer, operating system and programming languages. Introduction to chemometric and cheminformatic methods and applications in solving chemical problems.

[Introduction](#)

Figure 4.6: An Example of a Course from UTM OCW

## Conclusion

The OER provided by UTM academic communities to be shared with users around the world is one of UTM's contributions to the body of knowledge for the benefit of mankind. It is hoped that the projects described in this chapter will be the catalysts for more projects to inculcate the culture of sharing among the global community.



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# Chapter 5

## OER@UKM

*Mohamed Amin Embi & Afendi Hamat*

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### **Introduction**

The concept of Open Educational Resources (OER) is not something new to academicians in Universiti Kebangsaan Malaysia. Initiatives related to creating, disseminating, and sharing of educational resources started as early as late 1990 with the launching of SMART.Net in 1998. This was followed by the establishment of several educational/research portals, open LMS, and open access journals by faculty members in UKM. However, these early efforts were rather ‘sporadic’ and were started by an individual lecturer’s or researcher’s own initiative. Hence, recently, UKM has taken a step forward by embarking on a more structured and sustainable implementation of OER known as the ORI@UKM project. ORI stands for Open Resource Initiatives meant to coordinate work related to Open Educational Resources initiated by faculty members and/or the university to share resources related to teaching, learning, and research to the public.

### **Early OER Work**

#### **Open Learning-to-learn English Programmes: SMART Net, e-Learn, & i-SELL**

One of the earliest OER efforts in UKM is the establishment of an open learning-to-learn English programme known as SMART Net in 1998 by Prof. Dr. Mohamed Amin Embi. In fact, SMART Net was one of the worlds’ first online learning-to-learning English programmes available for free to assist ESL learners to improve their English language skills. It was officially launched by the Deputy Minister, Malaysian Ministry of Education, in November 1998. Later, in 2000, a web-based learning-to-learn English programme known as e-Learn (see Fig. 5.1 and 5.2) was developed and launched by Prof. Dr. Mohamed Amin Embi. Recently, in 2010, another interactive learning-to-learn English programme known as i-SELL (interactive Strategies for Successful English Language Learning) (see Fig. 5.3) was made available to the world community.



Figure 5.1: e-Learn



Figure 5.2: e-Learn in Utusan Malaysia

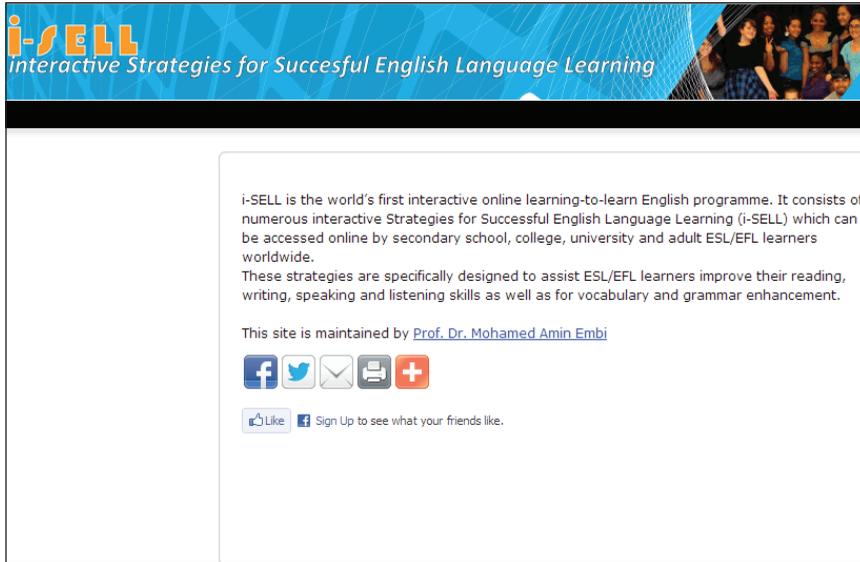


Figure 5.3: i-SELL

### Educational & Research Portals: VirTEC, ELT-TReC, My eLeaRN, & Malaycivilization.ukm.my

UKM has also pioneered the establishment of a number of educational and research portals meant to help academicians create, manage, and share educational/research materials with the public. In 2000, under the UNESCO Participation Programme, Prof. Dr. Mohamed Amin Embi founded VirTEC (see Fig. 5.4 and 5.5). VirTEC or Virtual Teacher Education Centre is an ASEAN one-stop centre for teachers and educators to share teaching and learning resources/materials. In 2002, Prof. Dr. Mohamed Amin Embi founded another open educational portal known as ELT-TReC (English Language Teaching – Open Teacher Resource Centre) (see Fig. 5.6 and 5.7). It is an online open resource centre designed to enhance the professional development of English language teachers in Malaysia and the ASEAN region. ELT-TReC was officially launched by the Deputy Minister, Malaysian Ministry of Education, at the National Conference on English Language Teaching in 2003. Recently, in 2010, an open educational and research portal known as My e-LeaRN or Malaysian e-Learning Research Network (see Fig. 5.8) was established by Prof. Dr. Mohamed Amin Embi. My eLeaRN is a one-stop portal designed to coordinate and disseminate research information and activities on e-Learning in Malaysia.

Among the most well-known open research portals in UKM is the Malaycivilization.ukm.my (see Fig. 5.9). It consists of several databases including PADAT, Peribahasa, and Sejuta Pantun. PADAT is the world's best bibliographic database on Malay world studies on the Internet. Currently, there are more than 45,000 related articles from journals, books, proceedings, theses, and other sources accessible to the world community. In addition, Peribahasa is a digital dictionary of Malay proverbs containing more than 22,000 entries of peribahasa, simpulan bahasa, bidalan, pepatah, and perbilangan published between 1921 until 2000. Sejuta Pantun is a database that includes all the pantun in printed or digital form that is available in Brunei,

Indonesia, Malaysia, Singapore, Pattani in Southern Thailand, and Mindanao in Southern Philippines.

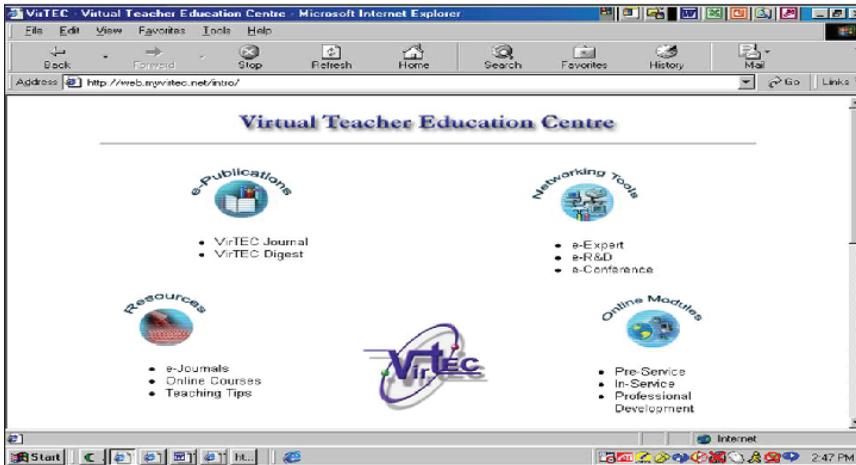


Figure 5.4: VirTEC



Figure 5.5: VirTEC in Berita Harian

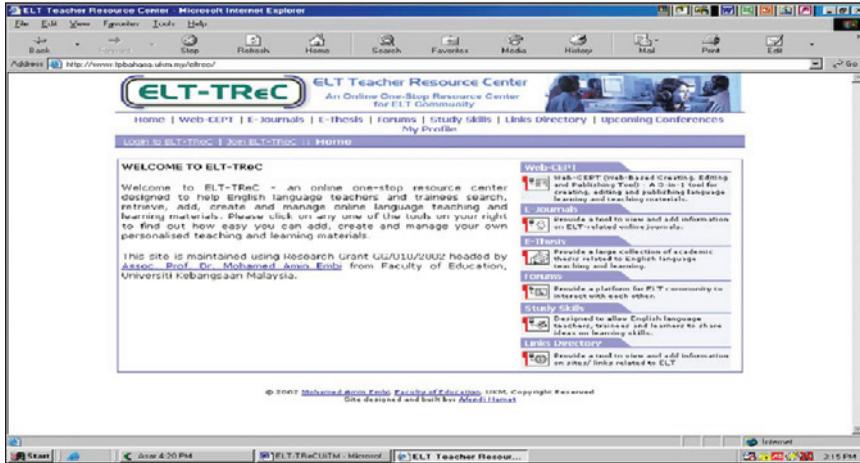


Figure 5.6: ELT-TReC



Figure 5.7: ELT-TReC in Utusan Malaysia

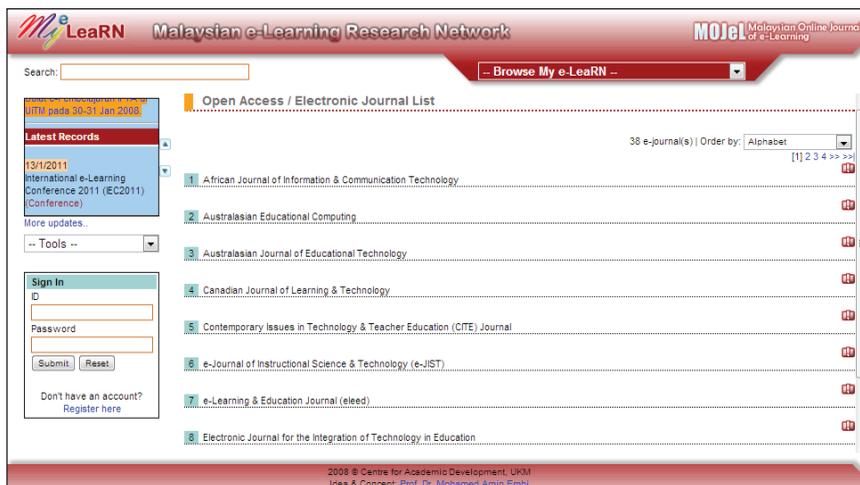


Figure 5.8: My eLeaRN



Figure 5.9: Malaycivilization.ukm.my

### Open Access Management Systems: SaLMaS, SLIM, & T-Folio

UKM has also pioneered several open access management systems as early as 2003, including SaLMaS, SLIM, and T-Folio. SaLMaS or Self-access Learning Management System (see Fig. 5.10) is founded by Prof. Dr. Mohamed Amin Embi through his sabbatical project. It is designed to assist the teaching community at all levels of education to manage online teaching and learning materials/activities. Recently, in 2009, Prof. Dr. Mohamed Amin Embi and Dr. Afendi Hamat developed and established another open LMS known as SLIM or Second Language Instruction Management System (see Fig. 5.11). It is the world’s first template-based Course Management System designed to allow second language instructors to create and manage online language materials/activities related to the main language skills (reading, writing, speaking, and listening).

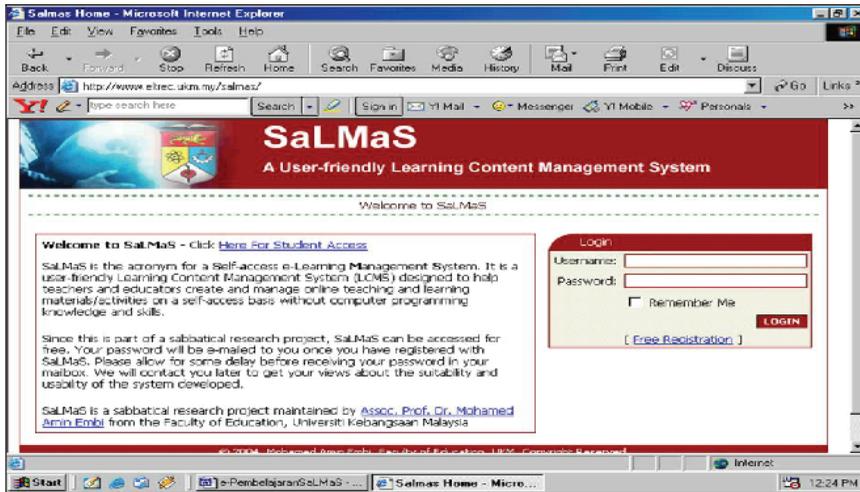


Figure 5.10: SaLMaS

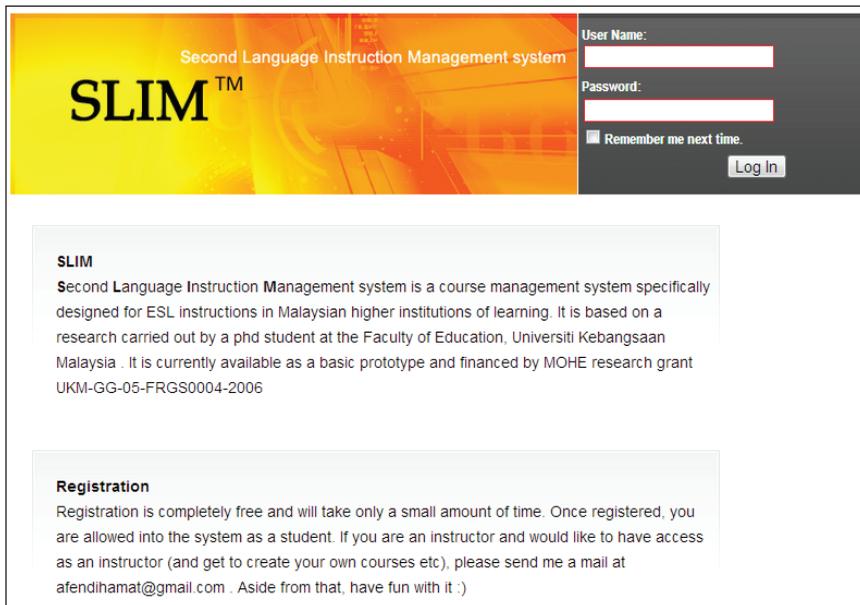


Figure 5.11: Second Language Instruction Management System (SLIM)

Recently, in 2010, under the FRGS Grant, Prof. Dr. Mohamed Amin Embi founded an open teaching portfolio management system known as T-Folio (see Fig. 5.12). T-Folio is the acronym for Teaching Portfolio Management System. It has been widely used by university lecturers all over Malaysia.

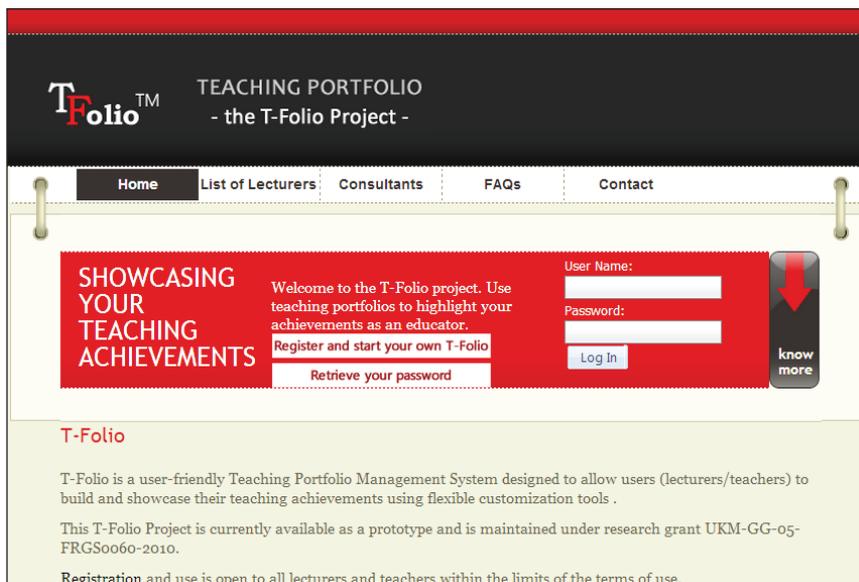


Figure 5.12: T-Folio

### Open Access Journals: VirTEC Journal, iJeLLT, MOJeL, & AJTLHE

UKM has also pioneered the establishment of several open access journals including VirTEC Journal, iJeLLT, MOJeL, and AJTLHE. VirTEC Journal, which was launched in 2000, is Malaysia's first open access online journal in the field of education. In 2004, an SIG Group on e-Learning headed by Prof. Dr. Mohamed Amin Embi launched another open access journal known as iJeLLT (Internet Journal of e-Learning & Teaching). Later, in 2008, iJeLLT was renamed as the Malaysian Online Journal of e-Learning (see Fig. 5.13). Recently, in 2009, UKM has also founded another open access journal called the ASEAN Journal of Teaching and Learning in Higher Education or AJTLHE (see Fig. 5.14). AJTLHE is indexed in the Directory of Open Access Journal (DOAJ), Ulrich's Periodicals Directory, Open J-Gate, Index Copernicus, E-Journals in Education, Malaysian Abstracting and Indexing System (MyAIS), and Ebscohost.

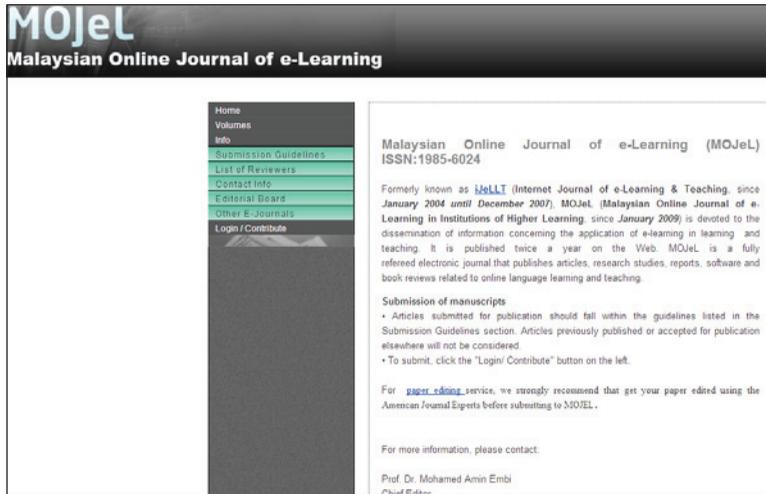


Figure 5.13: MOJeL

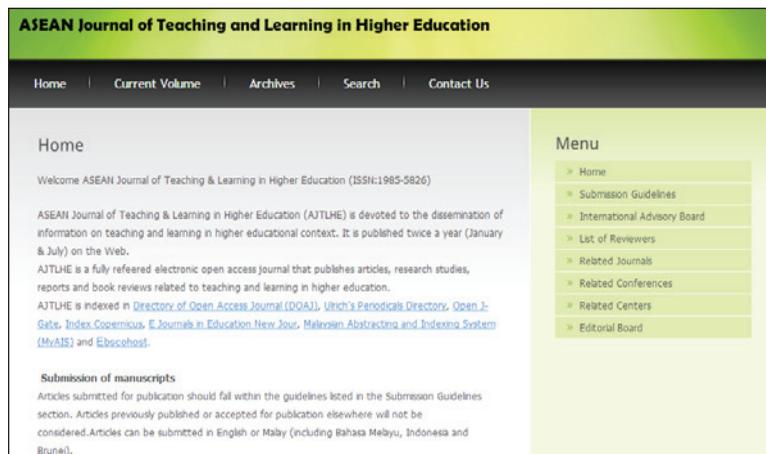


Figure 5.14: ASEAN Journal of Teaching &amp; Learning in Higher Education

## Recent Open Resource Initiatives

As mentioned earlier, recently, UKM has taken a step forward by embarking on a more structured and sustainable implementation of OER known as the ORI@UKM. ORI stands for Open Resource Initiatives and is meant to coordinate work related to OER initiated by faculty members and various faculties or institutions to share resources related to teaching, learning, and research to the world community. Among others, recent ORI in UKM includes (i) UKM Open e-Journal System, (ii) Web 2.0 OER, and (iii) JiT2U.

## UKM Open Access e-Journal System

As a way to disseminate and share scholarly work to the world community, UKM has recently embraced an open access approach to its academic journals. Through the implementation of the UKM e-Journal System which uses an open journal system framework, scholarly work published by UKM journals is now accessible to the world community (see Fig. 5.15).

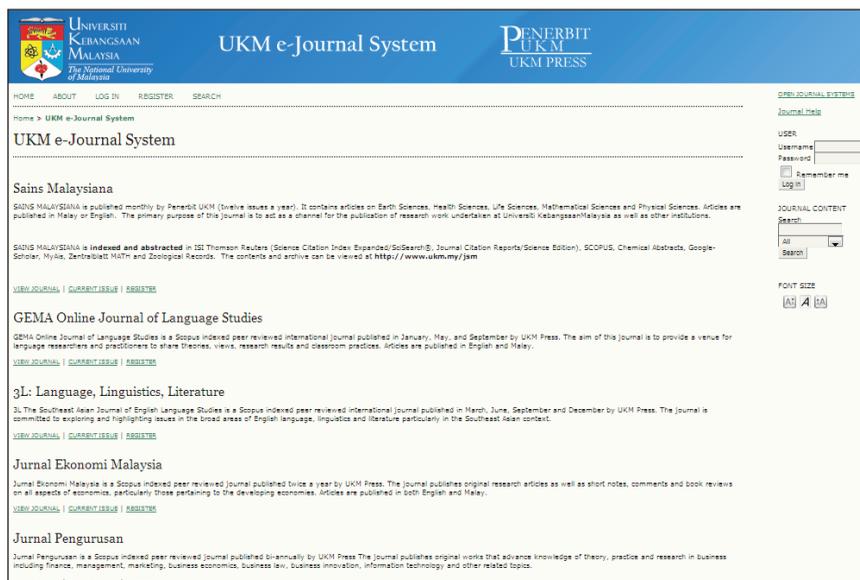


Figure 5.15: UKM Open Access e-Journal System

UKM has also pioneered the creation and dissemination of materials on the use of Web 2.0 tools for teaching and learning. In 2011, Prof. Dr. Mohamed Amin has initiated publication of a series known as the ‘Web 2.0 Tools in Education Series’ (see Fig. 5.16). So far, a total of 15 titles have been published in the form of e-books at Scribd.com. This series has recorded more than 700, 000 ‘reads’ worldwide in the past sixteen months. The following are the URLs of the ebooks published so far:

40 Must-Know Web 2.0 Edutools  
<http://www.scribd.com/doc/118928740>

Web 2.0 Mindmapping & Brainstorming Tools: A Quick Guide  
<http://www.scribd.com/doc/114424148>

Web 2.0 e-Publishing Tools: A Quick Guide  
<http://www.scribd.com/doc/104843525>

Web 2.0 Content Creation Tools: A Quick Guide  
<http://www.scribd.com/doc/98946511>

Web 2.0 Research Tools: A Quick Guide  
<http://www.scribd.com/doc/95039625>

Web 2.0 Annotation & Bookmarking Tools: A Quick Guide  
<http://www.scribd.com/doc/111778965>

Web 2.0 Survey & Polling Tools: A Quick Guide  
<http://www.scribd.com/doc/87624844>

Web 2.0 Sharing Tools: A Quick Guide  
<http://www.scribd.com/doc/74330492>

Web 2.0 Collaboration Tools: A Quick Guide  
<http://www.scribd.com/doc/81045414>

Web 2.0 Social Networking Tools: A Quick Guide  
<http://www.scribd.com/doc/74329853>

Web 2.0 Sharing Tools: A Quick Guide  
<http://www.scribd.com/doc/74330492>

Web 2.0 Tools in Education: A Quick Guide  
<http://www.scribd.com/doc/58594601>

Aplikasi Web 2.0 dalam Pengajaran & Pembelajaran  
<http://www.scribd.com/doc/65576530>

Aplikasi Perangkatan Sosial Web 2.0 dalam Pendidikan  
<http://www.scribd.com/doc/108797490>



Figure 5.16: Some Titles from the Web 2.0 Tools in Education Series

Presently, there is a one-stop centre on these Web 2.0 Open Educational Resources accessible at <http://www.scoop.it/t/web-2-0-learning-teaching> (see Fig. 5.17).

