Chapter Seven

Understanding and Using Open Educational Resources (OER)

Jerome Terpase Dooga

1. Introduction

As several chapters in this book have clearly indicated, the University of Jos has a culture of sharing knowledge, skills and practice. However, Open Educational Resources (OER) as a concept is yet to be properly understood and is therefore not yet practiced in a form that can be empirically investigated or discussed. This chapter is thus designed as an information source as well as a form of advocacy. But it also shares evidence of early attempts at experimenting with OER at the University of Jos. The chapter is framed within the broader picture of the concept of OER, its history, motivation, philosophy, purpose and practice within academia. It is arranged in the following order: it begins with the concept of openness and sketches a brief history of OER. Next it discusses how knowledge is viewed within the OER community, a philosophy which is a key driving force behind the OER movement. This is followed by an insight into legal frameworks that have been put in place to provide an enabling platform for the OER practice. Major organizations and institutions engaged in OER are then highlighted, followed by the University of Jos experience and a conclusion.

2. Understanding Open Educational Resources

2.1 A Brief History of Open Learning: Openness can be interpreted in many ways. In its most basic interpretation, as defined by UNESCO, the term “open” refers to ‘the physical access to and use of learning content and the use of open technologies and standards for the development of services’. The concept of openness is not new. A Wikipedia article on open source (quoted in Butcher, 2011:32) notes that “the concept of open source and free sharing of technological information existed long before computers. For example, cooking recipes have been shared since the beginning of human culture.” The modern concept of ‘openness’ “is based on the idea that knowledge should be disseminated and shared freely through the Internet for the benefit of society as a whole” (Yuan, MacNeill and Kraan 2008:1). The same source points out two key aspects of openness namely, free availability and as few restrictions as possible to use the resource. Learning resources are often

4 http://portal.unesco.org
considered as key intellectual property across the competitive world of higher education. But in the past decade, more and more institutions and individuals have shared their digital learning resources openly and freely on the Internet as OER (Hylen, 2008). Increasingly, these resources have included not only content modules, full courses, collections and journals, but also courseware, software to support content development and retrieval, learning management systems and other development tools.

The term OER was first introduced at a conference hosted by UNESCO on Open Courseware for Higher Education in Developing Countries in 2000 and was promoted at the time specifically to ensure global access to educational resources. The Organization for Economic Cooperation and Development (OECD) defines OER as “digitised materials offered freely and openly for educators, students and self-learners to use and reuse for teaching, learning and research”. More recently, a guide to OER jointly prepared by UNESCO and the Commonwealth of Learning (COL) provides a more expansive definition to reflect contemporary views of OER. The guide states:

In its simplest form, the concept of Open Educational Resources (OER) describes any educational resources (including curriculum maps, course materials, textbooks, streaming videos, multimedia applications, podcasts, and any other materials that have been designed for use in teaching and learning) that are openly available for use by educators and students, without an accompanying need to pay royalties or licence fees (Butcher, 2011:5).

Proponents are convinced that Higher Education can greatly benefit by harnessing OER. They highlight that OER have tremendous potential to contribute to improving the quality and effectiveness of education. According to the above-mentioned OER Guide, the transformative potential of OER revolves around three linked possibilities:

- **Increased availability of high quality, relevant learning materials can contribute to more productive students and educators.** By removing restrictions around copying resources, OER can reduce the cost of accessing educational materials and thus contribute both to higher student productivity and better quality.

- **The principle of allowing adaptation of materials provides one mechanism amongst many for constructing roles for students as active participants in the educational process.** This is based on the constructivist theory that students learn best by doing and

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creating, rather than by passively reading and absorbing. Because open licences encourage activity and creation by students through re-use and adaptation of content, it can make a significant contribution to creating more effective learning environments.

*OER has potential to build capacity by providing institutions and educators access, at low or no cost, to the means of production to develop their competence and producing educational materials and carrying out the necessary instructional design to integrate such materials into high quality programmes of learning* (Butcher, 2011:13).

These three possibilities are based on the assumption that

a. Investment in designing effective educational environments is critically important to good education;

b. A key to productive systems is to build on common intellectual capital, rather than duplicating similar efforts;

c. All things being equal, collaboration will improve quality, and

d. As education is contextualized practice, it is important to make it easy to adapt materials imported from different settings where this is required, and this should be encouraged rather than restricted (Butcher, 2011:13).