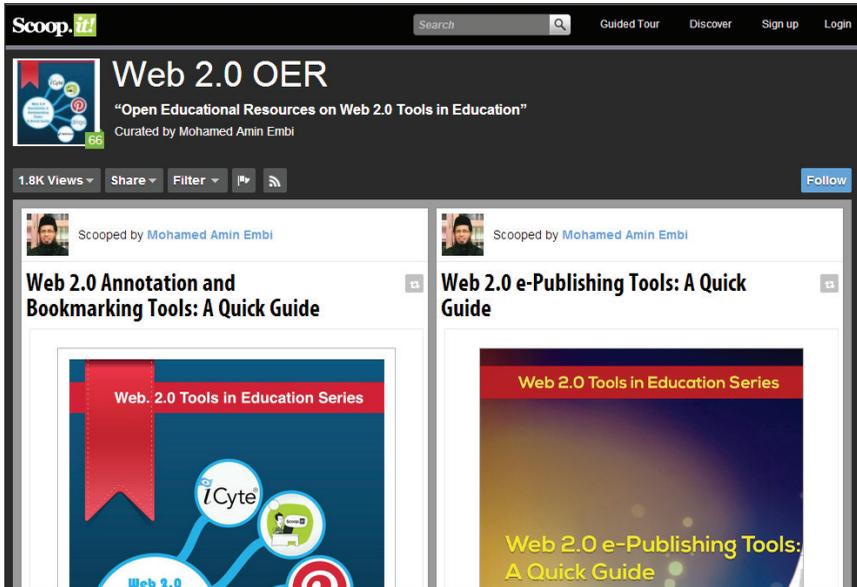


Figure 5.17: Web 2.0 OER

### JiT2U (Just-in-time Training 2U)

UKM has also pioneered the development and dissemination of Open Educational Resources in the form of mobile content. Recently, in 2011, Prof. Dr. Mohamed Amin and Dr. Afendi Hamat, developed and launched JiT2U or Just-in-time Training 2U (see Fig. 5.18). JiT2U which is accessible across any platform (Apple, Android, or Web-browser) is designed to introduce educators worldwide to how to utilise selected Web 2.0 tools in teaching and learning. In a period of twelve months, JiT2U has been accessed by users who are mainly educators, teachers, and lecturers from 106 countries (1026 cities) worldwide.

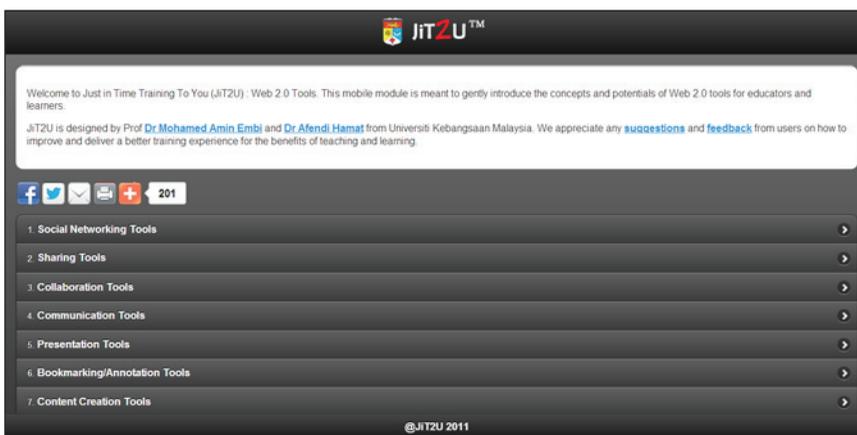


Figure 5.18: Just-in-time Training 2U (JiT2U)

## **Conclusion**

This chapter has presented a sampling of the efforts carried out by UKM to make available educational resources to all. UKM has recognised earlier on the value of the web as a method to cheaply and effectively disseminate information and knowledge. On the other side of the equation, UKM has also employed traditional media in order to raise awareness on the availability of the online resources. It is felt that a combined channel of web plus traditional media still has a strong role to play in OER. Most of UKM's early efforts are focused on language learning but these have since evolved to include a sharper focus on the utilisation of Web 2.0 services and resources. The reason is simple: UKM, as a national university, believes in enabling the richest and most contextualised sources of educational resources – the local educators themselves. It is hoped that this effort will enable more of our educators to produce open educational resources that are in line with the national contexts and local cultures.



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# Chapter 6

## OER@USM

*Hanafi Atan, Rozinah Jamaluddin & Abd Karim Alias*

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### Introduction

At Universiti Sains Malaysia (USM), the development and dissemination of Open Educational Resources (OER) to provide equitable access to knowledge and learning to the public have been given much emphasis. This has been even more apparent following the awarding of the Accelerated Programme of Excellence (APEX) status to USM by the Ministry of Higher Education in 2008 with one of the main strategies being the development of Open CourseWare. Figure 6.1 shows a strategy canvas for nurturing and learning as stipulated in the USM APEX transformation plan.

As can be seen in Figure 6.1, the domains in the “create” column are to “introduce non-traditional entry”, “create Open CourseWare” and “enhanced open learning”. With such a strategy canvas in place, various plans and strategies have been formulated in order to make OER@USM a reality. Apart from supporting the USM APEX transformation plan with regards to nurturing and teaching, the development of OER@USM is also targeted to make USM known globally as a leading sustainability-led university. In addition, OER@USM will pave the way for the provision of free quality education to the bottom billion all over the world.

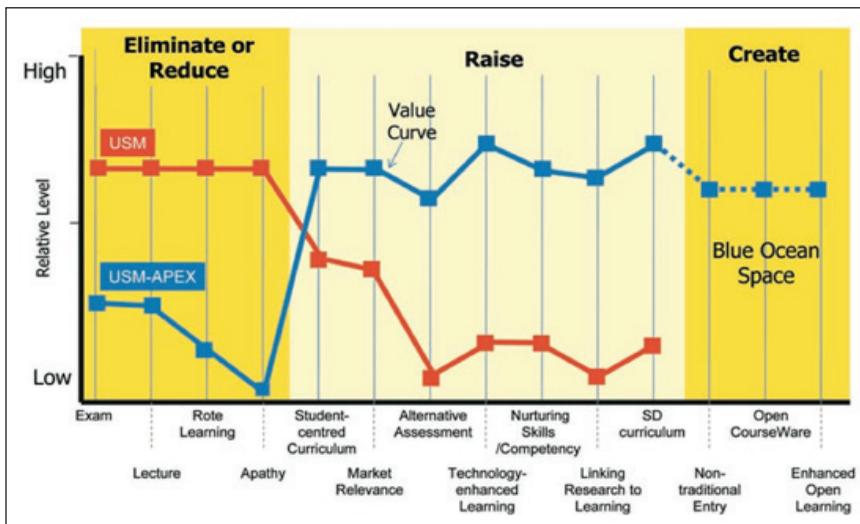


Figure 6.1: USM APEX Strategy Canvas for Nurturing And Teaching

Various committees have been set up by USM under the jurisdiction of the office of the Deputy Vice Chancellor (Academic and International Affairs) to spearhead the development of OER and its implementation with the co-operation of the various schools and service centres within USM. The development of OER kicked off when USM established the Centre for Development of Academic Excellence (CDAE) in January 2012; this centre has been given tasks specifically to oversee the development and the successful implementation of OER.

To ensure the efficient development of OER, the senior management of CDAE has also been exposed to the necessary knowledge and the latest trends in OER by attending various seminars and conferences related to OER as follows:

- i. Policy Forum for Asia and the Pacific: Open Educational Resources  
Plac: Bangkok, Thailand  
Date : 23–24 April 2012
- ii. 2012 World Open Educational Resources Congress  
Plac: Room II, UNESCO HQ, Paris, France  
Date : 20–22 June 2012

Various discussions, workshops, and trainings have been organised by CDAE to strategise and formulate the necessary models and process workflows to ensure the successful development of OER@USM. Sufficient manpower and financial resources have also been made available by USM to ensure the sustainability of the development and implementation of OER@USM.

## Development Models

Figure 6.2 depicts the development model of OER@USM.

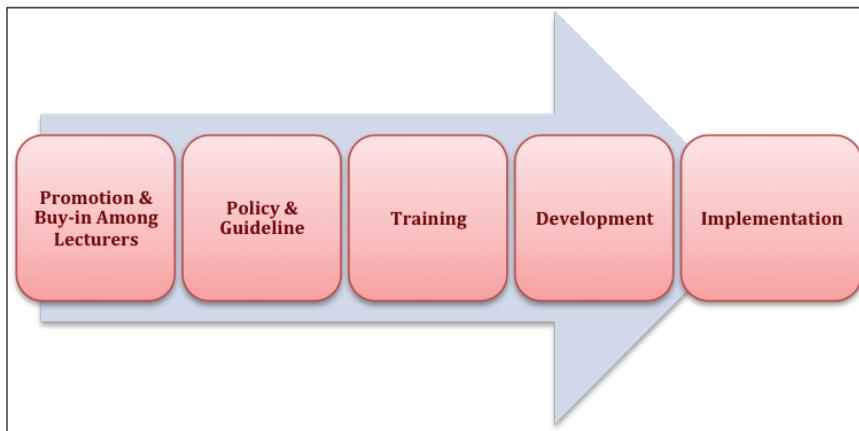


Figure 6.2: OER@USM Development Model

Within USM, CDAE is responsible for the overall development of OER@USM. The main elements in the development model of OER@USM are the following:

- i. Buy-in from lecturers
- ii. Policies and guidelines
- iii. Training

- iv. Development
- v. Implementation

### Buy-in from Lecturers

One of the crucial elements in the successful implementation of an OER initiative in any university is the support rendered by the top management of the university as well as the co-operation and participation from the various faculties/schools

The top management of the university was briefed on the planning, development, and implementation of OER, and the proposals for relevant policies and guidelines were tabled at a USM ICT Council meeting for its approval. The proposal plans received support and were approved by the Council; subsequently, the university is providing the financial resources and manpower to carry out such an initiative.

The next important aspect is to secure the buy-in from the lecturers. For this, CDAE has embarked on the process of buy-in four to six months in advance from the date of the commencement of development. The process focused on promotion and buy-in was achieved via road shows conducted at all the schools in the main and engineering campuses. Here, the lecturers were introduced to the concept of OER and its importance and their participation was solicited. A one-day seminar was also organised to provide exposure to the participants on OER and the roles that they need to play.

Figure 6.3 shows a road show session at one of the schools at USM undertaken by Professor Abd Karim Alias, the director of CDAE.



Figure 6.3: OER Roadshow

## **Policies & Guidelines**

CDAE is also responsible for the formulation of the policies and guidelines related to the development and implementation of OER@USM. The policies and guidelines were submitted to the USM ICT Council for approval and their development and implementation commenced as soon as the approval was granted. These policies and guidelines were strictly adhered to during the entire process of development and implementation.

## **Training**

Another important aspect of OER development and implementation is the training of the lecturers so that they acquire the necessary knowledge and skills to develop OER of the courses managed by themselves. For that, CDAE had also organised two-day OER seminars attended by about 80 lecturers, facilitated by Mr Zaid Ali Alsagoff of the International Medical University, a well-known expert in OER in Malaysia. Figure 6.4 shows the group photo taken at the end of the successful training of OER.



Figure 6.4: OER Training

## Development

The process flow of the developmental process involved various stages as depicted in Figure 6.5.

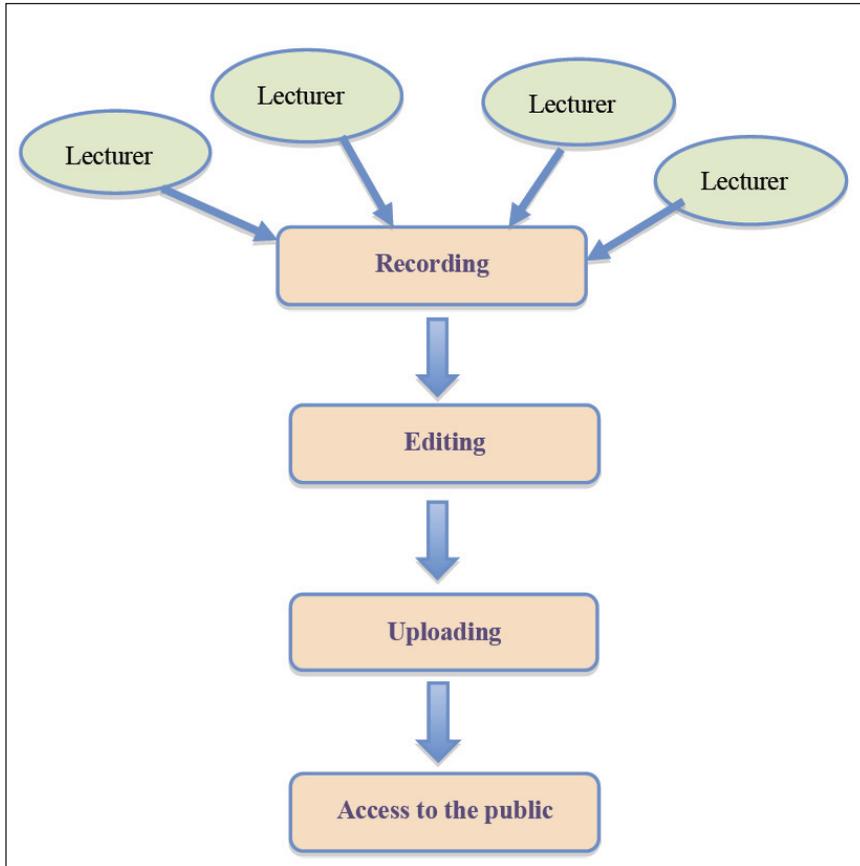


Figure 6.5: Developmental Process Flow

The process flow involved the processes of recording, editing, and uploading of relevant materials onto the OER@USM portal with the final stage being to provide its access to the public.

## Recording

There are two types of recording being deployed in the development of OER@USM:

- i. Lecture hall recordings
- ii. Studio recordings

### *Lecture Hall Recordings*

In this type of recording, every lecture given by the lecturers will be recorded with the recording being conducted from the beginning to the end of the semester. In this way, all the lectures for a

particular course will be recorded, a total of 40 hours of lecture recordings being provided for a course. Lecturers present their lectures as they normally do and the recording crew records the lectures as well as the presentations that appear on the white screen. Figure 6.6 shows a typical recording session in the lecture hall.



Figure 6.6: A Recording Session

### ***Studio Recordings***

In studio recordings, a green room is used with a dedicated recording crew and equipment. In these recordings, lecturers need to prepare their presentations so that the presentations are compatible with the requirements of the recordings. Again, the recordings will cover the entire 40 hours presentation of each course. Figure 6.7 shows a typical recording session in a green studio.



Figure 6.7: Green room Studio for OER Recording

### **Implementation**

The next stage of the development is the implementation. This includes editing, promotion and publicity, as well as the provision of 24/7 access to the public.

#### ***Editing***

All the recorded videos will be edited so that they conform to the standards stipulated by the policies and guidelines. They include the quality of the audio and video materials being recorded. Sub-titles will be added to the contents. Experts in each area will also review the contents of the videos. Irrelevant contents will be removed so that the final contents would be of the highest possible quality.

#### ***Promotion/Publicity***

CDAE is also responsible for the promotion and publicity of the course contents. In this regard, CDAE is working very closely with MEIPTA, the Ministry of Higher Education, as well as regional and international agencies to promote OER@USM.

#### ***Access to the Public***

The access to the public is made possible via a dedicated server and is managed by the Centre for Information, Knowledge and Information USM under the supervision of USM CIO, Zulham Hamdan. Appropriate technical support is also provided to ensure that the portal can be accessed 24/7 by the public.

Apart from the dedicated OER@USM platform which hosts comprehensive content, some selected features in the contents of the courses will be highlighted on common video platforms such as YouTube, Vimeo, iTunes U, etc. This will make OER@USM more visible regionally and internationally.

## Features of OER@USM

Apart from videos featuring lecturers presenting their lectures, other features will also be included in the courses, including course synopses, course notes, assessments, and other learning materials. These would ensure that the public is able to participate in all the learning activities similar to those made available to full-time students attending the courses.

## Launching

The launch of OER@USM took place on 10 January 2013 in conjunction with the annual message of the Vice Chancellor. Figure 6.8 shows a group photograph of all the lecturers and heads of units and departments together with the Vice Chancellor during the launching of OER@USM.



Figure 6.8: Initial Phase OER Development Team

## Conclusion

USM has embarked on the development of OER with the aim of supporting the PSPTN as well as the APEX transformation plan; at the same time, this is paving the way for USM to be known globally as a sustainability-led university. To date, USM has produced 222 hours of video recordings of about 19 courses involving 12 lecturers and the process is continuing into the second semester of 2012/2013. By the end of this academic session, USM hopes to be able to produce more than 500 hours of video recordings with these videos being made accessible to the public complete with other supplementary learning materials (lecture notes, syllabuses, assessments, etc.). It hopes that OER@USM would achieve its objective of providing equitable quality education to the public at large and, at the same time, foster academic collaboration in terms of teaching and learning among academicians all around the world.

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# Chapter 7

## OER@UPM

*Habibah Ab Jalil, Alyani Ismail, Sidek Ab Aziz & Chan Kim Fatt*

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### Introduction

Universiti Putra Malaysia (UPM) as one of the leading public universities in Malaysia has a critical role in supporting knowledge-driven economic growth strategies and the construction of democratic, socially cohesive societies. UPM is taking a step-by-step but systematic and holistic approach in approaching Open Educational Resources (OER) to the UPM community. There are several strategies undertaken by UPM at different levels—that is, from the top level to the individual effort. The Centre for Academic Development (CADE) is taking on the role of moving the OER within the university’s community by creating awareness among university members through trainings and other initiatives. There are serious movements in creating opportunities for OER development, which are: strategic planning through UPM ‘Teaching and Learning’ and ‘e-Learning’ policies refinement; research on e-content and e-content sharing; providing sufficient infrastructure and support system; and fostering a good culture of knowledge sharing. This chapter will give an insight on some of these initiatives.

### Infrastructure & Support for OER at UPM

UPM has been committed towards providing a technology-rich environment for OER, which offers a number of ICT infrastructure services by making assistance, information, and resources available online and at all times. UPM is also one of the founding members of the Malaysian Research and Education Network (MYREN) which provides dedicated network connectivity among major Malaysian universities and research institutes. MYREN is linked to Europe (GEANT2) through the TransEurasian Information Network (TEIN). Through this involvement, UPM is at the forefront of providing good ICT infrastructure, in particular to support the OER initiative.

To ensure fast access to information, the university strives to improve broadband facilities for staffs and students, as well as public access from the outside. Currently, UPM through InfoComm Development Centre (iDEC) offers a total of network aggregate bandwidth of 850 Mbps. This speed is enough to give fairly good access for the purpose of teaching and learning.

To strengthen the ICT infrastructure, in particular, to promote knowledge sharing through the OER initiative, UPM has provided a video-sharing portal called uCAST, developed by iDEC, where users can easily share audio and video files with the public through the portal. Figure 7.1 shows a screenshot of uCAST. To date, uCAST has nearly 800 video files uploaded, with nearly 500,000 times videos watched.

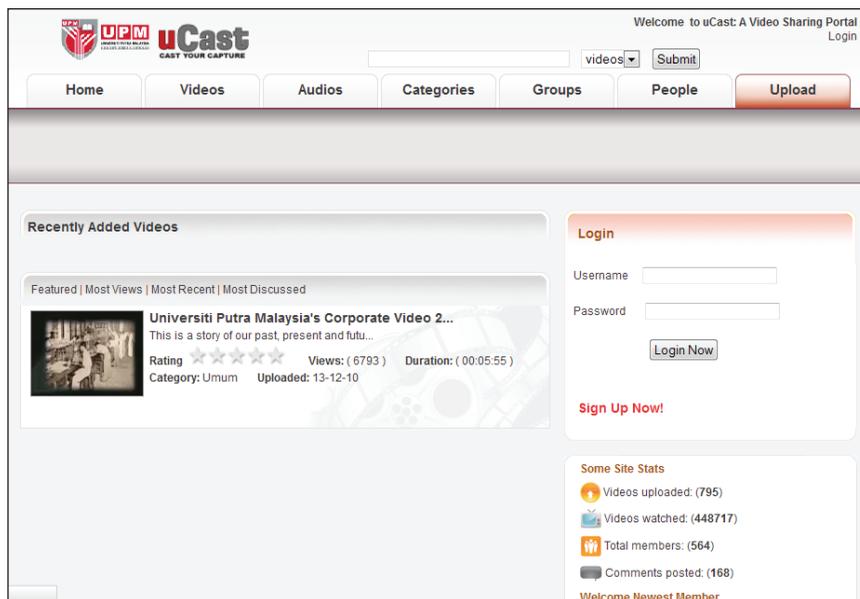


Figure 7.1: uCAST

## Awareness

An important facet to the university culture is faculty awareness, satisfaction, vitality, commitment, as well as creating an atmosphere conducive to active learning, within or outside the campus. Starting in 2012, a new training course in *Program Pembangunan Profesional Berterusan* (CPD) has been added by CADe, a namely, a Service Learning Workshop for all academics, and we believed it is a strong foundation to embrace a holistic university curriculum towards aligning course outcomes with community needs. Service Learning is an academic endeavour, being a counter-normative pedagogy, and through this approach, academia shall fully understand the value of their knowledge and expertise to the society, and how they can apply such an approach to their teaching and discipline.