2.2 Open Educational Resources and the Global Knowledge Community: The OER philosophy holds that knowledge should not be commodified; rather it should be made freely available to all. V.S. Prasad (2002) is often cited for making the proclamation that knowledge is a “collective social product and so it is also desirable to make it a social property.” This view is expanded on by Paul David (2003) who notes that “knowledge is inherently a non-rival good”. In this view, knowledge is, indeed, a public good, and the incentives that are created by ‘privatizing’ knowledge “actually arise from artificial scarcities that are of no particular social value” (David 2003). These scholars argue that education should be massified. But another very influential view of education is that knowledge is a commercial commodity to hoard and trade to the highest bidder, or to be “privatized” The OER concept holds that knowledge should be for the common good, and in this it has made enormous progress since it was started over a decade ago.

2.3 Legal Frameworks to Support OER: Notable areas of progress include the development of alternative licensing to copyright laws. The most common of these was developed in 2001 by Larry Lessig of Stanford University and is called the Creative Commons (CC) ([www.creativecommons.org](http://www.creativecommons.org)). According to Liang (2004:78)

the Creative Commons believes that a large vibrant public domain of information and content is a pre-requisite to sustained creativity, and there is a need to proactively enrich this public
domain by creating a positive rights discourse. It does this by creating a set of licenses to enable open content and collaboration, as well as acting as a database of open content. Creative Commons also serves to educate the public about issues of copyright, freedom of speech and expression and the public domain.

The CC licenses include Baseline Rights such as: the right to copy, distribute, display, perform publicly or by digital performance, and to change the format of the material as a verbatim copy. Figure 26 below illustrates some of the different ways in which resources under CC licenses may be used. In any case, irrespective of the specifications of the CC license, all permit reuse.

![Figure 26 The Range of Options Available with OER](http://wikieducator.org/Educators_care/Defining_OER)

Creators may choose from the following conditions which they wish to apply to their work.
<table>
<thead>
<tr>
<th>Attribution by</th>
<th>Share Alike sa</th>
<th>Non-Commercial nc</th>
<th>No Derivative Works nd</th>
</tr>
</thead>
<tbody>
<tr>
<td>You let others copy, distribute, display, and perform your copyrighted work — and derivative works based upon it — but only if they give credit the way you request.</td>
<td>You allow others to distribute derivative works only under a license identical to the licence that governs your work.</td>
<td>You let others copy, distribute, display, and perform your work — and derivative works based upon it — but for non-commercial purposes only.</td>
<td>You let others copy, distribute, display, and perform only verbatim copies of your work, not derivative works based upon it.</td>
</tr>
</tbody>
</table>

**Table 11 Options With The Creative Commons (CC) License**

Source: http://creativecommons.org/licenses/?stype=site&q=table+of+licences

These permissions can be combined in various ways, as can be seen in the chart below:

Source: http://creativecommons.ca/en

The proliferation of facilities and services available online that are linked to OER are a testimony to the high uptake of the initiative in education. The COL/UNESCO Guide to OER
(cited earlier) lists six categories of OER facilities and services available online. These include:

1. Open Courseware (OCW) OER Repositories  
2. University OCW Initiatives  
3. Content Creation Initiatives  
4. Subject-Specific OCW OER  
5. Open Schooling Initiatives, and  
6. OCW OER Search.

An awareness of the availability of the various categories of OER is a critical first step in effectively engaging with OERs. The MIT Courseware is a fine example of open courseware.

The MIT Open Courseware has been especially successful. By January 2012, the OpenCourseWare included 2,100 courses and had been used by nearly 100 million people. According to University World News, MIT had launched a new MITx, an interactive online learning platform designed to give students “access to online laboratories, self-assessments and student-to-student discussions” (Issue 00205, web: January 23, 2012. http://www.universityworldnews.com/article.php?story=20120119151708550). This has been made possible in part due to grant funding and donations amounting to about 50% of the $4 million annually (d’Oliveira & Lerman 2009). The MIT model has inspired many other institutions around the world, to the extent that “more than 250 universities have committed to openly publishing course content in the OCW model and there are now more than 100 live sites and materials from over 9,000 courses available” (d’Oliveira & Lerman 2009). Another very popular open resource is Wikipedia.
The growing global network of practitioners and financiers of OER indicate that the movement is potent and viable. It also shows that it promises to be a key factor in driving Higher Education in the 21st century. The global OER network includes the following:

On the African continent, examples of some notable initiatives include those by OER Africa, the African Health OER Network (http://www.oerafrica.org/healthoer/Home/tabid/1858/Default.aspx) as well as the Teacher Education in Sub-Saharan Africa (TESSA) (http://www.tessafrica.net/).
3. OER: Issues to Consider:

Educators and senior managers of educational institutions have two main concerns regarding OER. These are (1) intellectual property concerns and (2) quality assurance. These issues are as old as higher education itself and are held as sacrosanct by practitioners. Hence, the anxieties surrounding them are understandable. In this section, we examine the twin concerns of intellectual property and quality assurance within the context of OER in higher education.

3.1 Intellectual Property Concerns: There are two aspects to this concern. The first is the fear that the creator of the resource (the original author) would be ‘giving away’ his rights, with the potential loss of possible commercial gain that such a resource might bring. A second aspect of this fear relates to the possibility that others might take undue advantage and benefit by selling, plagiarizing (intellectual theft) or exploiting it in other ways (Butcher, 2011:9).

Regarding the fear of losing one’s intellectual property rights (IPR), it must be noted that open licenses do not take away the content creator’s rights. Rather, they protect such rights and ensure that the resource is available to the widest audience and is utilized to the fullest extent, while still being attributed to the original author. As stated earlier in this chapter, the CC license gives the author four choices from which to determine the extent to which their resource may be open. These range from the least open Non Derivatives Work (nd) to the most open Attribution (by). Regarding the fear that others might take undue advantage of openness and unfairly exploit or steal the resource, the COL/UNESCO Guide (2011) cited earlier provides four benefits that can accrue from sharing content under an open licence, which provide safeguards to possible plagiarism and other forms of exploitation of intellectual property.

1. Digitized content is easy to share between students and institutions: Rather than being a threat, sharing content publicly under the open licence is the safest way to protect the author’s IPR and copyright, because the licence will ensure that when content is shared, it remains attributed to the original author. More important, open sharing of content can more rapidly expose plagiarism by making the original materials easy to access. Finally, since users already have permission to use, and adapt through the licence, it reduces the incentive to steal or to lie about the source.

2. Within the open licence, open sharing environment, the more other institutions and individuals make use of materials created by your institution, the more this will serve to market the originating institution’s services and thereby attract new students. This point is framed on the conviction that educational institutions that
succeed economically in an environment where content has been digitized and is increasingly easy to access online are likely to do so because they understand that their real potential educational value lies not in content itself, but in offering related services valued by their students. These might include guiding students effectively through educational resources via well designed teaching and learning pathways; offering effective student support (such as practical sessions, tutorials, individual counselling sessions or online); and providing intelligent assessment and critical feedback to students on their performance.

3. For individual educators, proper commercial incentives for sharing content openly are most likely to flow when institutions have policies to reward such activity properly. For most educators, incentives lie in changing the institutional and national policies and budgetary frameworks so that they reward collaboration and open sharing of knowledge. At present, the national and institutional policy frameworks (including at the University of Jos) have tended, at worst, to penalize collaboration and open sharing of knowledge (by removing possible streams of income when knowledge is shared openly) or, at best, to ignore it (as many universities do by rewarding research publications over other pursuits).

4. Even if institutional and national policies and budgetary frameworks do not reward collaboration and open sharing of knowledge, there are still incentives for educators to share their resources openly. Indeed, according to Butcher (2001:9), “when educators raise the concern (of intellectual property), it actually masks a different anxiety—namely, that sharing their educational materials will open their work to scrutiny by their peers (and that their peers may consider their work to be of poor quality)”. Those who share materials openly have significant opportunities to build their individual reputations through the online collaborative vehicles. They also increase opportunities to learn from feedback and from others and thus improve their teaching practice and domain-specific (subject) knowledge by sharing and collaborating with growing networks of educators around the world.

3.2 Quality Assurance: Concerns around the quality of OER have been significant in determining whether an institution would release their teaching and learning materials or not. In discussing quality assurance issues, it is important to note that OER is not the same thing as open access publishing, although the two may sometimes overlap. Butcher (2011: 9) makes the following distinction between open access publishing and OER: “Open access publishing is typically referring to research publications of some kind released under an open licence. OER refers to teaching and learning materials released under such a licence. This distinction is critical, especially in Higher Education where educational materials are primarily seen as ‘publications’ and the quality of such publications is controlled by publishers.