## The Collaborative Organization

Innovative today is a continuous process of small and constant change, and it is built into the culture of successful universities. We believe that CADe or any organization could not move the OER without empowering participatory management. Therefore, through participations of faculties and other universities or entities, collaboration, and improvisation would emerge from the bottom up and from the outsids. CADe has invited faculties and research groups to collaborate, lead or support the university's initiatives through research, R&D, and knowledge-sharing programmes. CADe has also programmed a series of visits to other leading universities for collaboration and exchanging ideas.

## Institutional Initiatives

In line with the concept of OER, UPM had launched several flagship projects (FPs) to create an environment conducive to content sharing, and collaborative content development. Among the initiatives are the establishment of Content Repository (CORE), Virtual Resource Centre (RECENT), the ‘Make Learning Fun’ training series, and the e-Content Development Competition. These projects are closely monitored and reviewed by a team, co-ordinated by CADe to ensure its usefulness, usability, and suitability to the current trends in teaching and learning, as it is important in cultivating the culture of original content, development, and sharing among academicians. Figure 7.2 shows the overall model for the OER initiatives in UPM.

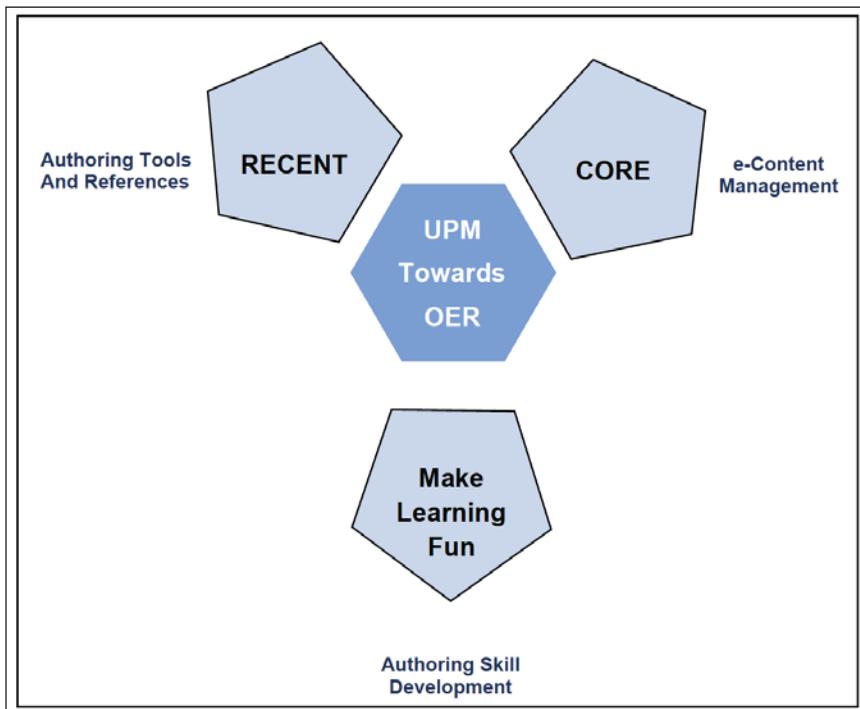


Figure 7.2: UPM's Initiatives Toward OER

### **FP1: Content Repository (CORE)**

CORE is a platform whose role is sharing and storing e-content. Rather than as an independent system, CORE will be developed as one of the ‘content providers’ for PutraLMS, which is currently the UPM’s official Learning Management System. Therefore, it is an integrated system which can also be easily integrated to other systems in UPM. So far, the technical part of CORE is ready for the execution and implementation of CORE. However, issues concerning sharing and intellectual property policies will have to be looked into further. To handle the intellectual property issue which most of the academicians are concern with, the terms and conditions of CORE have now been clearly stated in the UPM’s e-learning policy and the details

in its sub-document, so-called e-Learning Guidelines. Additional documents regarding the Content Provider-User Contract and e-Content Incentives are also in the process of refinement. Technical support for e-content development and protection is provided by CADe with the help of Infocomm Development Centre (iDEC).

### **FP2: Virtual Resource Centre (RECENT)**

RECENT acts as a one-stop resource centre for knowledge sharing in not only e-content development but also all other teaching and learning materials. Some e-content-related modules in RECENT include eKIOSK, Web 2.0 Toolbox, and Instructional Design Lab. All of these modules will include a bulletin board for discussion and idea sharing. The purpose of eKIOSK is to become a reference centre for the sharing of open source software or freeware. Web 2.0 Toolbox consists of a list of Web 2.0 tools and the samples of each tool respectively. Instructional Design Lab will help academicians by providing the content development support, e-Content Development Guideline, showcasing the best practices in e-content development. Furthermore, down the road, it is planned to include a support service to conduct and analyse pre- and post-test of using e-content or technology in teaching and learning to nurturing the rapid improvement in teaching and learning.

### **FP3: The ‘Make Learning Fun’ Training Series**

Nowadays, digital literacy is a crucial skill for every academic in the university. Therefore, CADe has conducted a series of training which was open to all the academics in UPM. Make Learning Fun is a training package as a result of the rebranding, review, and redesign of current e-learning training programs in UPM, with add-ons of the e-content development elements. Programmes included in this training package are ‘LMS Alive’ (formerly known as Course on PutraLMS), Web 2.0: Go World!, The Magic Box (formerly known as Tools for e-Learning) some technical seminars and forums for the sharing of knowledge and ideas. As a continuing effort to stimulate the interest of academicians towards e-content development, all the programs will emphasise showing successful examples, sharing the best practices, and promoting the concept of ‘My Content, My Style, My Way’.

## **OER: Individual Initiatives**

Since the late 1990s, much of individuals’ efforts are seen in developing websites that contain learning materials in UPM. Among them, these are some of the examples of profound initiatives of opening access to learning materials not just to the students but also to the public. Examples of the websites are shown in Figures 7.3-7.6.

### **Example 1: <http://ace.upm.edu.my/~bas/>**

Famously visited sites were created by Dr. Bahaman Abu Samah from the Department of Professional Development and Continuing Education Faculty of Educational Studies, UPM. The website was created in 1998 and still a useful source until now. This site contains complete and intensive training materials on statistics and research methodology that can be downloaded.

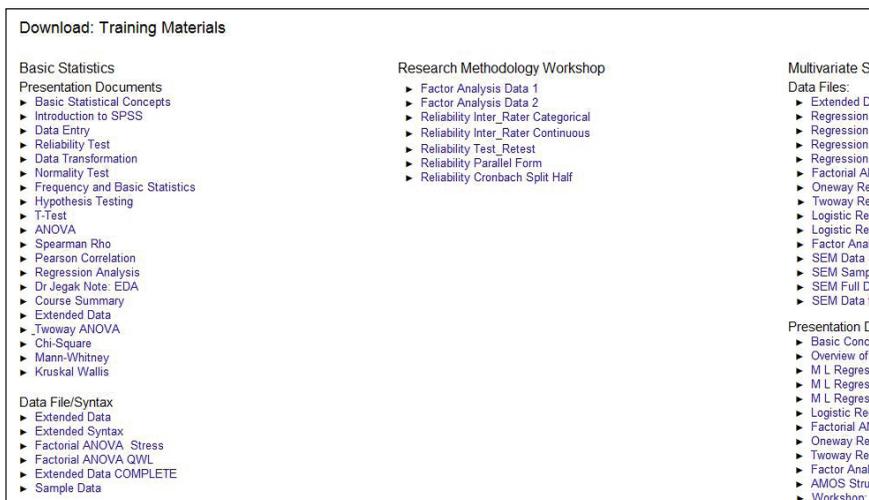


Figure 7.3: Example 1

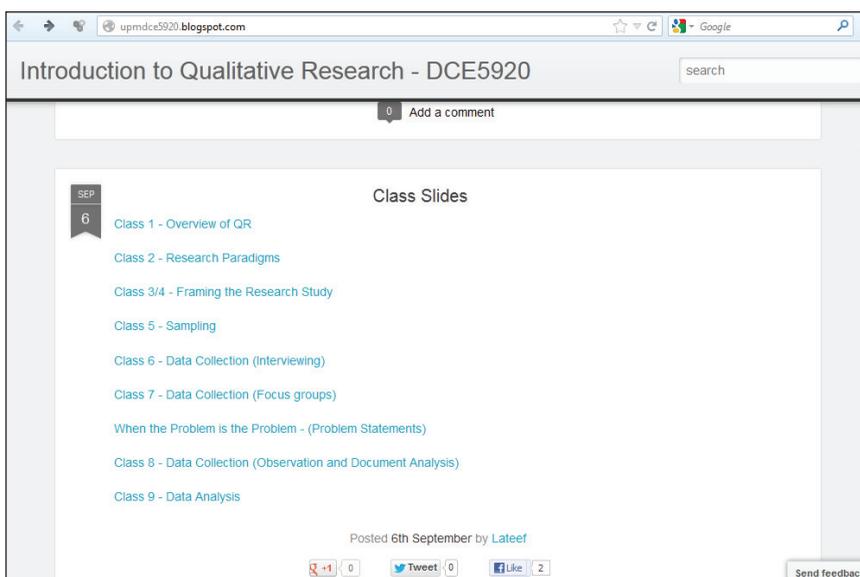
**Example 2: <http://upmdce5920.blogspot.com>**

Figure 7.4: Example 2

This blog was created by Associate Professor Dr. Steven Eric Krauss for the benefit of university graduate students of an introduction to qualitative research class, as well as anyone else who is interested in learning the basics of qualitative research methods. Along these lines, the blog contains information about the class including the course synopsis, class readings along with other useful resources related to qualitative research such as websites, articles, and Internet tools. In addition, the class lecturer includes resources for graduate students and researchers not directly related to qualitative research such as the website [turnitin.com](http://turnitin.com), which can be used to check one's assignments and written work for plagiarism. Although the blog was not developed

for interactive purposes, users are free to leave comments for the lecturer that can be responded to via the blog or other means such as email.

**Example 3:** <http://juridahrashid.blogspot.com>

A blog created by Madam Juridah Md Rashid from the Department of Language and Humanities Education Faculty of Educational Studies, UPM, is another internationally famous blog. Visitors from 87 different countries have viewed and used this site, of which 6,782 were Malaysian viewers and increasingly 4400 overseas viewers.



Figure 7.5: Example 3

This blog by Mdm. Juridah Md. Rashid is a very useful resource not just for the students as pre-service teachers, but also for other educators in fields all over the world. It was created to provide a platform for all students in her literature class to hold discussions on chosen issues/topics pertaining to the prescribed texts. Students need to voice their opinions and reactions to the chosen topic. The majority of the students in her class would usually become the passive listeners rather than the contributors to the class discussion. Blogspot allows students time and space to share their thoughts and reactions, as they do not need to physically face their course mates. Slowly, they gained their self-confidence in voicing their interpretations/thoughts. These thoughts reflect their understanding of the literary texts they read. Most of the literary texts they read are texts used by students undertaking literature programs from all parts of the world. The views they shared are uniquely views of learners reading literary texts in an ESL environment.

**Example 4:** <http://share.snacktools.com/597D95D9E8C/fukabj9u>

A more recent initiative in course sharing through implementing Web technology has been made by Prof. Dr. Sidek Ab Aziz from the Department of Physics, Faculty of Science. e-FlipBook (e-Book) was used to support his classes and was made available freely to public.

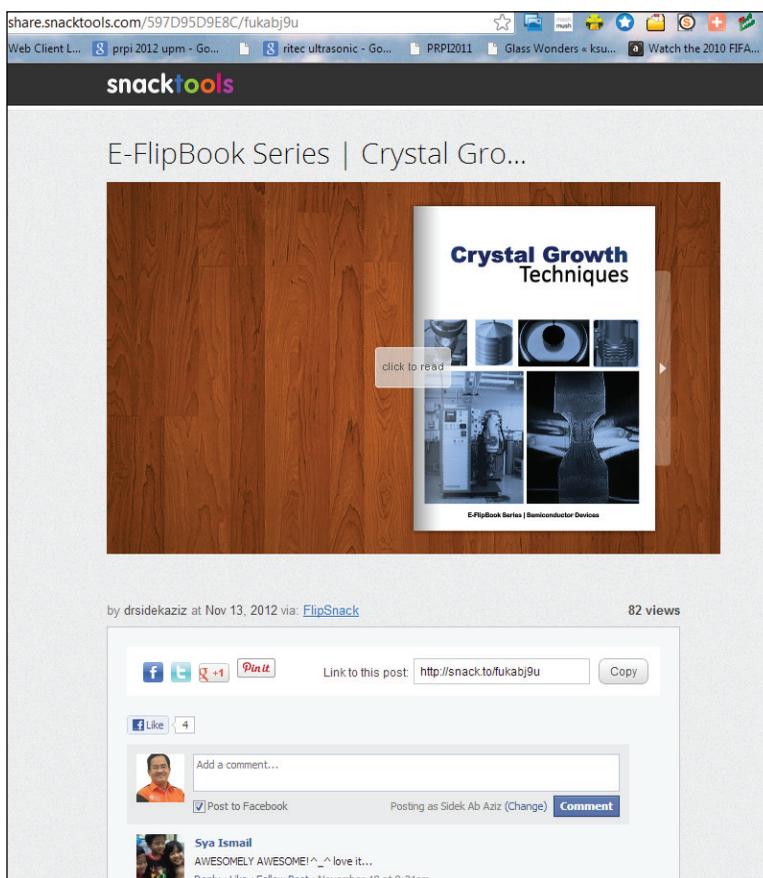


Figure 7.6: Example 4

Fundamentally, e-books are usually read on dedicated e-book readers or general-purpose computer tablets. Personal computers and many mobile phones (most smart phones) can also be used to read e-books. The e-books and other technology like 2.0 which enable the development of OER content, is believed to be a driving factor to enhance the learning communities through OER.

### Research Related to OER: Current Scenario in UPM

Recently, in 2012, CADE involving 90 lecturers from various backgrounds and faculties in UPM conducted a survey of ‘Acquisition and Sharing of eContent’. Among the objectives of the survey is to see the perception of the academicians in UPM towards e-content sharing.

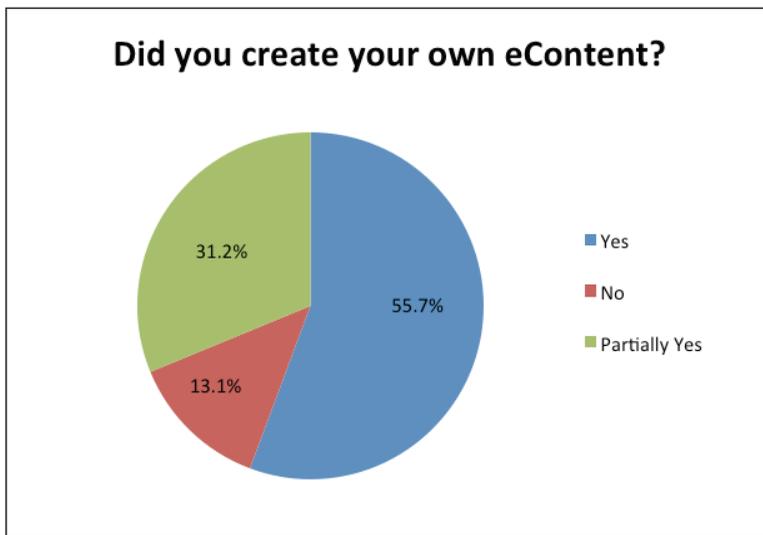


Figure 7.6

Based on the survey, 86.9% of the lecturers create their own digital content for learning materials, either partially or completely. This shows a positive sign of UPM’s academics towards original e-content development, which is one of the criteria that accounts for content sharing in OER, whereby the individual efforts and initiatives are crucial.

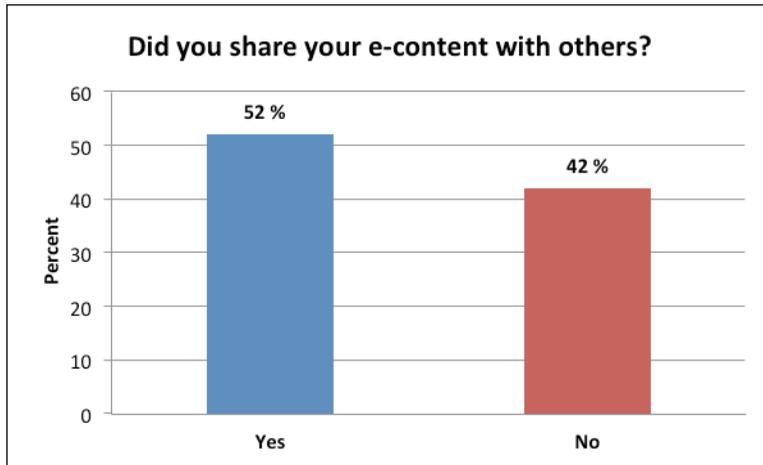


Figure 7.7

In terms of sharing their e-content, 55% of the lecturers share their materials with others. This is still considered acceptable at the current stage. However, more studies are required in terms of ownership, and awareness programs need to be conducted in order to achieve a higher percentage of lecturers' willingness to share e-content. Ownership issue as the policy to protect the intellectual property has not been fully implemented and requires further refinement. It is believed that the rate of sharing will increase after the implementation of CORE, awareness programme, and the new UPM's e-learning policy.

Regarding the willingness of sharing e-content materials among academicians in UPM, the study has put in four different scenarios of e-content sharing. The results for four different situations are as follows:

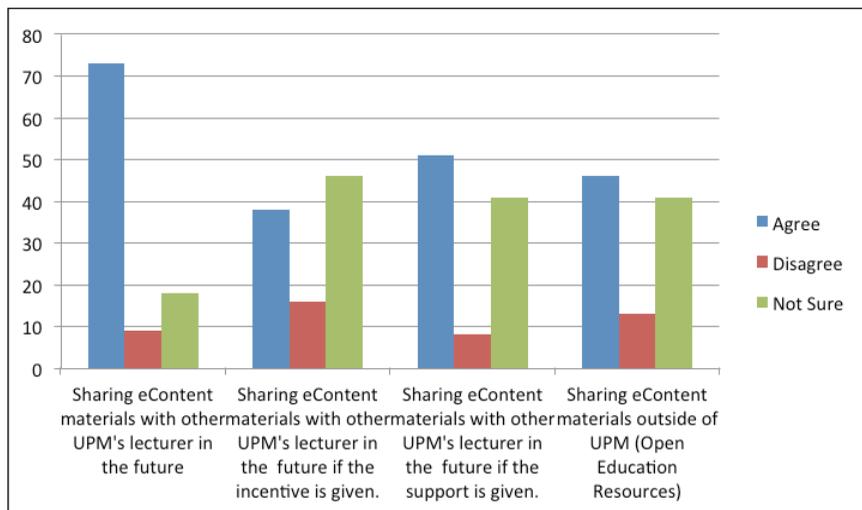


Figure 7.8

The results clearly show that most of them are willing to share their materials with other lecturers in the university but are not necessarily driven by incentive. However, most of them

need support to share but were not sure of this aspect. In other words, they were not clear to what extent they would be supported by the university. In terms of sharing their content with the public, specifically to the public, only 13% disagree, 46% agree, and the remaining 41% are not sure of this matter. This result seems to show that the academics did not fully comprehend the idea of sharing their e-content with the public. For those who were not willing to share, the respondents were asked for their reasons for not sharing the e-content with others. Table 7.1 display is the analysis on the reasons why they do not want to share their e-content.

Table 7.1: Lecturers’ reasons for not sharing their e-content with others

		Percentage %	
		Yes	No
a)	No enforcement	39	61
b)	Not given the space/opportunities	21	79
c)	There is no need to share	39	61
d)	No one wanted to share with me	5	95
e)	Trouble for me	5	95
f)	I do not benefit from sharing	8	92
g)	Sharing will only facilitate the work of others, not me	8	92
h)	There is no encouragement from any party	18	82
i)	No support from the university	5	95
j)	No training was given	45	55
k)	Not skilful	32	68
l)	Concerned about privacy or security	18	82
m)	I’m embarrassed to share it with others	0	100
n)	I have no time to think about how to share	3	97
o)	I need to keep my title from being used indiscriminately	5	95
p)	They are mine, then it is my right to not share with others	3	97
q)	I think other people can produce better e-content to be shared	11	89
r)	To produce e-content is the university’s responsibility, not mine	13	87
s)	The materials produced are unique, they are suitable for only my use	13	87
t)	The university platform does not allow me to share	5	95
u)	I do not know how to share through existing platforms	21	79
v)	The available platform is quite difficult to allow sharing	5	95

Findings in Table 7.1 show that most of the items are scored for ‘No’ and the highest score for ‘Yes’ is on training. This shows that they were positive towards sharing but training could be

the factor which hindered them to share. As the ‘No’ or disagree with the reasons is mostly high, it shows that to some extent, they do accept the concept of sharing. This is possibly true when most of them are involved in course sharing. Be it at the individual, faculty, or institutional level, there is some degree of awareness, morale, enforcement, and support existing in the university. It is just a matter of inculcating the liberalisation of such new education into the university culture that is the main concern.

## **Conclusion**

Understanding the concept of OER may be significant in helping instructors in universities and higher institutions to develop new thinking of new knowledge construction to the people outside their classroom. The use of OER can be perceived, not as a more rational improvement to education, but as a further refinement in the exercise of education. While the use of OER might circumvent the more overt practices of discipline exacted by the traditional institution—regulating, organising, and categorising the bodies of its learners—it is problematic to assume that such a form of open education is emancipated from the regimes of control and subjectification. ‘Knowledge sharing’ is believed to be an important aspect which should be addressed in the universities, as well as of other efforts to put OER in place and this exactly what UPM is venturing into.