Of course the issue of quality is fundamental and must be accounted for. But it must be noted that the term ‘quality’ is relative and depends on many factors, and some of these
are purely political and have nothing to do with the intellectual standard of the resource. For example, Arunachalam (1999), quoting an editorial from *New Scientist* (of November 1\textsuperscript{st}, 1997, 3) notes regarding the attitude of editors in selecting papers for publication in the so-called “mainstream” or “core” first-tier journals:

When it came to choosing manuscripts for publication (sic) editors of reputed international journals would more likely select the one from Harvard in preference to the one from Hyderabad (a city in south central India, and south eastern Pakistan)—even though both manuscripts may be of comparable quality. To most editors in the West, Harvard seems a sounder bet than Hyderabad.

So, even for research publications, researchers in the developing world do themselves no good when they measure the success of their research by whether or not such get published in the journals of the oligarchic powers of the West. Instead, Arunachalam (1999) recommends that “it is more important to develop a better knowledge of who does what where within the country or the region, and begin to identify the salient themes of research that emerge within comparable countries while seeking ways to network researchers as densely as possible.” Moreover, localization is a function of invisibility while internationalization on the other hand is a function of access. With access, well prepared content can break the barrier and become international. Arunachalam (1999) insists that

Internationalization does not necessarily mean exclusive contact with “core” scientific countries. New ideas, respect of rigorous standards and transfers of laboratory techniques can occur between various kinds of scientific “nodes,” all of which are not necessarily located at Harvard, Oxford or other “central” institutions. Moreover, if the literature is freely accessible, some of the obstacles to internationalization can also be removed or at least their effect diminished. The basic issue, therefore, is achieving some form of *internationalization*, not connecting with mainstream science, whatever meaning is assigned to this dubious expression. And achieving a satisfactory degree of internationalization is a function, among other important factors, of access.

The point here is that while external views are important, content creators and institutions need not be unwittingly bogged down by them. Concerns over the perceptions of external observers should not hold back faculty from sharing with outsiders what they create and share with their learners. Furthermore, the distinction between *research publications* and
teaching and learning materials makes it easier to approach the issue of quality assurance. Because OER belong to the latter, quality assurance issues must be treated in the same way that the selection of content and learning resources is generally treated in an institution. As stated in Butcher (2011: 12), “the responsibility for assuring the quality of OER used in teaching and learning environments will reside with the institution, programme/course coordinators, and the individual educators responsible for delivery of education”. This is proper because these institutional bodies have always handled issues of quality assurance. They retain the final responsibility for choosing which materials to use, whether these are open or proprietary.

4. Using Open Educational Resources

4.1 Quality Management Issues: At the University of Jos, there are a number of traditions. In some faculties, departments make the choice of texts to be recommended for use by students. In others “a lecturer chooses texts to express the philosophy of a course. In some departments, no one vets the texts to be recommended” (SMS from V.S. Dugga, January 25, 2012). With the increasing adoption of OER, the quality assurance process may be standardized. In any case, several alternative ways of approaching quality management issues have been used. Yuan, MacNeill and Kraan (2011) highlight three of these:

1. **Institution-based approach**: this is to use the brand or reputation of the institution to persuade the user that the materials on the website (or institutional repository) are of good quality. The UK Open University’s OpenLearn initiative is an example of this approach. Institutions most probably (read ought to) use internal quality checks before they release the courses. “As institutions share more educational content online, they will want to ensure that this content reflects well on the institution and may thus invest in improving its quality before making it available in repositories” (Butcher, 2011:12). The constraint is that such internal quality checks are not open in the sense that users of the resources can follow them. But this may not be a major setback, since even the quality assurance mechanisms of many research publications, including the so-called reputable ones, is by no means transparent or objective.

2. **Peer review approach**: This is one of the most used quality assurance processes in academia. It is well known and used in Open source software (to review the code delivered by community members) as well as Open access journals (to decide which articles should be published). It could also be used for OER to guarantee the quality of a repository’s resources. It is important to make such review decisions credible and peer review according to agreed criteria.

3. **Open Users review approach**: This is a kind of low-level, bottom-up, but high density approach; letting individual users decide on whatever grounds they like whether a learning resource is of high quality, useful or good in any other respect.
This can be done by having users rate or comment on the resource or describe how they have used it, or by showing the number of downloads for each resource on the website. This is a good approach because, in the final analysis, whether a resource was peer-reviewed and published in the best journals or was just a lecture note clearly written by an individual instructor, it is its value to the end-user, the learner that would determine its usefulness. Other issues related to quality assurance involve the process of searching for, adapting or re-purposing and using OER.

4.2 Searching and Re-Purposing OER: The explosion of available content online poses additional challenges to quality assurance. In a sense it is a blessing because it reduces the necessity to develop new content from scratch, but it is also a burden because it demands advanced skills in information searching, selection, adaptation, design and evaluation. The first step in the search therefore is with course planning. There must be a course outline, as it helps to define the scope of the course. The objectives and outcomes of the course must also be clearly outlined. These elements provide the frame for what to look for and form the pathway for the search (Dooga, August 3, 2011). Drawing on evaluation criteria from the Joint Information Systems Committee (JISC) Open Educational Resources Infokit, Intute Resource as well as SAIDE’s (2000) Learning Design Criteria, TessaWelch (2011) provides a guide to selecting appropriate content. This guide are a rule of thumb for conducting a literature search for research in general, especially online, whether this pertains to OER or not:

- **Intute Resource www criteria:**

  ![Intute Resource www criteria](http://www.vtstutorials.ac.uk/tutorial/education/?sid=2632708&itemid=12075)

Source: [http://www.vtstutorials.ac.uk/tutorial/education/?sid=2632708&itemid=12075](http://www.vtstutorials.ac.uk/tutorial/education/?sid=2632708&itemid=12075)

- **SAIDE’S Learning Design Criteria (2000):**
  - **Orientation** (clear introduction, overview and statement of learning goals)
  - **Selection** (rigour, relevance, currency) and coherence of content
  - **Presentation of content** (clear explanation of concepts, good scaffolding and opportunity for processing)
  - **View of knowledge** (open and constructed in contexts) and use of learners’ experiences
Activities for active engagement in learning process (varied, different levels of cognitive demand) with feedback that takes the learning process further.

The SAIDE criteria are similar with that provided by the JISC Open Educational Resources Infokit. Like SAIDE, JISC’s list includes accuracy, reputation of author/institution, standard of technical production, accessibility and fitness for purpose. Following these suggested selection and evaluation criteria is likely will provide at least the first level of quality assurance.

4.2.1 The Search: Regarding the actual search for OER, there are several options. If the person searching knows specifically where the resource is located, he/she could just go there directly and look for it. Also, if the searcher is aware of OER sites, it would be useful to search those sites. Some of these are subject-matter specific, but others are general. They include:

1. The Global Text project - http://globaltext.terry.uga.edu/
2. OER@AVU – Teacher Education - http://oer.avu.org
4. OER Commons – http://www.oercommons.org/

There are other search engines such as:

- Temoa - "a knowledge hub that eases a public and multilingual catalog of Open Educational Resources (OER) which aims to support the education community to find those resources and materials that meet their needs for teaching and learning through a specialized and collaborative search system and social tools."
- DiscoverEd - "Discover the Universe of Open Educational Resources"
- Jorum - "free learning and teaching resources, created and contributed by teaching staff from UK Further and Higher Education Institutions"
- CoL – knowledge finder – for an approach to searching for OER, open courseware, and other resources for learning
- OER Dynamic Search Engine - a wiki page of OER sites with accompanied search engine (powered by Google Custom Search)
- JISC Digital Media maintain guidance on finding video, audio and images online, including those licensed as Creative Commons.

4.3 Using OERs at the University of Jos: Although OER has been in use in Higher Education for a while, it is yet been known or properly understood at the University of Jos. The University of Jos Library has made efforts in the last few years to introduce the community to OER. Until 2007, any contact with OER material was largely accidental. But starting in that year, the University of Jos Library added the MIT OCW as an active link on its web page. Instructors, mainly in the Department of Mathematics, encouraged students to access the resources for additional information. The Department also used digital resources from the Carnegie Mellon University’s Open Learning Initiatives and the Khan Academy to complement local content. Apart from Mathematics, no department integrated OER material as part of a course, or aligned it with the curriculum.