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# Chapter 8

## OER @ UiTM

Nor Aziah Alias, Azlan Abdul Aziz, Mohd Ali Mohd Isa, Mohd Nor Hajar Hasrol & Mohd Nor Mamat

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### Introduction

Contemporary educational practices such as the development and provision of Open Educational Resources (OER) are indeed necessary to promote accessibility and equal opportunities to learners and educators. The impulsion to share knowledge and expertise via online resources available to anyone in the world within the limits of stipulated use has been shared by many higher education institutions including Malaysian universities that are also paving their way to stay relevant and comparable to distinguished OER providers such as Massachusetts Institute of Technology, Harvard University, and Stanford University. The earlier chapters have described several initiatives by these Malaysian universities. In the context of Universiti Teknologi MARA (UiTM), readily available open resources include open access journals such as *Jurnal Intelek*, *Terengganu International Management & Business Journal*, *Social and Management Research Journal*, *AJUE (Asian Journal of University Education)* and many others. An online database called PRISMA (Publication Repository Information System Management) also hosts publications of UiTM lecturers and are available as research resources to a wider audience (see Fig. 8.1).



Figure 8.1: PRISMA (Publication Repository Information System Management)

OER is defined as ‘technology-enabled, open provision of educational resources for consultation, use and adaptation by a community of users for non-commercial purposes’ in the first chapter of this book. In addition, OER has also been defined by the William and Flora Hewlett Foundation to mean 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 or re-purposing by others. Thus Open Educational Resources (OER) include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials or techniques used to support access to knowledge.

This chapter focuses on the teaching and learning resources, rather than the research resources. Although educational resources are not entirely available to non-registered users, Universiti Teknologi MARA has taken steps towards the provision of such resources and mooted their use among members of the university. Thus, the chapter is limited to discussing the potential adoption of OER, the development of OER for teaching and learning, the provision and delivery of OER, and the possible challenges to both OER adoption and OER development within the UiTM context.

A brief description of the characteristics of OER is seen necessary to frame the discussion that ensues. In this chapter, OER are basically teaching and learning materials that are free for use. The term OER is used synonymously with Open CourseWare, open e-learning content, or open digital content. An excellent illustration of the different forms of OER with examples to demonstrate the categories is given in Figure 8.2.

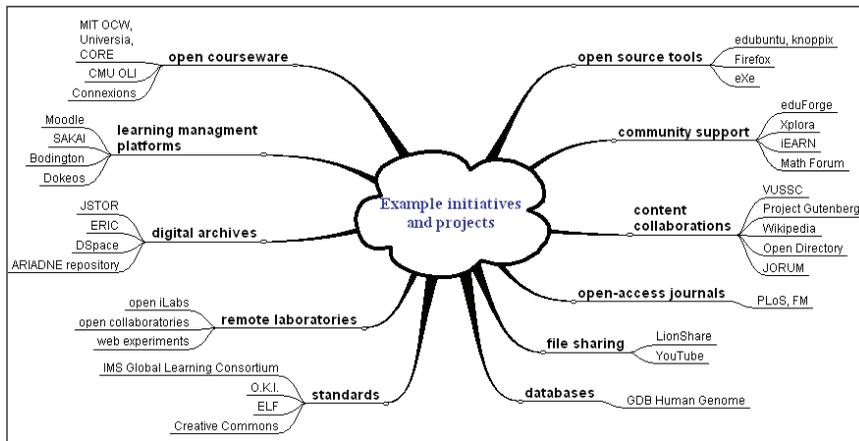


Figure 8.2: OER Categories and Examples (Source: Tuomi, 2006, Open Educational Resources)

As per UiTM initiatives, much effort has been put into the learning management platform, databases, and open access journals.

### Adoption of OER at UiTM

There are isolated cases of UiTM academics making use of OER from established universities to teach. The i-Learn Center provides awareness to the academic staff via its online pedagogy training modules and through talks given during the basic teaching courses that are mandatory for new academic staff to attend. Nevertheless, there has not been any formal or systematic study done on the adoption of OER.

## Development of OER at UiTM

Universiti Teknologi MARA (UiTM) started the formal development of learning resources since the inception of its distance-learning programme in the 1990s. In 1998, the online Flexible Learning Program (FLP) was established, promoting a more active process of developing self-instructional materials or SIM. These SIMs were mostly print; they have been migrated to digital content to accommodate the growing needs of users from all over the country. To date, more than 300 e-modules have been shared by the university community of more than 150,000 students and 8,500 lecturers. It is expected that in due time, the vast resources existing within the university will be shared with other non UiTM users

Two centers are responsible for the development of learning resources in UiTM. These are the university e-learning center called the i-Learn Center and the university distance-learning arm now known as the Institute of Neo Education (InED). The i-Learn Center is responsible for the university e-learning agenda including planning, training and evaluation of projects. The center hosts a department that solely oversees the development of digital content for the consumption of university lecturers and students. The Institute of Neo Education, on the other hand, handles distance learning and off-campus learning programmes. The creation of e-content is thus pertinent to ensure that distance learners are supported.

Though the resources developed by i-Learn and InED do not possess the full attributes of OER, they are seen as the initial indication of UiTM initiatives in propagating OER and the move towards active production and sharing of OER. Figures 8.3 - 8.11 that follow illustrate the different types of resources available.

### a) *Self-instructional materials (SIM) or Digital SIM*

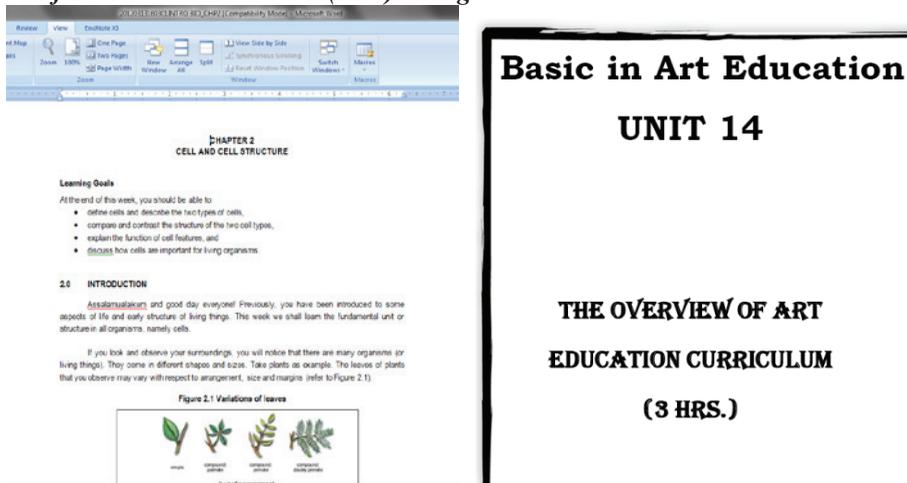


Figure 8.3: Self-Instructional Materials

### b) *Courseware*

The courseware are either developed under the vendor-supported programme or individually developed by lecturers with the support of the i-Learn Center.

FACULTY OF MEDICINE  
ORTHOPAEDIC SURGERY

BONE TUMOURS  
HOME X/XX



### BONE TUMOURS

The objective of this tutorial is to provide a brief overview on bone tumours.

It is best that you recommended texts at hand while perusing through the slides for ease of understanding.

Please attempt the exercise at the end of each section to further enhance your knowledge on the topic.



Faculty Of Electrical Engineering  
ELE421 Basic Electronic

Chapter 1 : Semiconductor Diodes  
Topic 1.1 : Introduction 2/23

## INTRODUCTION

- Application of electronic devices in electronic system are communication (TV, radio, VCR etc.), digital system, industrial system, medical system, instrumentation and others.
- In 1940's electronic system such as radio, TV and computers were constructed using solid state components replacing vacuum tubes. Solid state component are made from elements that classified as semiconductor elements.
- Semiconductor means neither a [conductor](#) nor an [insulator](#) but rather lies halfway in between the two. The resistive properties of a semiconductor can be varied between those of a conductor and those of insulator. Semiconductor material such as silicon and germanium have four electrons valence. Si and Ge was the most commonly used semiconductor materials in the industry.



 i-Learn Center
 Home
 Previous
 Next
 Site Map
 UNIVERSITI TEKNOLOGI MARA

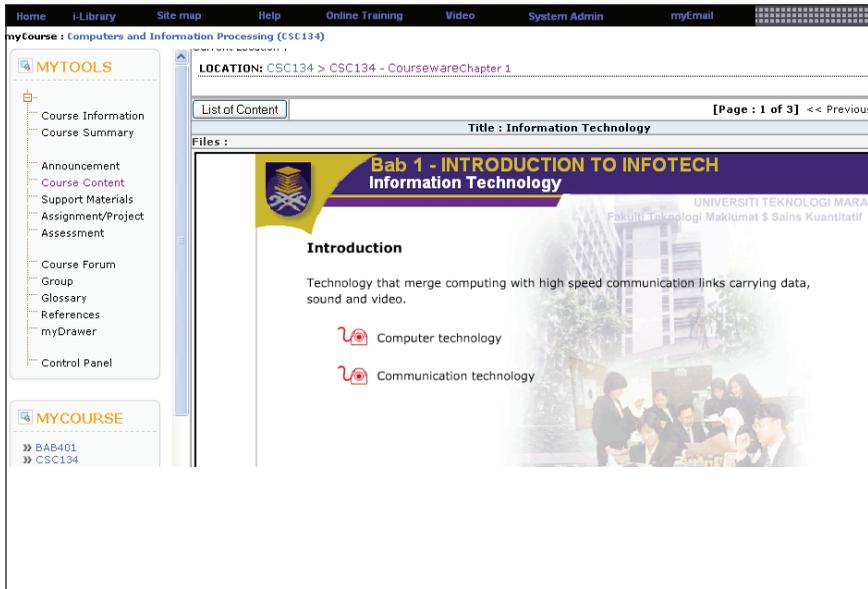


Figure 8.4: Courseware

### c) Learning videos

Learning videos are developed by individual lecturers or groups of lecturers. Though the collection is very minimal, these videos are made available on the i-Learn portal.

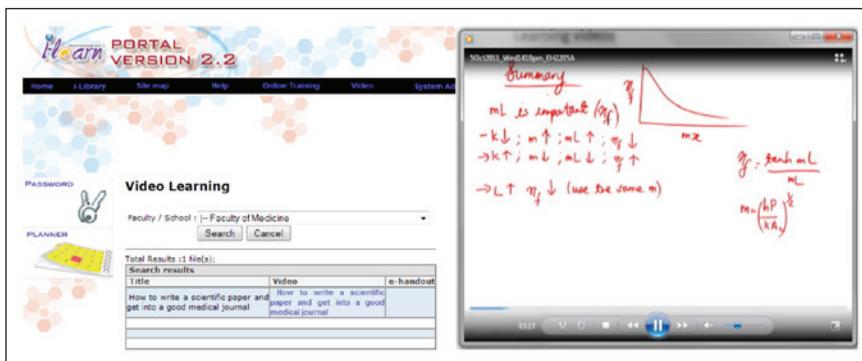


Figure 8.5: Video Learning in UiTM

The latest e-content project in UiTM is the production of teaching videos using a tool developed by a professor at the Carnegie Mellon University. The videos are of good quality; a 1–15-min presentation was produced, edited, and uploaded within an average time of 30 minutes to an hour. The fast and efficient process of creating, uploading, and sharing the teaching videos is the driving factor for the development of OER of this form. UiTM is currently procuring various software and setting up special dedicated servers to support video learning among students

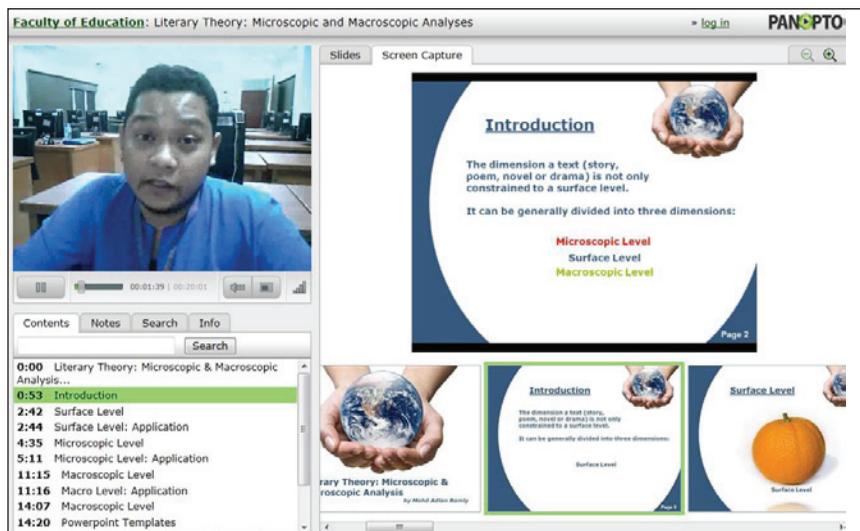


Figure 8.6: Teaching video

**d) Online training materials**

Online training materials are currently available on the UiTM learning management portal. This is another avenue for further provision of free training. The i-Learn Center is currently developing 15 training modules related to e-learning. These include both specific and general modules on software packages, instructional design, and online pedagogy. Most are nearing completion and will be made available to academic staff and to other non-UiTM users once the OER platform is established.

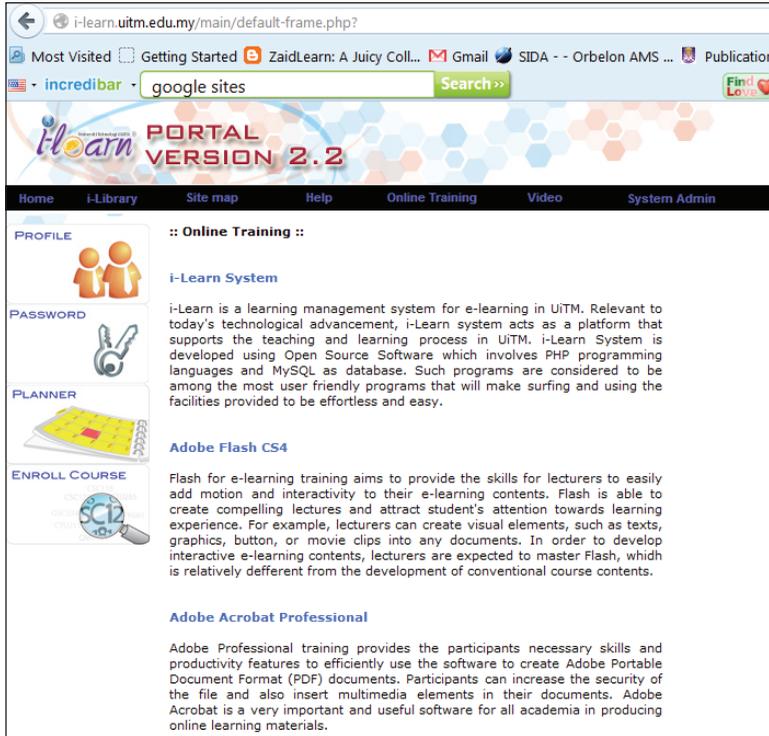


Figure 8.7: Online Learning Materials

**e) The i-Library**

The i-Learn portal's i-Library is poised to be a treasure trove as more digital contents are procured and uploaded for user consumption. As this point in time, the i-Library hosts hundreds of e-modules developed by UiTM staff. These are available to both lecturers and students. Users only need to search by faculty to get the list of available resources.

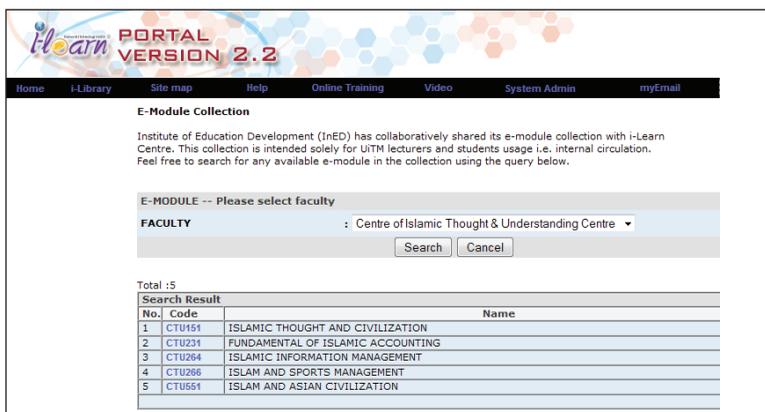


Figure 8.8: E-Module Collection

The i-Library also provides links to other educational resources.



Figure 8.9: Links to Educational Resources in the i-Library

**f) Slideshars and websites by individual lecturers**

Sharing files via Slideshare and placing resources on one’s website are among the most common forms of sharing resources among the university lecturers

**g) Sharing of resources among lecturers**

A culture of sharing among academics is an important pre-requisite for successful OER use and development. UiTM has in essence provided groundwork for sharing; course contents are built-in folders accessible to all instructors teaching the subject. Junior lecturers are grateful for this feature that allows them to view, download, and use the materials provided by the more senior and experienced lecturers. This in turn serves as a cross-check for accuracy and quality of the materials given to the students.

The screenshot displays the i-Learn Portal interface for the course "RESEARCH METHODOLOGY (EDU702)". The top navigation bar includes "Home", "i-Library", "Site map", "Help", "Online Training", and "Video". The course title is "myCourse : RESEARCH METHODOLOGY (EDU702)".

**MYTOOLS** (Left Navigation Menu):

- Course Information
- Course Summary
- Announcement
- Course Content
- Support Materials
- Assignment/ Project
- Assessment
- SuFO (Team Teaching)
- Ent/Exit Survey
- Course Forum
- Group
- Glossary
- References
- myDrawer

**List of Course Content (EDU702)** (Main Content Area):

LOCATION: EDU702

**Lecturer**

- DR JOHAN @ EDDY LUARAN
- DR NOR AZIAH ALIAS
- DR TEH

---

**List of Course Content (EDU702)**

LOCATION: EDU702 > Dr Nor Aziah Alias > WEEK 4

**Name**

- 1 SIM 3
- 1 ACTION RESEARCH
- 1 SAMPLE QUANTITATIVE RESEARCH
- 1 VARIABLES AND DESIGN
- 1 LITERATURE REVIEW AND FRAMEWORKS
- 2 VIDEO SESSION 1: RESEARCH FAQS
- 3 VIDEO SESSION 2: LR, VARIABLES AND CONSTRUCTS
- 4 LINK TO VIDEO
- 5 LINK TO VIDEO 2

---

LOCATION: EDU702 > Dr Nor Aziah Alias

**Name**

- 1 COMMENTS AND FEEDBACK - QUIZ 2, PRESENTATION, PORT
- 2 START HERE
- 3 WEEK 1
- 4 WEEK 2
- 4 WEEK 3
- 5 WEEK 4
- 7 WEEK 5
- 8 WEEK 6
- 9 WEEK 7
- 10 WEEK 8
- 1 LINK TO GOOGLE SITES
- 2 OUR WALL
- 3 SHARING OUR IDEAS ON RESEARCH

Figure 8.10: Sharing of Teaching Materials on the i-Learn Portal

Lecturers are also allowed to add or enrol in a specific course. By doing this, they have access to the course and may in fact, learn new things from other lecturers. The academics thus have access to learning materials that not only support their teaching tasks but also incite their motivation for continuous and lifelong learning.

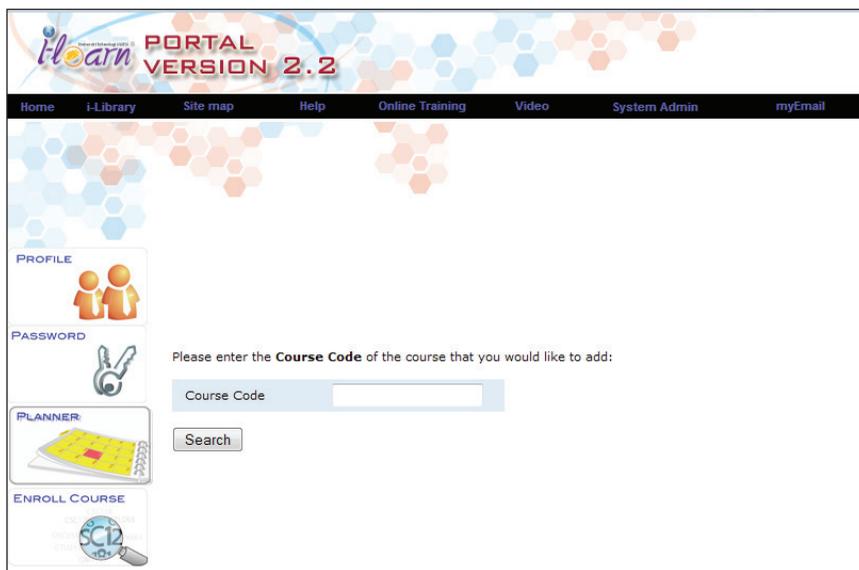


Figure 8.11: Enrolling in Any Course Available on the i-Learn Portal

The previous sections have elucidated the antecedents, the potential forms of OER, and the different technology platforms that may be used to support OER. It is of the opinion of the writers that in terms of technology, UiTM is ready to embark on the provision of OER. Some author suggests that OER should include

- a) Learning Content: Full courses, courseware, content modules, learning objects, collections, and
- b) Journals
- c) Tools: Software to support the development, use, re-use, and delivery of learning content including searching and organization of content, content and learning management systems, content development tools, and on-line learning communities.

These are available in UiTM. The next step is to make them available to all. The project nonetheless requires a concerted effort among academics, technical personnel, and infrastructure. Legal issues and instructional issues are among other factors to consider too.

### Challenges to OER Adoption & OER Development in UiTM

As illustrated in the earlier sections, there are many practices and features in the existing system that support OER use and development. UiTM is confident of establishing a functional and sustainable OER platform and advocating knowledge as a public good. The i-Learn Learning Management System has elements such as the i-Library that may be made accessible to other non-registered users. Open course websites may also be swiftly generated since the growth

of digital content in the i-Learn portal has been monumental in the past year. The i-Learn Center also envisions speedy development of OER and OCW (Open CourseWare) using rapid e-learning tools that are readily available in the market. However, there are issues and concerns that must be addressed especially in relation to the people involved in OER use and development.

**1) *Awareness and adoption of OER***

Though the university's top management is championing e-learning, the notion of open, and free educational resources for all has not caught up with many academics. Awareness of OER and OCW among the academics is still at a low level. In a massive institution such as UiTM, the trickling down of information requires super-efficient channels. In terms of adoption, the vast resources may overwhelm instructors; thus, training is necessary. Lecturers should not be left to deal with the OER without assistance. The 2012 Babson Report on OER in US Higher Education found that time and effort to find and evaluate OER to be the most important barriers by faculty to the adoption of OER.

**2) *Access and technology competency***

As of March 2012, more than 600 lecturers are 55 years of age or above. More than 20% of academics in the whole UiTM system are 50 and above. Though it is not fair to make generalizations, many of these seniors tend to be less competent and skeptical towards online learning. Searching for the best OERs may become a chore to these lecturers. This is again supported by the recent Babson Survey Research Group report where it is stipulated that the older faculty have a greater level of concern with OER adoption than do younger faculty.

**3) *Time and commitment of lecturers***

The university main plan, for instance, research, plays a big role in thwarting the development of OER. Since the process takes time, academics may opt to not develop OER and concentrate on research output that will ultimately be evaluated for promotion and salary increase.

**4) *Culture of sharing***

Perhaps the most pressing concern is the lack of culture of sharing among academics. Traditional teaching sees the lecturer as the 'master' and the provider of knowledge. The tendency to regard one's teaching materials and resources as one's own is still prevalent among Malaysian academics. Acculturation of resource and information sharing, the idea of open access, re-using and improving the resource—these are still not widely held by most academics.

**5) *Quality of OER and understanding of copyrights and creative commons attributions***

This is a perennial issue in e-content development. OER and their capability of being used and re-used stand to be the point of debate especially among those with the 'the textbook is the course' mind-set. There are academics who prohibit the circulation of their teaching materials, proclaiming intellectual rights and individual work. In relation to the above, understanding of copyrights and the creative commons are pertinent to successful adoption and production of OER.

There are other challenges that necessitate careful planning in the adoption and development of OER. The few that have been described are the more pressing issues. Other institutions of higher learning embarking on similar project should also scrutinize these issues to ensure sustainability and impact of OER in learning.

## **Conclusion**

The chapter gives an account of the potential of OER adoption and development in UiTM. Though the pace has been slower than planned, UiTM has various mechanisms in place. These will inadvertently support the OER initiatives; it is hoped that active OER adoption and development will take off without substantial financial and technology implications.

# Chapter 9

## OER@IIUM

*Nuraihan Mat Daud & Mohd Azrul Azlen Abd Hamid*

### Introduction

The International Islamic University Malaysia (IIUM) has Integration, Islamization, Internationalization, and Comprehensive Excellence as its missions. In order to achieve these, it is open to innovative ideas which include the adoption of technology in knowledge dissemination. The past few years have seen a steady increase in the number of educational resources that are made accessible to the public. In order to find information on the university, other than on its official website, users also have the option of browsing Wikipedia (see Fig. 9.1). Wikipedia is an online free-content website that brings knowledge and resources to everyone who seeks it.

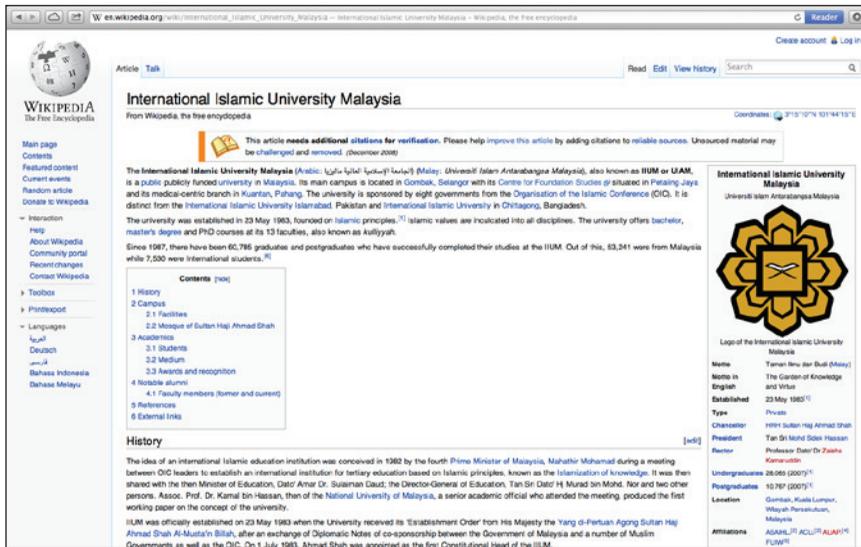


Figure 9.1: Information on the University on Wikipedia

### IIUM Repository

The Research Management Centre of the University was given the task of developing a database of staff's research and publication. The system was known as the e-Publication system. The

database, however, was not made accessible to the general public. To encourage the staff to share and promote their publications, the IUM Repository (see Fig. 9.2) was introduced to the staff of the university in June 2011. It is a digital repository of documents and scholarly output of IUM staff encompassing various subjects and disciplines. It is to maximize access to their work. This repository is accessible at <http://irep.iium.edu.my>. Staff of the university are instructed to deposit into IREP the works that they produced particularly from 2010 onwards. These include a section of their books, book chapters, monographs, articles, conference papers, and workshop materials. Apart from the written works of IUM staff, those that are produced collaboratively with other parties are also deposited into the IUM Repository. The information is freely available on the Internet, and the full-texts of some of the documents are easily accessible to the Internet users. The items deposited by the staff are used by the management of the university in the assessment of their performance. It is integrated with other systems of the university, which include an online CV system and the yearly assessment system called APAR (Annual Performance Appraisal Report).

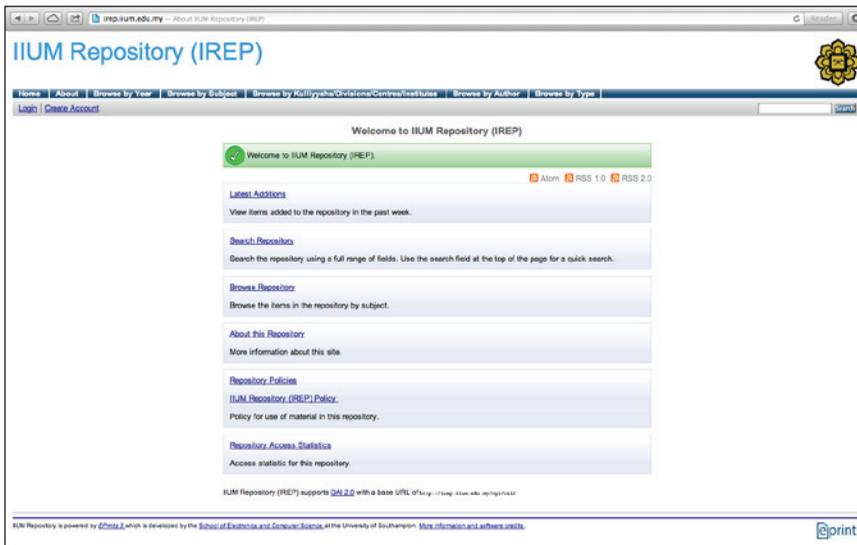


Figure 9.2: IUM Repository

Materials that are deposited are verified by the university librarians. Those who are interested can browse the materials by year, subject, Kulliyah/Division/Centre/Institute, author, or type. Figure 9.2 provides a screenshot of a web search by topic:

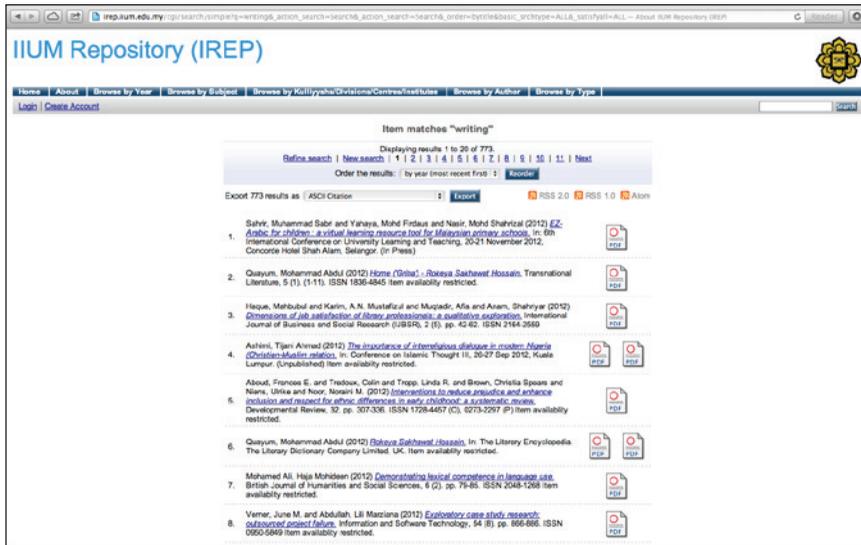


Figure 9.3: A Screenshot of a Topic-Based Search

The guide to self-archiving, which is meant for the staff of IIUM, is also made accessible to the public. The screenshots are given in Figure 9.4 and 9.5:

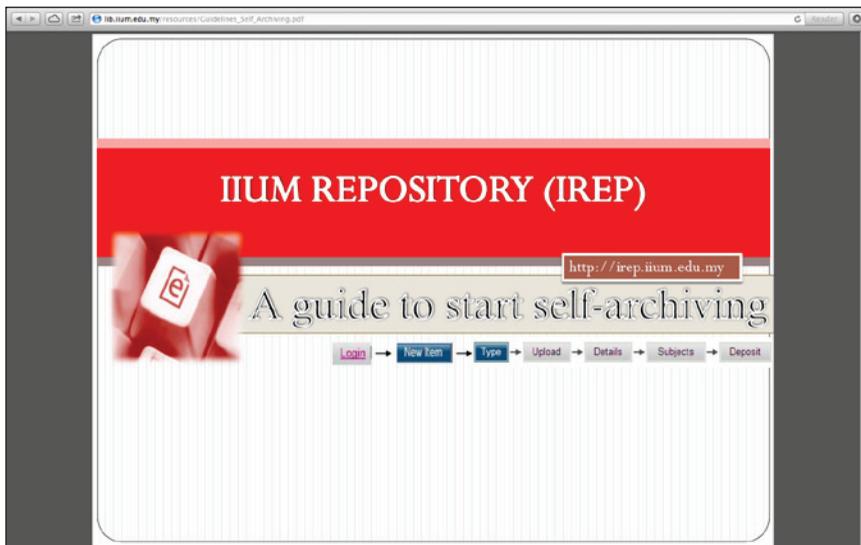


Figure 9.4: IIUM Repository User Manual

TABLE OF CONTENT		
No	Content	Page no
1	Introduction	3
2	IIUM Repository Main Page	4
3	How to register and deposit your publication: A step-by-step summary	5
4	Create Account	6
5	Login	7
6	Select item type	8
7	Upload file	9
8	Enter details	10
9	Enter subject	11
10	Deposit item	12
11	View/Edit/Update your deposited item	13
12	Learn your item status	14
13	Edit your 'under review' deposited item	15
14	General process workflow	16
15	Contact persons	17

Figure 9.5: The Table of Contents of the IIUM Repository

## Online Journals

All journals of the university used to be published as hardcopies. The advent of technology made it easier for the university to make their journals more accessible to a larger audience, and to reduce production cost.

### IIUM Journal: Economics and Management Journal

Being one of the pioneer faculties, the Kulliyyah of Economics and Management is one of the first two faculties to produce its own journal. Its journal, the *IIUM Journal: Economics and Management* (see Fig. 9.6), was the first to venture into online publication. The Editorial Board has taken the initiative to scan the hardcopies of issues which were published from 1987 to 1998 and made them accessible on the Internet. Starting from Volume 7, No 1, 1999, the journal was produced online up until the present.



Figure 9.6: IIUM Journal: Economics and Management

## Engineering Journal

The IIUM Faculty of Engineering was established in 1994. In 2000, the Faculty started publishing its own online journal, which is known as the *International Islamic University Malaysia Engineering Journal* (see Fig. 9.7). The biannual journal published works on engineering fields which include Electrical and Computer Engineering, Mechanical and Manufacturing Engineering, Automation and Mechatronics Engineering, Material and Chemical Engineering, Environmental, and Civil Engineering, Biotechnology and Bioengineering, Engineering Mathematics and Physics, and Computer Science and Information Technology.

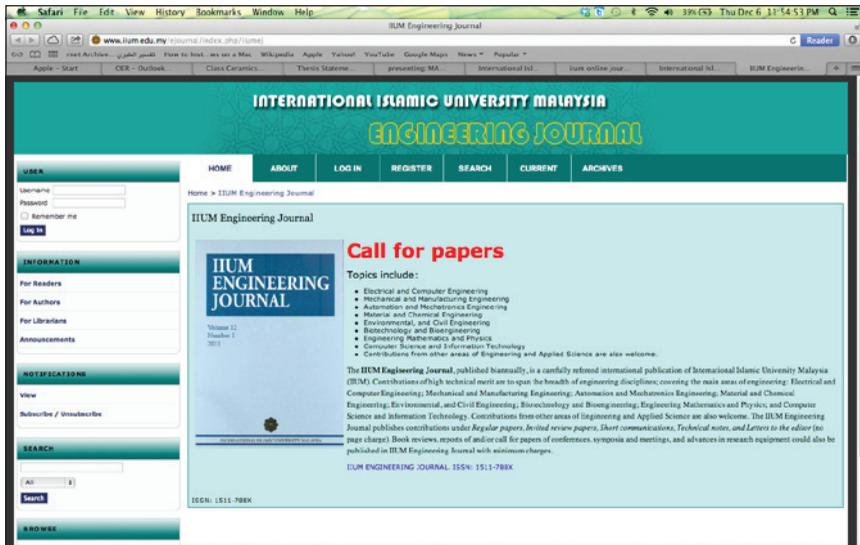


Figure 9.7: International Islamic University Malaysia Engineering Journal

## Asiatic

The third journal that was published online was *Asiatic* (see Fig. 9.8), which was the IIUM Journal of English Language and Literature. The English Language and Literature Department used to publish a similar journal known as *Gombak Review* before switching to *Asiatic*. Its first issue was published in December 2007. *Asiatic* is a peer-reviewed, print, and online journal that is published biannually, in June and December. A peer-reviewed online journal, *Asiatic* is indexed in the *MLA International Bibliography* and listed in the *MLA Directory of Periodicals*. It is also indexed in *AustLit: The Resource for Australian Literature*, *EBSCO Publishing*, *Elsevier's Scopus*, *Malaysian Abstracting and Indexing System (MyAIS)* and *The Journal of Commonwealth Literature's Annual Bibliography* (UK). The journal is a member of the *Council of Editors of Learned Journals* (CELJ, USA).

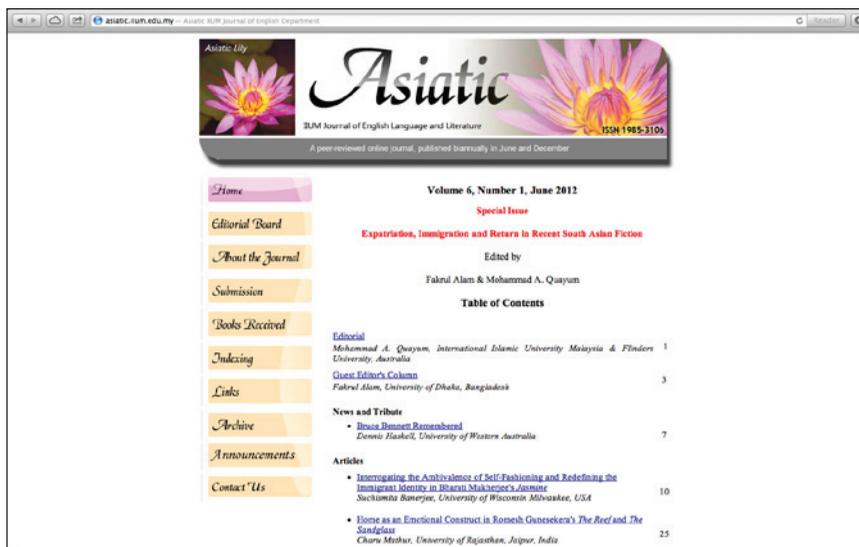


Figure 9.8: Asiatic Journal

### Journal of Islam in Asia

In the following year, Journal of Islam in Asia was published online (see Fig.9.9). In July 2008, Volume 5, Number 1 was the first issue to be published online, and made accessible to all. It is a refereed International Arabic-English biannual journal. The journal covers issues on Islamic thought and those that concern the Muslims.



Figure 9.9: Journal of Islam in Asia

## Journal of Linguistic & Literary Studies (Majallah Ad-Diraasat Al-Lughawiyah Wal-Adabiyah)

The latest online journal produced by IIUM is the *Journal of Linguistic and Literary Studies* (see Fig.9.10) (in Arabic), which is produced by the Arabic Language and Literature Department of the University. Its first online version was published in 2012.



Figure 9.10: *Majallah Ad-Diraasat Al-Lughawiyah Wal-Adabiyah*

## Online Conference Proceedings

Apart from journals, papers which are presented at conferences organized by the university are also published online. One such conference is the International Language Conference. All papers presented at this conference can be accessed easily through the Internet (see Fig.9.11):

**The Online Proceedings of ILC 2011**



**2ND INTERNATIONAL LANGUAGE  
CONFERENCE (ILC) 2011**

CENTRE FOR LANGUAGES AND PRE-UNIVERSITY ACADEMIC  
DEVELOPMENT (CELPADE),

International Islamic University Malaysia (IIUM)



22<sup>ND</sup> - 24<sup>TH</sup> APRIL 2011, INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA, KUALA LUMPUR,  
MALAYSIA

**THE ONLINE PROCEEDINGS OF ILC 2011**

**PAPERS IN ENGLISH**

21	Characteristic of Verbs in Thai Newspaper Headline	Kittika Promsakha na sakonnakorn & Rattana Chanthao	<a href="#">doc</a>
22	Thai Language Errors in Speaking of Chinese Students in Thailand	Lihua Yang & Wirat Wongpinunwatana	<a href="#">doc</a>
23	The Effect of Different Types of Interactional Corrective Feedback on EFL Learners' Uptake	Masome Hemmatdar	<a href="#">doc</a>
24	Designing Virtual Arabic Language Course (VALC) For Elementary Students.	Mohd Azrul Azlen bin Abd Hamid	<a href="#">doc</a>
25	Disagreement politeness among preadolescents	Mohd Yusri Mohamad Noor, Tengku Intan Suzila Tengku Sharif & Norfakhriah Che Othman.	<a href="#">doc</a>
26	Building Vocabulary Through Affixes	Naghah Jaafer Majeed & Inam Ismaeel Taher	<a href="#">doc</a>
27	Developing Soft-Skills: Utilising Learning Styles in the Language Classroom	Nesamalar Panjalingam	<a href="#">doc</a>
28	Reflections on the Teaching of Creative Writing	Nur Sarah Baharudin & Tengku Nurul-Ashiqin Tengku Mohamed Hashim	<a href="#">doc</a>
29	Developing Soft Skills Through the Jigsaw Learning Model	R. Muhammad Ali	<a href="#">doc</a>
30	Discovering Students' Learning Styles	Sally Ali	<a href="#">doc</a>

Figure 9.11: Webpage of the International Language Conference

## Research Funding

To assist the researchers, IIUM also provides its staff with a list of organizations that provide funding for research projects. This information can also be accessed by others (see Fig. 9.12):



Figure 9.12: List of International Funders

## Virtual Teaching Environment

Other than for research and publication, the IIUM also provides the space a virtual space for learning. The *IIUM Island* was developed by a few language practitioners on *Second Life* (SL) for this purpose. The island belongs to the Kulliyah of Languages and Management. It was first introduced during the launching of the 2<sup>nd</sup> International Language Conference held on 2<sup>nd</sup> April 2011. The conference was officially launched on SL by the Malaysian Minister of Higher Education.

In SL, users are represented by their avatars. They ‘move’ in SL by controlling their avatars. They can walk, fly, jump, clap, dance, sit, chuckle, and even teleport to other regions. In addition, there is a variety of communication tools that they can use in SL. These include text and voice chats, instant messaging and calling cards. Besides these capabilities, SL also enables users to import images and sounds. SL is distinctive from other virtual worlds as it offers sophisticated technical capabilities. Users can create 3D objects and environments to respond to other people and objects. This capability promises exciting opportunities for education. In addition, classes can be held in places that would otherwise be impossible to conduct in real life.

The following screenshots (Fig. 9.13 to 9.15) are part of the IIUM Island that is dedicated for teaching and learning. Other Internet users are allowed to visit this island.

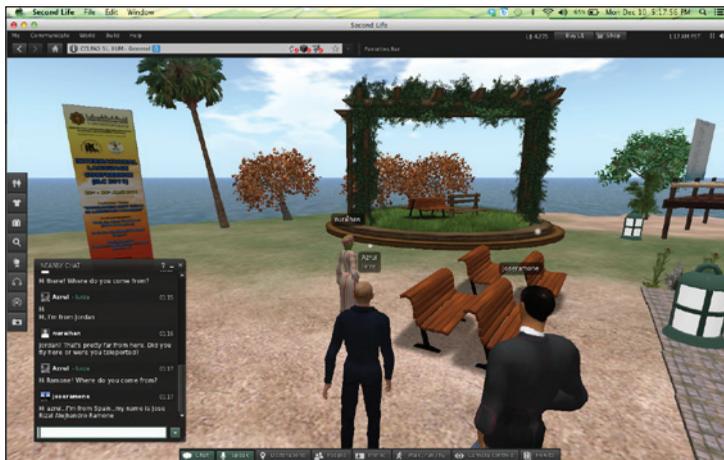


Figure 9.13: A Screenshot of Online Communication in SL



Figure 9.14: A Screenshot of SL Users Taking a Virtual Quiz



Figure 9.15: A Screenshot of an Online Class in SL

## Online Teaching Materials

The university has its own learning management system (LMS) for the staff to integrate their digital course materials. However, the materials on this LMS are not made accessible to the general public. With the availability of Web 2.0 technologies, an increasing number of academic staff is sharing their teaching materials online. Various platforms are used by the staff for this purpose. One of them is YouTube. The following is one of the learning resources that are made available on YouTube by the staff (see Fig. 9.16).



Figure 9.16: Learning Resources on YouTube

Other than YouTube, platforms like Scribd, SlideShare, Vuvox, and others are used. Samples of materials that are uploaded on the Internet are given in Figures 9.17 to 9.19:

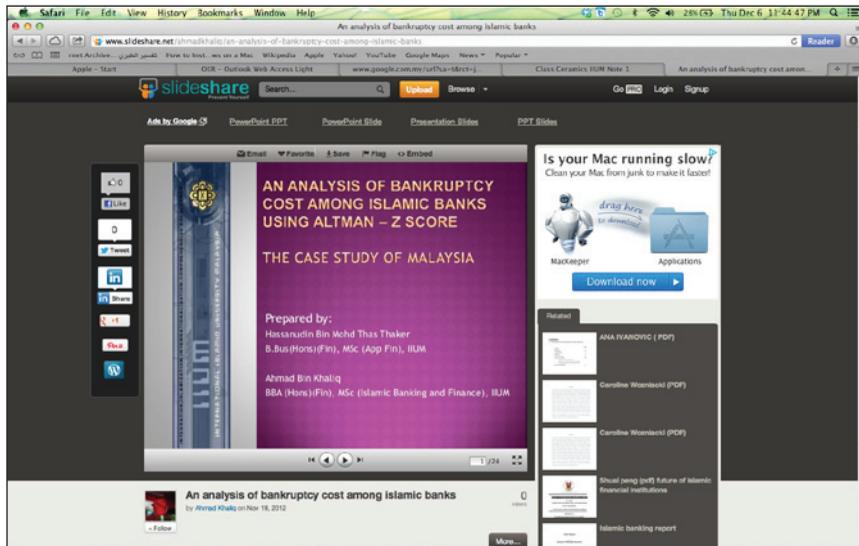


Figure 9.17: Teaching Materials on Slideshare

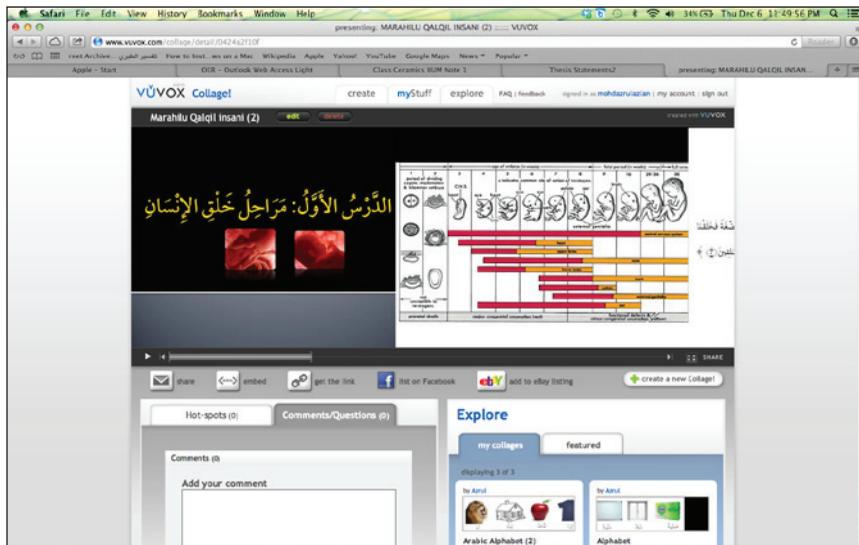


Figure 9.18: Arabic Learning Materials on Vuvox

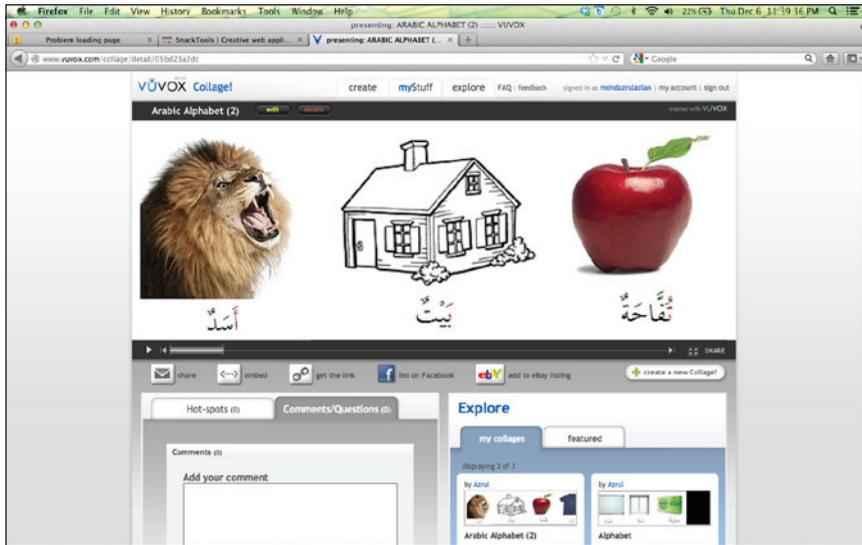


Figure 9.19: Online Dictionary and Notes on Vuvox

Social networking tools have also been utilized by the staff to teach not only the IIUM students but also the general public. Facebook, for example, is one of the popular social networking tools that is used to interact with those outside the university community. Figure 9.20 shows an interaction between one of the staff and the public:



Figure 9.20: Facebook as a Learning Resource

### Students' Assignments

Apart from teaching materials, some of the students' works are also published online. The following is an example of one student work that was written using Flipsnack (see Fig. 9.21):



Figure 9.21: Student Assignment on Flipsnack

Many other means are used to publish students' works online depending on the users' preference. The following was published using Scribd (see Fig. 9.22):

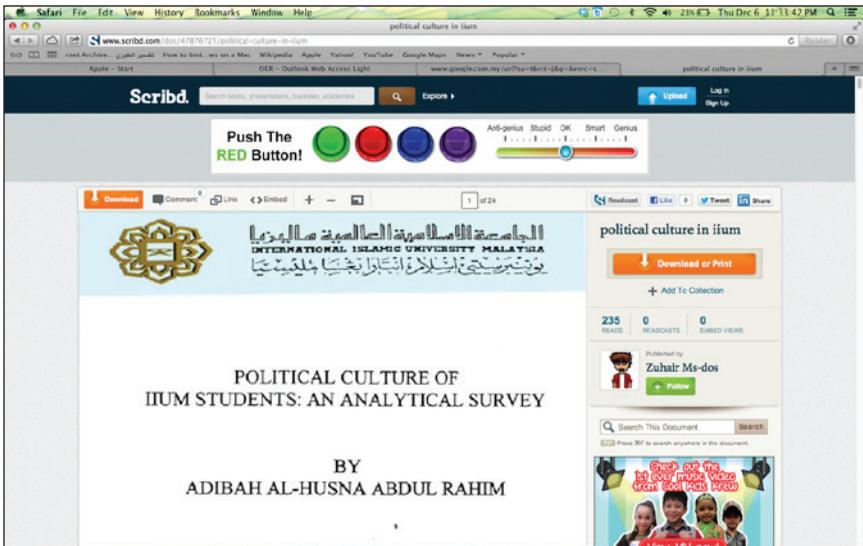


Figure 9.22: Student's Work on Scribd

## IIUM Students' Co-Curricular Activities

The Internet has also been used to promote some of the co-curricular activities organized by the university. YouTube is one of the popular platforms for publishing their activities. Video recordings of the debating competitions that are uploaded on YouTube are given in Figure 9.23:

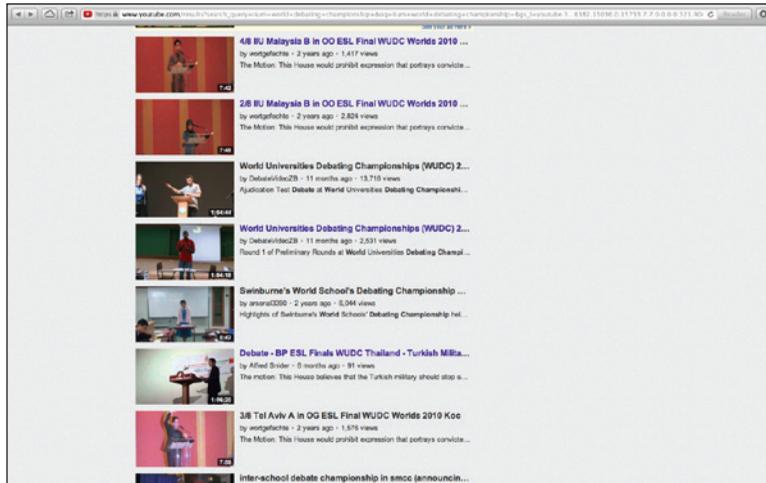


Figure 9.23: Recording of Student Activities on YouTube

## Keeping In Touch With The IIUM Community

Facebook has also been used by the staff, students, and others to communicate. The latest events organized on campus are normally discussed on IIUM Online (see Fig 9.24).



Figure 9.24: IIUM Online Facebook

## **Conclusion**

Where Open Educational Resources (OER) is concerned, the IIUM started sharing with the online community since 1999. New developments show that there is an upward trends where providing educational resources is concerned. This trend can be significant to the academic world since the university is rich with Islamic resources and matters that concern Islamization of knowledge.

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# Chapter 10

## OER@UMS

*Tan Choon Keong, Yoon Sook Jhee, Lee Kean Wah, Roslee Talip & Salfarah Abdullah*

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### Overview

OER in Universiti Malaysia Sabah (UMS) dated back to 1998 when the first open access journal known as *The Borneo Science Journal* was established. Since then, efforts have been made mainly by the lecturers to develop personal projects and networks to share teaching and learning resources with UMS undergraduate and postgraduate students. The next stage of the OER initiative in UMS involves the students' participation in developing and sharing OER. Several OER platforms have been developed using Web 2.0 tools including wikis, blogs, and document-sharing tools. The current initiative in UMS involves consolidating all the available OERs. A faculty-level OER has been established. This will help to develop a more systematic and comprehensive OER created and shared by the UMS community.

### OER in Community Projects

UMS is active in conducting community projects aimed to improve the teaching and learning practices in schools around Sabah. *Educate Sabah* (Figure 10.1) is a website developed to share resources designed and used in these community projects. The website consists of English, Mathematics, and Science teaching and learning resources. These resources include lesson plans, games, teaching aids, photos, and videos. These resources are contributed by UMS students who volunteered in these community projects.

The resources included on the website have been verified and validated during the implementation of the projects. Findings show that students' achievement improves at the end of these projects. Therefore, these resources are recommended to be used in other Malaysian classrooms with similar needs and environment. The website also aims to raise the awareness of rural education especially in Sabah. Visiting the website also raises the users' awareness on the educational issues faced by teachers and students from different parts of Sabah.



Figure 10.1: Educate Sabah

## Developing OER as a Professional Learning Network

Lecturers in UMS create and moderate OERs as part of the Professional Learning Network (PLN). Figure 10.2 shows four PLNs developed by UMS lecturers. In these PLNs, the lecturers share their insights on their areas of interests. Materials used in lectures as well as writings on issues related to their areas of interest are shared in the PLNs. This practice has encouraged the lecturers to be up-to-date and innovative in their professional practices. Some of these OERs have also attracted educators from the United States, Japan the Czech Republic, Israel, and the United Kingdom.



Figure 10.2: PLN of Four Lecturers

## Preparing Student Teachers through Developing OER

In School of Education and Social Development, student teachers moderate blogs as part of the professional development as future teachers. In these blogs, student teachers share their teaching ideas and sample activities. This project helps to develop and shape the student teachers' identity and professional practice. A total of 30 blogs with ideas on teaching English has been created by these students (see Fig. 10.3).

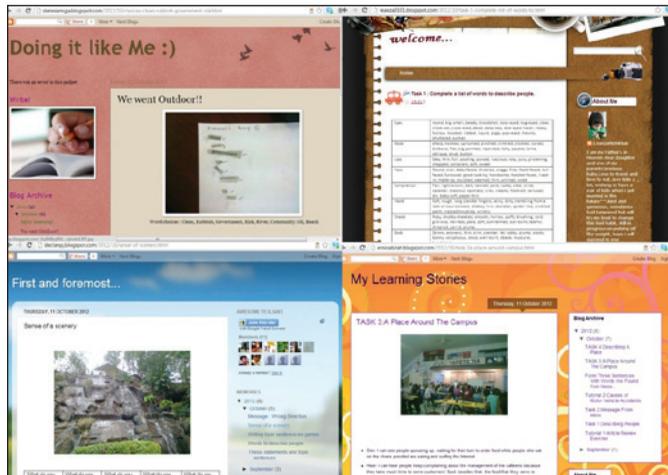


Figure 10.3: OERs Developed by Student Teachers

Student teachers also moderate Eportfolios specifically for assessment and testing. In these Eportfolios, students share their instruments and rubrics in assessing four skills in English, namely, speaking, listening, reading, and writing. These resources are developed based on the current curriculums used by Malaysian schools. A total of 36 Eportfolios has been created to provide resources on language testing and assessment (see Fig. 10.4).

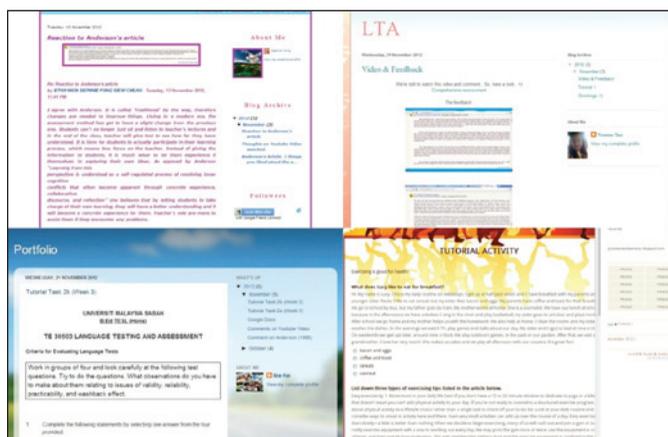


Figure 10.4: Eportfolio Developed by Student Teachers

## E-books as OER

Academicians in UMS publish manuals and students' work in the form of e-books. These e-books consist of activities to teach different subjects at both primary and secondary levels. These activities are contributed by the students through their assignments. Contents are then improved, formatted, and compiled to form an e-book. Manuals created to teach computer applications and software are also published in the form of e-books. These manuals have been used by students as their references. Figure 10.5 shows two e-books published by UMS lecturers and students.

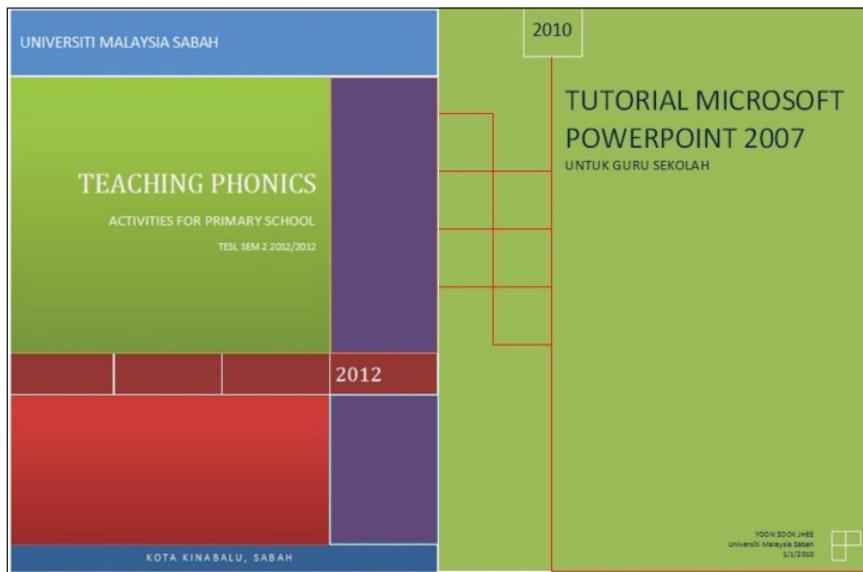


Figure 10.5: E-books by UMS Lecturers & Students

## OERs in Document-sharing Tools

Lecturers and students also publish their work as OERs using several document-sharing tools. These resources mainly consist of lecture notes, assessment rubrics, and presentation slides. Some of these resources have been viewed more than a thousand times. These resources are listed in Scoop.it! created by a lecturer (see Fig. 10.6).

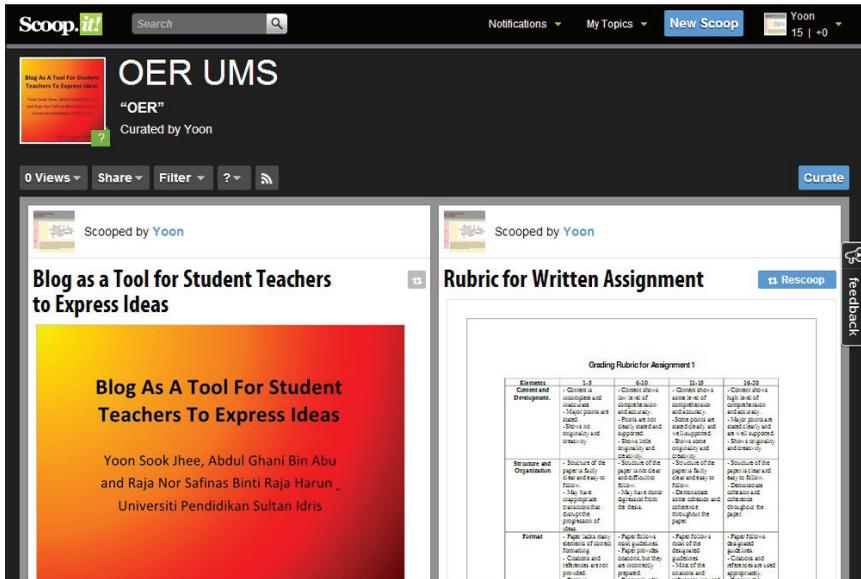


Figure 10.6: OERs Shared via Document-sharing Tools

### Open Access Journal

UMS started its first open access journal in 1998 known as *The Borneo Science Journal* (see Fig. 10.7). It has published 30 volumes since its establishment. This peer-reviewed international journal has received submission from academicians nationwide. Being one of the earliest open access journals in Malaysia, *The Borneo Science Journal* is widely accessed and referred to by academicians and students of the related areas.



Figure 10.7: Borneo Science Journal

## Current Initiatives in UMS

School of Education and Social Development (SESD) is a pioneer in developing OER in UMS. Currently, SESD is moderating the OER of SESD as shown in Figure 10.8. All the resources in this OER are contributed by the lecturers and student teachers of SESD. These resources include lecture notes, tutorials, e-books, lesson plans, handouts, photos, and videos related to TESL, Social Sciences Education, Physical Education, and Science Education. In ensuring the sustainability of the OER, student teachers of SESD are encouraged to publish their written work as OERs.

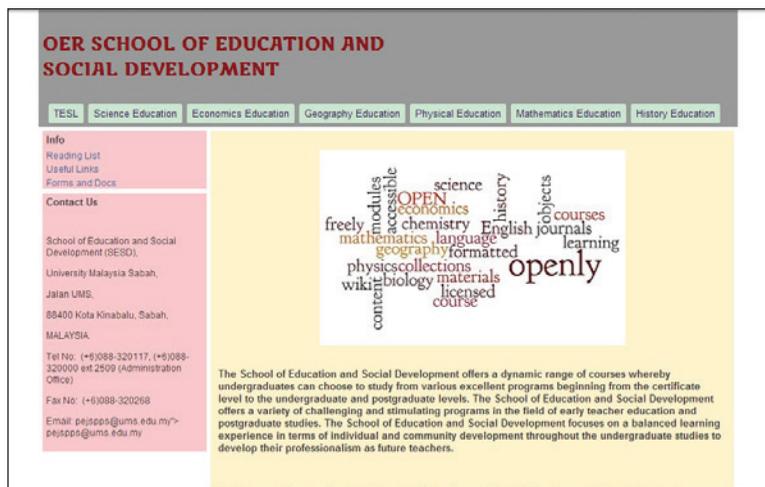


Figure 10.8: OER School of Education and Social Development

In developing OER, students are informed of the possibility of their work getting published as part of the OER SESD. Lecturers in UMS educate students on the concept of OER, authorship, and open license.

In ensuring the resources created by the students are usable and practical, lecturers follow the framework shown in Figure 10.9. The framework is used in developing resources through lectures, tutorials, assignments, or projects.

Informal interviews with the student teachers show that the students are motivated to complete their assignments or tasks when they are aware that their work will be published. Students are eager to get feedback from the lecturers to enable them to design the best resources they can.

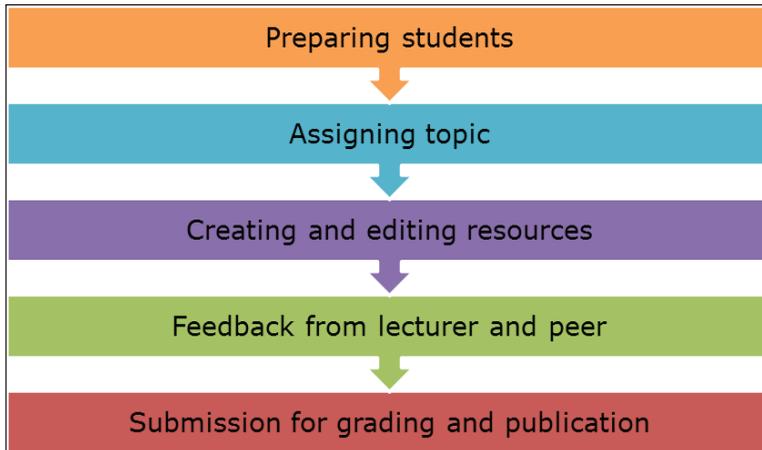


Figure 10.9: Framework of OER Development in SESD UMS

i. Prepare students

The lecturer informs the students on the concept of OER, where their work will be published, who the readers are, and the benefits of publishing their work as OER.

ii. Assigning topics

The lecturer assigns different topics according to the syllabus of the subjects. The lecturer provides a guideline to assist students in completing their work

iii. Developing resources

Students create or modify existing resources (depending on the assignment given). Students consult the lecturer from time to time. Students edit and improvise their work based on the feedback.

iv. Feedback from lecturer and peers

The lecturer monitors the students' work from time to time. Students present their work for constructive feedback from the lecturer and their peers.

v. Submission for grading and publication

Students' resources are graded. The lecturer compiles, makes necessary changes, formats, and publishes the students' work. Students assist the lecturer if necessary.

## Conclusion

OER has recently received much attention in UMS. The creation of OER has encouraged the lecturers to be more innovative in course preparation and delivery. Apart from developing OERs, UMS also shows commitment in OER movement through staff's continuous professional development. UMS has sent lecturers to attend workshops and conferences related to OER. Workshops and seminars will be conducted from time to time to raise the awareness of OER among the UMS community. There is still much to be done in developing a university-level

OER in UMS. The current effort in UMS focuses on providing the right knowledge and skills to academicians and students who will be involved in developing sustainable OERs.

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# Chapter 11

## OER@UNIMAS

*Hong Kian Sam, Gabriel Tonga Noweg, Fitri Suraya Mohamad, Narayanan Kulathuramaiyer, Norazila Abd Aziz, Soubakeavathi Rethinasamy, Shanthi Nadarajan & Latifah Loh Abdullah*

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The definition of Open Educational Resources (OER) by the Commonwealth of Learning (COL) forms the basis for the following discussions. According to COL:

*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'. While OER are mainly shareable in digital formats (both online and via offline formats such as DVD or CD-ROM), COL sees OER not just synonymous with online resources, online learning or e-learning, and within the development context COL is working, OER can also be in printable formats. (<http://www.col.org/resources/crsMaterials/Pages/OCW-OER.aspx>)*

Based on the above definition, Universiti Malaysia Sarawak (UNIMAS) is deemed as having just embarked on institutionalising some aspects of OER and the majority of the activities related to OER in UNIMAS have taken place at the individual and faculties/institutes/centres initiatives. This chapter reports the current scenario of OER at UNIMAS from four aspects: institutional efforts, academics use of OER for enhancing teaching and learning, academics use of OER for self-development, and future institutional efforts by UNIMAS.

### **Efforts by Faculties/Centres & Institutes**

#### **OER @ The Faculty of Computer Science & Information Technology (FCSIT)**

One of UNIMAS' earliest and continuing initiatives in OER is related to the Faculty of Computer Science and Information Technology (FCSIT). FCSIT publishes the Journal of Information Technology in Asia (JITA). JITA is an international peer-reviewed online publication of original works by researchers in the Asia Pacific region, covering Information and Communication Technologies and its innovative applications. The journal serves as a platform to promote exchange of ideas with researchers around the world. FCSIT, in collaboration with other institutions in the JUCS Consortium, is also an active partner of the Journal of Universal Computer Science (J.UCS). J.UCS is a high-quality electronic publication that deals with all aspects of computer science (see Fig. 11.1 for JITA and Fig. 11.2 for J.UCS). J.UCS has been appearing monthly since 1995 and is thus one of the oldest electronic journals with uninterrupted publication since its foundation. Other than having features commonly associated with electronic journals, J.UCS also has some unique features that greatly assist academics in

their search for relevant literature. For instance, the “Geographical Mashup” feature (see Fig. 11.2) enables academics to search for articles by regions and topics.



Figure 11.1: JITA and J.UCS

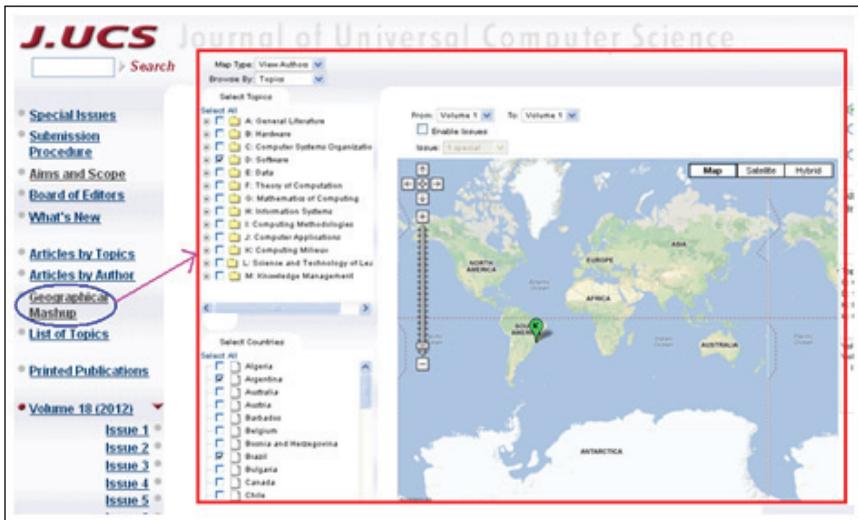


Figure 11.2: The Geographical Mashup feature for J.U.C.S .

FCSIT, in collaboration with UNIMAS’ Institute of Social Informatics and Technology Innovations – Centre of Excellence for Rural Informatics (ISITI-CoERI) UNIMAS, also actively works toward bridging the rural-urban digital divide and the preservation and dissemination of indigenous knowledge through the implementation of the e-Bario project (see Fig. 11.3). The project sets out to define the extent to which contemporary Information and Communication Technologies (ICTs) could deliver sustainable human development to remote rural communities in Sarawak. It aims to identify further needs and opportunities within such communities that can be best satisfied through the innovative use of ICTs, and using action–oriented measures, the project attempts to demonstrate how significant and sustainable development can be achieved by remote rural communities using ICTs as the enablers.



Figure 11.3: e-Bario Project

### OER @ The Centre for Information & Communication Technology Services (CICTS)

Another OER-related initiative at UNIMAS is undertaken by its Centre for Information and Communication Technology Services (CICTS), a service centre which aims to provide efficient, effective, and quality ICT management and services to enhance the scholarly activities in UNIMAS. In June 2012, CICTS created the Open Source Initiative and Advance Technology Unit to assist in the evaluation of technological tools. It also aims to create awareness in and enhance the use of open source software, particularly for teaching, learning, and research purposes. Its recent initiative in OER is the development of a UNIMAS Wiki. The UNIMAS Wiki can be edited by UNIMAS staff and students and will soon be made accessible to communities outside UNIMAS (see Fig. 11.4)

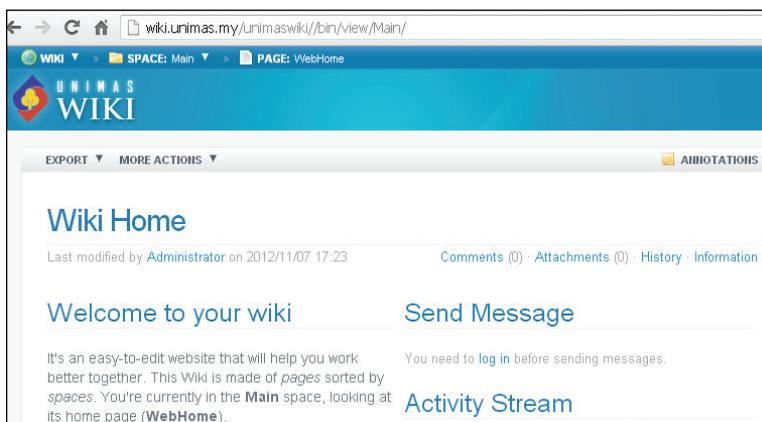


Figure 11.4: UNIMAS Wiki

## OER @ The Centre for Academic Information Services (CAIS)

The Centre for Academic Information Services (CAIS) is generally the Knowledge Centre for UNIMAS. CAIS together with the other public university libraries have embarked on a few projects to develop online databases such as the Malaysian Theses Online, the Malaysian Gateway to Internet Resources, the Serials Online, the University Repository as well as the National Union Catalogue. CAIS has also been entrusted with the responsibility to establish, collaborate, manage, maintain, and disseminate the digital intellectual output and property of UNIMAS in the UNIMAS Institutional Repository (see Fig. 11.5). The online archive was created in January 2010 to increase the visibility of UNIMAS' authors and researchers. Access to the content is subject to an Access Policy which was developed to protect the security of data within the system.



Figure 11.5: UNIMAS IR

The IR showcases the various works of the academic staff and students of each faculties/centres/institutes such as books, journals papers, conferences papers, theses, and final year projects (see Fig. 11.6). In addition, availability of IR enables academic communities to make use of the resources for their teaching and learning purposes.

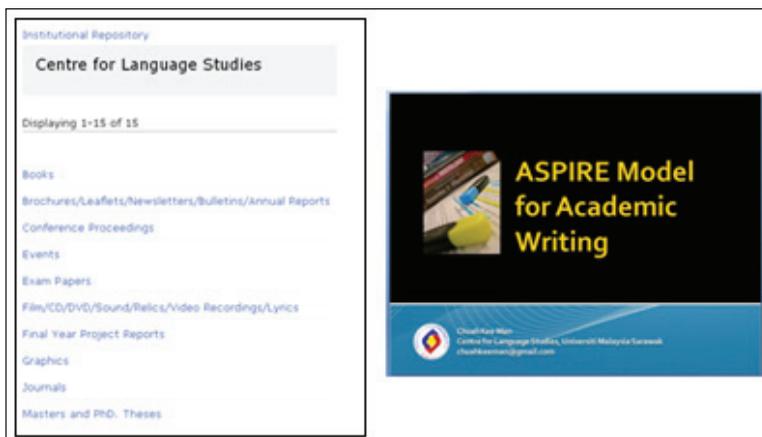


Figure 11.6: Some of the Resources available at the Individual Faculties/Centres/Institutes IR

The efforts by the various faculties/centres/institutes in UNIMAS have significantly contributed towards enhancing inter- and intra-institutional collaboration and made teaching-learning and other scholarly materials more accessible and visible to students, peers, and public.

### Use of OER in Teaching & Learning by Individual Academic Staff

The availability of OER has also made an impact on the way lecturers at UNIMAS design and develop instructional materials for their lectures, tutorials, and other class activities. OER has given rise to the need to re-examine the scope of course content, selection of pedagogical strategies, and modes of classroom activities.

The following are examples of academic staff adoption and adaptation of OER in some courses offered at the Faculty of Cognitive Sciences and Human Development (FCSHD) and the Centre for Language Studies (CLS). These are merely several examples of how academics in UNIMAS use OER in their teaching and learning environments. Similar to a majority of instructors worldwide, they are using small chunks of OER courses as part of their instructional materials rather than the whole OER courses. OER are mainly used to complement their own teaching and learning resources and instructional delivery which is conducted either face-to-face or in a blended e-learning mode using UNIMAS Morpheus LMS (which is Moodle-based). The availability and uses of OER has enabled academics to design teaching and learning environments that incorporate instructional materials from various educational resources. Engagement in these various resources creates opportunities for their students to further explore information relevant to their learning needs

### OER as Instructional Materials for an Undergraduate Course @ FCSHD

KMF2014 Fundamental of Statistics is a compulsory course for students at FCSHD which makes use of various OER in its teaching and learning activities. It makes use of “Online Statistics Education: An Interactive Multimedia Course of Study” (see Fig. 11.7) and Head First Statistics as supplementary texts to the existing course text available at CAIS.

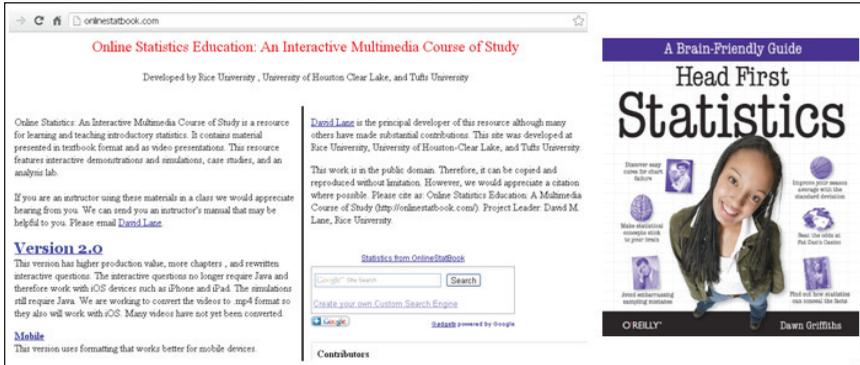


Figure 11.7: E-textbook Online Statistics Education: An Interactive Multimedia Course of Study and Head First Statistics

This course also makes use of simulations such as those available at Rice Virtual Lab in Statistics (see Fig. 11.8) for the teaching and learning of Central Limit Theorem and Confidence Interval. These simulations enable students to explore and discover their own learning and provide visual representations to enable students to better comprehend the concepts involved. Other simulations used in this course (see Fig. 11.9) are the inferential statistical test calculators and the sample size calculator.

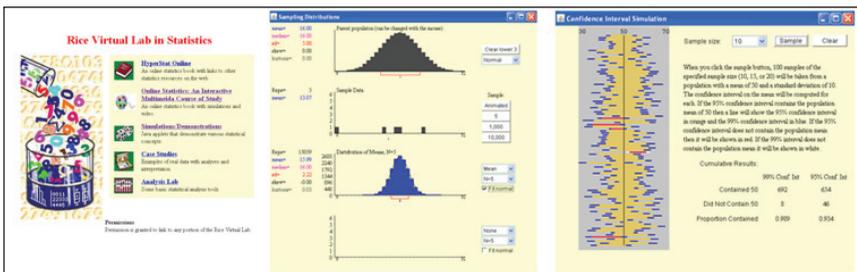


Figure 11.8: Rice Virtual Lab including Central Limit Theorem and Confidence Interval simulations

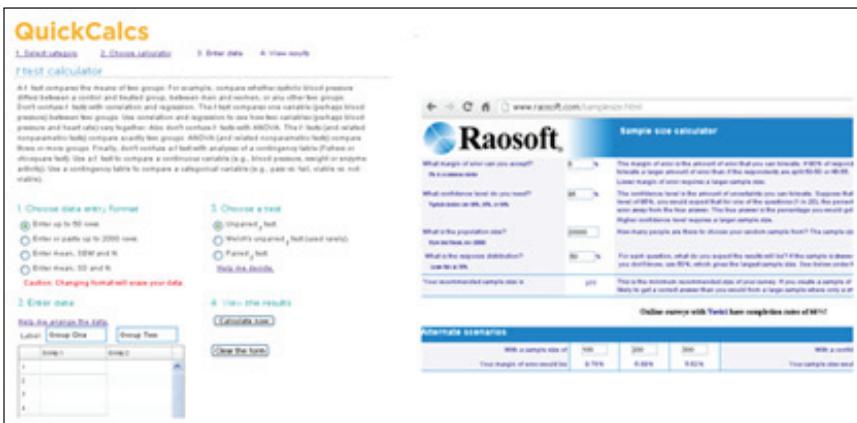


Figure 11.9: Independent T-Test Calculators & Sample Size Calculator

## OER as Instructional Materials for Postgraduate Courses @ FCSHD

The teaching and learning environments for postgraduate courses at FCSHD also make use of various OER. In the time before online materials become massively available, students were taught using materials which are cherry-picked by course instructors based on their reading repertoire and relevant research experiences. In present time, slides presented in lectures across campus are enriched by materials provided for free, or on a membership basis. For instance, by creating an account on Slideshare, lecturers now have access to a big bank of slides on a range of topics. The slides are often used to benchmark the quality and scope of contents of current courses, and where applicable, lecturers would rethink the approach and strategies of their respective course contents, in terms of how the contents are presented on their slides and during the oral presentation in class.

Visual media has steadily increased to become a powerful communicator of ideas. For example, Pinterest, a visual social network, has members who share interests in similar disciplines of learning, and most would share graphics in the form of photos, posters, infographics, statistical charts, and so forth, which could be used in tandem with contents within a course syllabus. Using infographics, for instance, helps students in understanding relationships between concepts. These graphics can be used for further critical analysis and discussions, because the interpretations of visual materials are dependent on prior knowledge and learning experiences, and if mitigated carefully, students can be pushed to think beyond the texts they read, using the items in the infographics as triggers for constructive analysis. An example of using Pinterest within a lecture for Masters in Learning Sciences programme at FCSHD is shown in Figure 11.10.

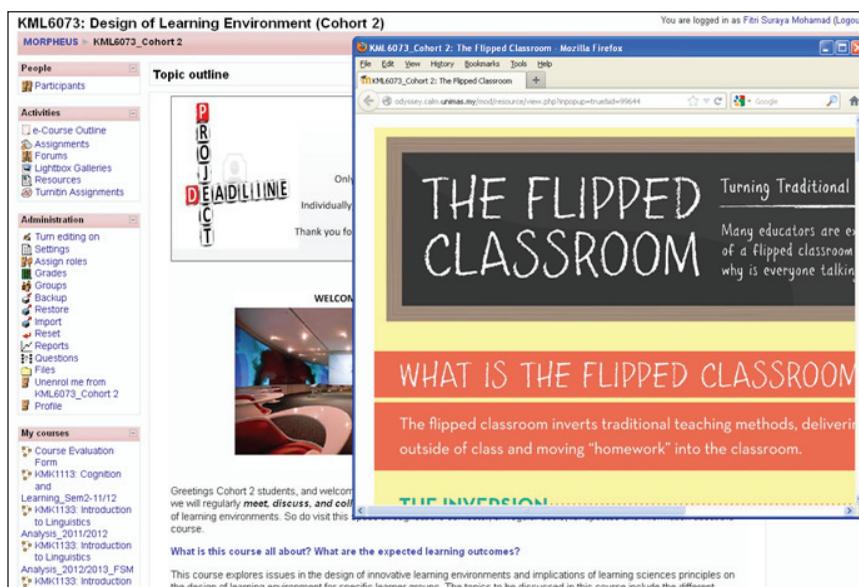


Figure 11.10: An Infographic on the Flipped Classroom from Pinterest

Social networking platforms like Facebook and Twitter, for instance, provide opportunities for educators to come together online, to talk and share ideas and resources related to their disciplines or interests. On Facebook, there are already various groups of academics who get together to form spaces to discuss how they use technological applications, tools, and

pedagogical strategies for teaching. One local group, which called themselves “Learning Innovation Circle”, has managed to organise two seminars in 2012 to bring together discussions which sparked online to face-to-face sessions with its members. For those who wish to use a social network which is specifically designed for educators, Edmodo and Lore are among the many options to choose from (see Fig. 11.11).

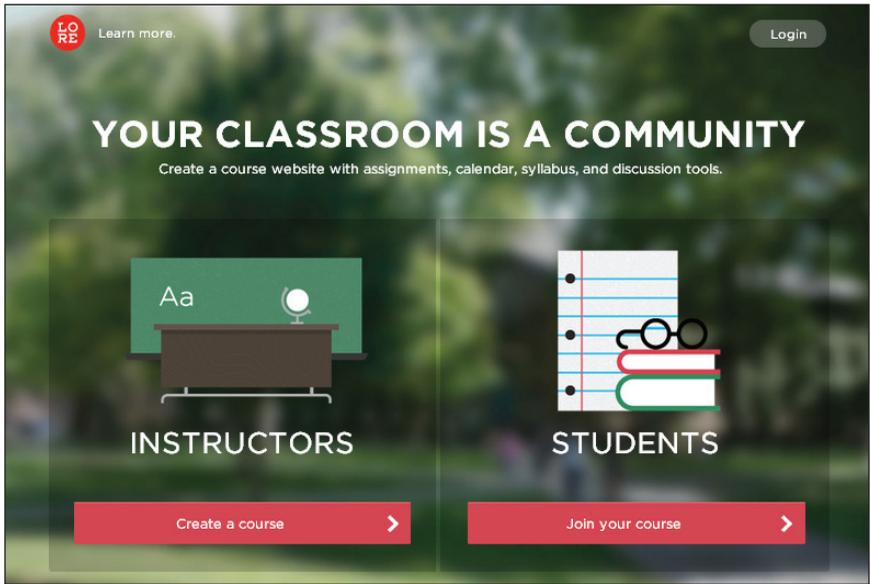


Figure 11.11: LORE

### OER as Instructional Materials @ CLS

At the CLS, several OER are used for the purpose of teaching and learning and supervision. Diigo (see Fig. 11.12) is an invaluable online collaborative and research tool used by both supervisors and research students for the purpose of bookmarking important reading materials and keep up with the latest in research. In addition to being able to bookmark and archive online resources, it can be shared among academics as well as graduate students. It is best seen as a digital library that enables instructors to share literature from almost anywhere and enables students to read, synthesize, and engage in collaborative projects.



Figure 11.12: Diigo in Action

Fieldwork Language Explorer (FLEx, is a research tool that is used for language analysis and storing field work data. It is indispensable for sorting indigenous language data for the purpose of translation, lexical entries, and linguistic analysis. There are a number of built-in fields which allows instructors and research students to customize their research display. Each entry has a dictionary preview (see Fig. 11.13) and built-in tutorial that makes field research purposeful and progressive.

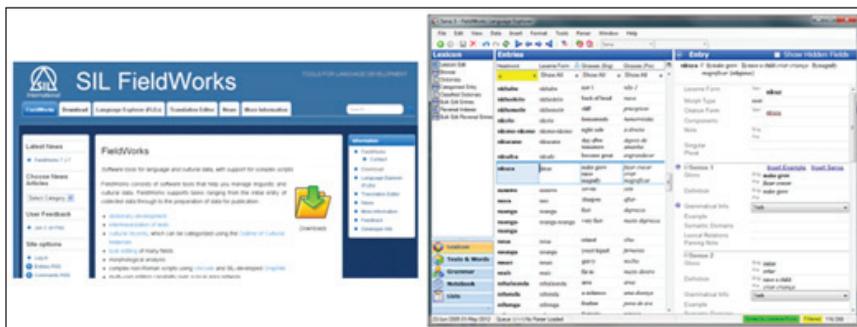


Figure 11.13: FLEx in Action

eXeLearning (see Fig. 11.14) is an authoring tool that allows instructors to add notes, videos, and questions into a module. It can be packaged as an IMS package and uploaded into Moodle. A lecturer can also place notes and additional exercises to help increase student's learning time.

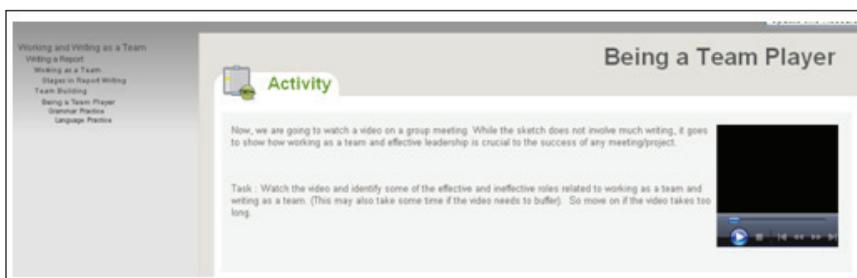


Figure 11.14: eXeLearning

Students are also taught how to cite and write references based on the 6th APA Referencing Style. An OER used for this purpose is the Purdue Online Writing Lab (see Fig. 11.15). The site serves as a reference for students to learn more about writing and referencing and it also provides them guidance on how to cite from certain uncommon resources.

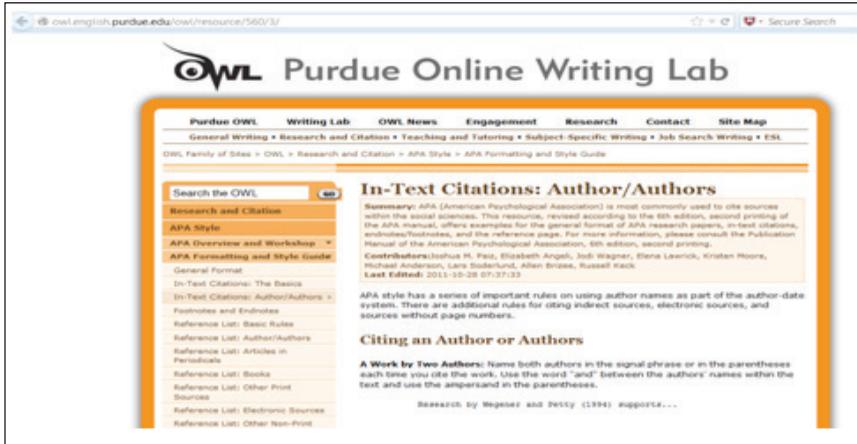


Figure 11.15: Purdue Online Writing Lab

As seen in Figure 11.16, several citing and referencing exercises are also taken from <http://commfaculty.fullerton.edu/jreinard/bookweb/newpage4.htm> and <http://library.acadiau.ca/tutorials/plagiarism/>.

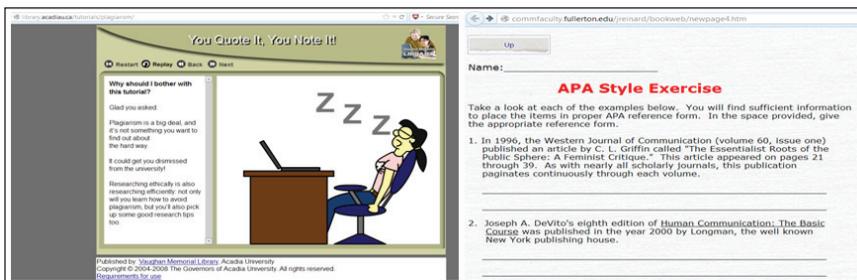


Figure 11.16: Screenshots of Exercises for Citing & Referencing

Popplet (see Fig. 11.17) is used to allow students to brainstorm ideas in graphical mode. This feature is used in the teaching learning activities in class and in Morpheus. Popplet is used to get students to work in a team, brainstorm ideas, and prepare a mind map of the main points of an essay before they start writing it. Popplet with its easy-to-use features supports collaboration, as multiple users can contribute to the same Popplet. In addition, it also enables students to have a clear idea of the main points to be discussed in writing academic essays.

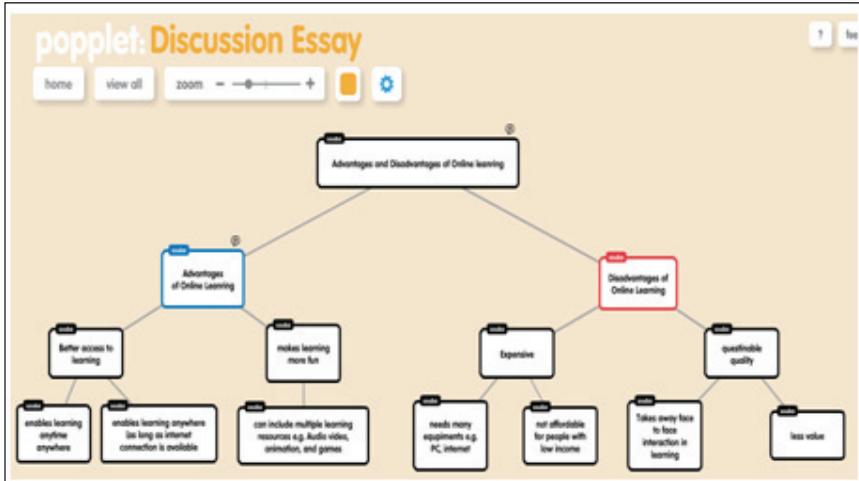


Figure 11.17: Popplet Discussions in Writing of Academic Essays

### Use of OER for Professional Development by Academic Staff

The following is an anecdotal example of an academic staff use of OER for her own professional development. Attending and presenting at academic events like conferences, seminars, and workshops have long been viewed as one of the primary ways in which new information or knowledge about an academic's specialised field of interest can be obtained, shared, and disseminated. These academic events also sometimes function as a formal training experience to advance one's understanding of topics or concepts within one's area of expertise. However, with Web 2.0 technologies, being physically present at these academic events is no longer a requirement. For example, organizers of the EdMedia World Conference on Educational Media and Technology (see Fig. 11.18) recognize the constraints which some interested participants may have if they were to be physically present on the date and at the country venue which have been specified in advance. As indicated in the EdMedia Virtual Presentation information page, not only similar validity is assured, but the opportunity to virtually participate at academic events also saves money and time and is described as green since it reduces one's carbon footprint. Most importantly, one does not have to leave work in order to engage in professional development initiatives.

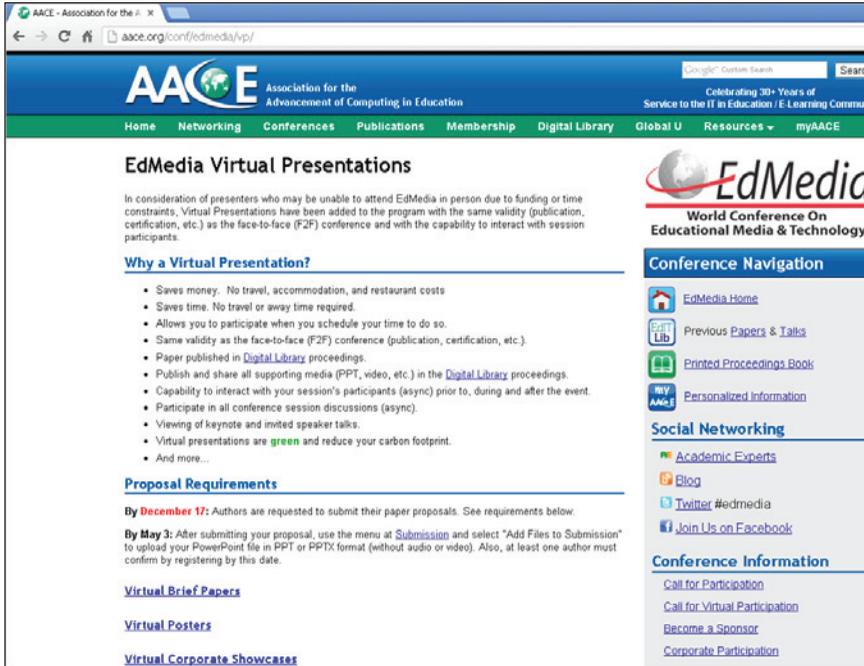


Figure 11.18: Ed Media Virtual Presentation

In recent years, opportunities for participating at academic events on a virtual basis have notably increased. Organizers of The Global Education Conference (see Fig. 11.19) and non-profit organizations such as EDUCAUSE have even gone a step further (see Fig. 11.20) by making it easier for academics to take part in their academic events. Unlike other conferences which adopt both physical and virtual participation modes, the Global Education Conference held all its sessions online using the Blackboard Collaborate platform, and academics around the globe who were interested in taking part in the event only needed to virtually sign up. Similarly, EDUCAUSE features webinars (web and seminar) on a regular basis and this provides a great opportunity to academics to virtually but continuously pursue professional development opportunities.

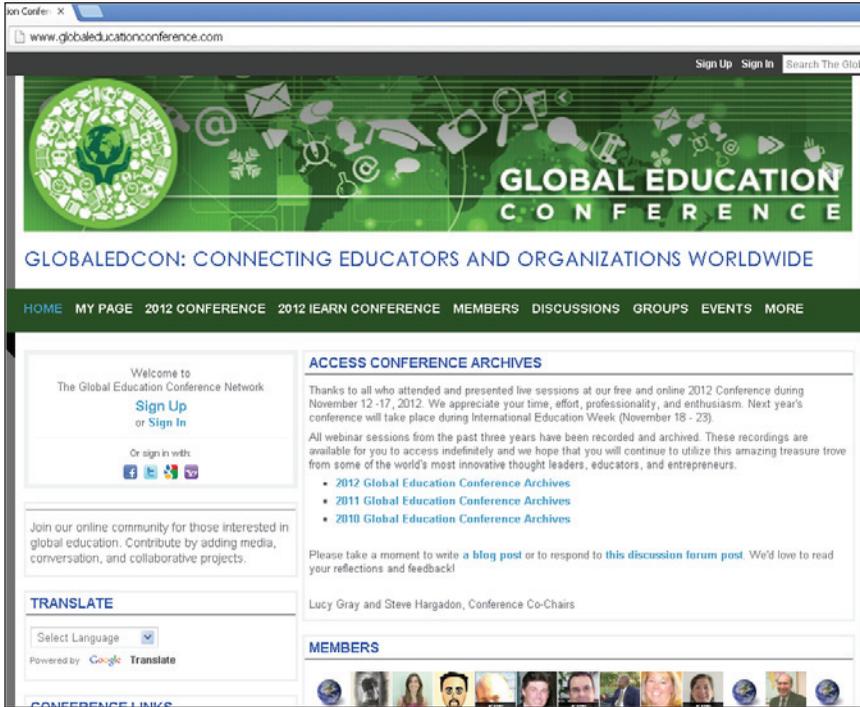


Figure 11.19: Global Education Conference Sign Up Page

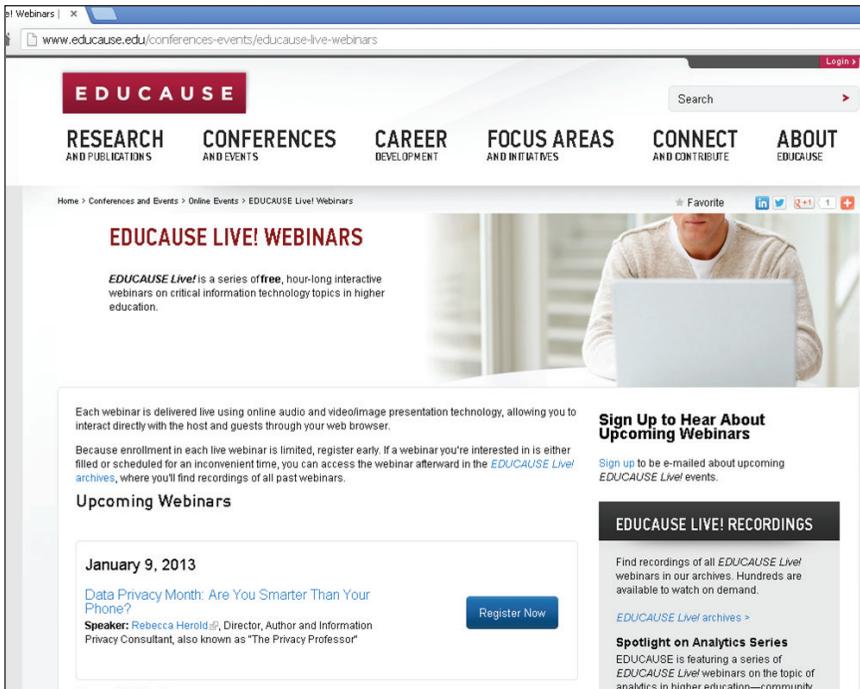


Figure 11.20: EDUCAUSE Webinars Announcement

### **Future Directions of OER in UNIMAS**

It is expected that in addition to the above highlighted examples of OER used in UNIMAS by individual academic staff and faculties/centres/institutes, UNIMAS will gear toward a more institutionalised initiative. For example, there is a move to explore the possibility of UNIMAS to be part of the Open CourseWare (OCW) Consortium and to encourage academic staff to contribute his/her courses to the OCW platform. Various technical, quality assurance processes and incentive initiatives are also being explored as part of the effort to crystallise the goal.

It is expected that UNIMAS and its academic staff and students and the community at large will benefit from the institutional initiative by enhancing the accessibility and quality of tertiary learning experiences, reducing instances of reinventing the wheel, and, at the same time, saving travel costs, and ultimately increasing the visibility of the university

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# Chapter 12

## OER@USIM

*Ernie Suzana Ali & Nurul Fathihin Mohd Noor Shah*

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### **Introduction**

The Islamic Science University of Malaysia (USIM) is seriously devoted to the utilisation of e-learning as part of teaching and learning process in transforming and positioning USIM in the main stream and as a hub of reference in our unique niche. The Global Open Access Learning Center (GOAL Center) had been developed and responsible in promoting, encouraging, and providing a conducive e-learning environment for the university members, stakeholder, and society. However, OER at USIM are not yet implemented but are already on the agenda for the GOAL Center to facilitate and implement it.

### **GOAL Center**

The Global Open Access Learning Center (see Fig. 12.1) or known as the GOAL Center was officially established on 1 October 2011. The establishment of this centre was in line with USIMs' vision to develop, explore, and expand the Islamic science knowledge in a more creative and innovative way in teaching and learning. This can be done via providing Learning Management System (LMS) which rebrand to Global Open Access Learning System (GOALS).

Open Access Learning System (GOALS) facilitates a conducive and comprehensive one-stop centre of virtual communication for teaching and learning process between students and lecturers. Even though the lecture note in GOALS is not really open to the world, there are links/resources which are available for people to freely access through GOALS.

**e-BOOK GOALS MANUAL & WEB 2.0 APPLICATION**

Index :

- Topic Block 1 : GOALS (Basic Training)
- Topic Block 2 : GOALS (Online Quiz)
- Topic Block 3 : GOALS (Online Assignment)
- Topic Block 4 : GOALS (Online Forum)
- Topic Block 5 : Wallwisher (Web 2.0 Apps)
- Topic Block 6 : Google Form (Web 2.0 Apps)
- Topic Block 7 : Wordle (Web 2.0 Apps)
- Topic Block 8 : Voki (Web 2.0 Apps)
- Topic Block 9 : Flipsnack (Web 2.0 Apps)
- Topic Block 10 : Stixy (Web 2.0 Apps)
- Topic Block 11 : GoAnimate (Web 2.0 Apps)
- Topic Block 12 : Prezi (Web 2.0 Apps)
- Topic Block 13 : Jing (Web 2.0 Apps)
- Topic Block 14 : SlideShare (Web 2.0 Apps) **\*coming soon**
- Topic Block 15 : Flickr (Web 2.0 Apps) **\*coming soon**
- Topic Block 16 : Delicious (Web 2.0 Apps) **\*coming soon**
- Topic Block 17 : Blog-Wordpress (Web 2.0 Apps)
- Topic Block 18 : Glogster (Web 2.0 Apps) **\*coming soon**

**External Reference**

Figure 12. 1: Portal GOALS

## OER Available @ USIM

Structured OER in USIM are still in very early stages. However, there are academicians from USIM who upload their own notes in cyberspace, which are readily accessible to the public as references. Figures 12.2 and 12.3 are examples of sharing via blog and slide share.

Check out all **Pack&GO** destinations at [KLM.com.my](http://KLM.com.my) Find deals >

**Nuradli Ridzwan Shah Mohd Dali**  
 25 SlideShares  
 367 Followers

Cardiff, United Kingdom  
 Senior Lecturer at USIM  
[nuradli.com/ULTRAen.htm](http://nuradli.com/ULTRAen.htm)  
 I am a husband and a father of four children. Currently pursuing my studies at Univ of Cardiff Wales on full time basis.

**Malaysia: Islamic Money Market Instruments**

**Nuradli Ridzwan Shah Bin Mohd Dali**  
 University Sains Islam Malaysia  
 Prof. Dr. Abdul Ghaffar Ismail  
 Universiti Kebangsaan Malaysia

Islamic Finance 7d 2961 views

Figure 12. 2: Slide share as a platform to upload notes

**LECTURE NOTES CPC USIM- BAIL**

<https://www.dropbox.com/s/5hm1vps2xtgap88/CRIMINAL%20PROCEDURE%201-BAIL.ppt>

Posted by **loyarberjurus** at 3:32 PM No comments: [Links to this post](#)

Recommend this on Google

Labels: **LECTURE NOTES**

Reactions:  menarik (1)  biasa (0)  hambar (0)

Thursday, December 13, 2012

**LECTURE NOTES CPC USIM- POLICE INVESTIGATIONS**

**KAKYAT "LEBIH HEBAT dari" "KUASA BOTOL BESAR" "SOALAN DARI MADEEP SINGH KEPADA KAVITA SINGH" ya ampoun pemegang mohor botol besar raja ...**  
*12 minutes ago*

**Khalid Samad**  
Kalimah Allah: Dari Sudut Dakwah - Walaupun saya telah baharu sahaja menulis mengenai persoalan ini yang selari dengan kenyataan Presiden PAS semalam, saya ingin mengemukakan pandangan saya ...  
*2 hours ago*

**LoyarBurok**  
BOCs in limbo: Rights 2 UK 0 - Nowhere to run but to human rights.  
*11 hours ago*

**The Scribe A Kadir Jasin**  
Privatisation of Government Land: Ways of Skinning the Cat - A Kadir Jasin "[ATTENTION, anonymous comments

Figure 12. 3: Blog as a Platform to Upload Notes

### Moving Towards OER

The GOAL Center through sharing by MEIPTA members' are strategising and trying to implement this OER in USIM. However, this will only sharing of lecture note provide by the lecturer. There are a series of programmes planned such as identifying the courses, format-setting workshops, series of workshops in developing OER, series of training, and pilot project forming.



Figure 12. 4: Portal of OER USIM

The GOAL Center is also in the process of developing a dedicated portal for OER USIM. Continuous workshops and training are also conducted to help the academician produce quality and original notes. OER seminars and knowledge sharing between the universities is also in progress to be implemented. Figure 12. 4 shows the main page of OER USIM which is still in the development stage.

Besides that, Web 2.0 application notes and step-by-step video are provided by the GOAL team, which can be accessed by USIM lecturers, students, and the community. Figures 12.5 and 12.6 show a screen shot of video instruction for Web 2.0 applications.



Figure 12. 5: Video Instruction for Web 2.0 Application

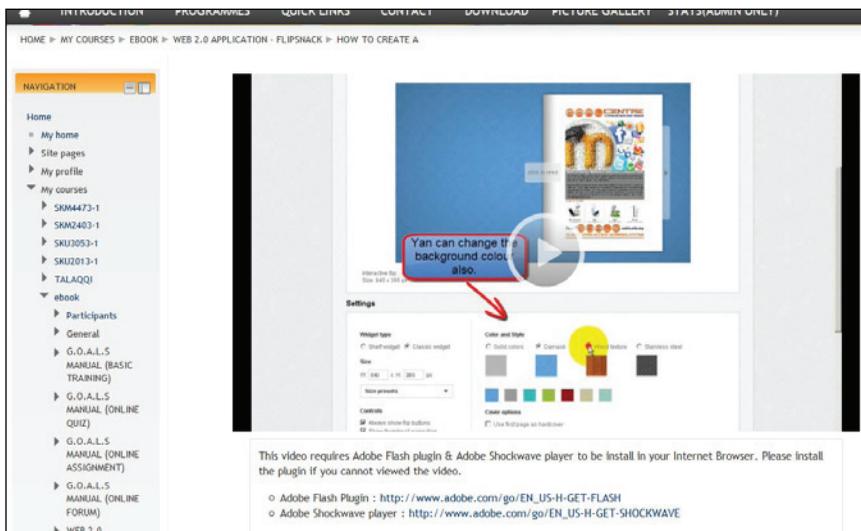


Figure 12. 6: Video Instruction for Web 2.0 Application (FLIPSNACK)

Apart from GOALS, there is another platform that plays a role in the archiving of OER in USIM. One of them is e-Imtiyaz, (see Fig. 12.7) which is provided by the USIM library. e-Imtiyaz is a repository for digital content of the Islamic Science University of Malaysia (USIM) where the academicians in USIM can share notes, research papers, journals, etc.

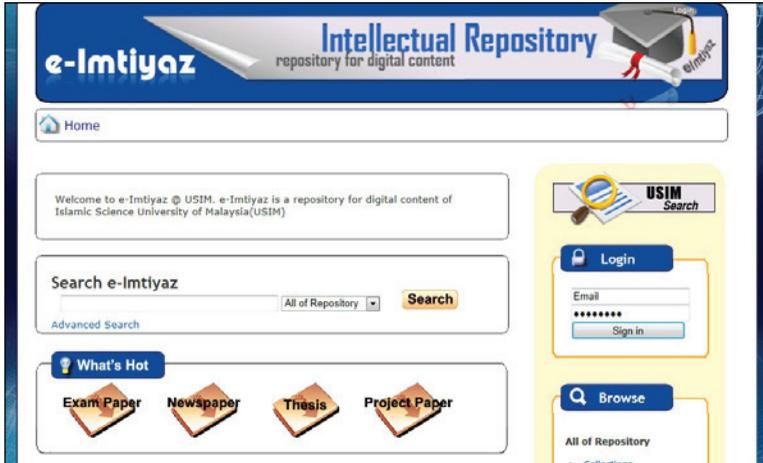


Figure 12. 7: e-Imtiyaz

The Division of Corporate Communication and International Relations (BKKPA) USIM is responsible for branding as well as USIM promotion not only locally but also internationally via virtual known as USIM ONLINE. USIM ONLINE (see Fig. 12.8) is an information portal where the repository for any video form which been divided into different categories such as education, Diskusi Ilmiah, Santapan Rohani, Biar Buku Bicara, etc.



Figure 12. 8: USIM ONLINE

## **Conclusion**

OER USIM had strategized and yet to be implemented in moving USIM towards the world one stop references for Islamic Science Studies.