Today, the University of Jos is actively involved in Open Courseware (OCW) OER through the University Repository which is set up and managed by the University of Jos Library (www.unijos.edu.ng/library). The repository holds research outputs of members of the University community, such as theses and dissertations as well as published and ongoing research reports. In addition, the Library has links not only to the MIT Open Courseware but also to OER Africa and other sites of open resources in its eGranary. From time to time, the University Library embarks on awareness and training programmes to enlighten the University community of the existence of these resources and how they may be accessed. The University is also involved in various Content Creation Initiatives through the Jos-Carnegie and PHEA ETI projects. The Department of Mathematics has a number of well-developed online courses, typically heavily subscribed courses. The Department says these resources are available as OER and can be accessed on Moodle at http://moodle.unijos.edu.ng/course/category.php?id=6. Through the PHEA ETI, the Faculty of Law has successfully developed four courses to be released as OER, an academic research writing course in the Faculty of Arts which are also available on the University’s learning management system: http://moodle.unijos.edu.ng. Multimedia resources have also been produced in Pharmacy and Microbiology. All of these are being shared both within the immediate University community and available to all as OER. The historical archives are available on the University Repository at http://dspace.unijos.edu.ng/handle/10485/12/browse?type=title&submit_browse=Title

Even so, the University’s academic community is yet to be well informed about the concept, value, and uses of OER. As a result, the available OER resources are not yet been accessed optimally, according to reports from the Library. As noted above, a few faculties have embarked on creating OER from scratch, but less progress has been made by educators to adapt or re-purpose OER content. However, there have been at least two successful attempts at adapting OER content and pedagogy for teaching as noted below. An
outline of the context of these courses is provided as well as a personal narrative as to how OER were adapted for these situations.

A. Building a “Communication Skills” Course from OER

The University of Jos hosts a three-month Certificate Course in Labour Relations for trade union leaders in Nigeria under their umbrella body the Nigeria Labour Congress (NLC). It is a four-month course that starts in September, with examinations taking place in December. One of the modules covered in the course is “Communication Skills.”

In 2009, the curriculum and content of the programme were reviewed. The goal was to tailor content to the needs and challenges of participants in their capacity as trade union leaders. The challenge was therefore to design the course in such a way that it would address the challenges particular to the participants. It was also critical to design a course that would have a strong hands-on approach over a lecture-type delivery method. This meant that the design would address not only content, but pedagogy, and would adopt specific, clear theoretical assumptions on the nature of learning, especially the nature of teaching adult learners.

Each instructor on the programme had the responsibility to revise or re-write the contents of their course, following guidelines. While these efforts at course creation were on, I got introduced to the concept of OER at a PHEA workshop in Johannesburg. in addition to content, I needed to find an appropriate method of including activities throughout the course to get learners involved. Above all, I needed to find the appropriate strategy to teach these adult learners. At the time, I knew nothing about OER sites. But I knew how to use Advanced Google Search.

Drawing from my course outline, and guided by my defined course objectives and outcomes, I went to advanced search and set the search parameters in Google. Under “usage rights” I selected the option “free to use share or modify.” The following figure shows the process here described.
Figure 29 Google Search Discreet Parameters

At the time, the search returned a little above 10,000 hits, which was much more manageable than the over 80,000 returned without the specification to “use, share and modify.” If I had known about some of the specific OER sites discussed earlier, my search would have been more discrete and the results richer. At this point, I was looking for resources that were from educational institutions. One clue was to examine those which had a universal resource locator (url) that ended with .org or .edu. That was how I located the “Communication Skills” book created by Bunda College of Agriculture as well as the resource on “Creating and Delivering Effectives Speeches” from The Writing Centre, University of North Carolina. The Bunda College resource had seven main chapters, but the contents were generally unsuitable for my audience. The fourth chapter had much of what I needed, so I took it. It required only little tweaking. More important, I adapted the presentation of activities in the book. So I adapted the pedagogy. The material on creating and delivering effectie speeches from the University of North Carolina was just adequate for my purpose. So I took the content as it was. I only added activities and localized the illustrations. I then wrote the other modules to complete the course. The following table summarizes the process of re-purposing the OERs as well as the resulting “domesticated” version.
As part of the PHEA ETI project at the University of Jos, the Faculty of Arts embarked on a project to design and build a multidisciplinary online course on **Academic Research Writing**. The aim of the course was to address the challenges of academic writing among final year undergraduate students as well as postgraduate students and younger academic staff in the humanities faculty. It was expected that at completion, the course would assist users to master the art and techniques of academic writing and would be an invaluable resource for preparing academic projects, theses and dissertations as well as equip academic staff with the skills to write publishable academic essays. Seven scholars from the Faculty of Arts contributed various modules to the course. The team of content developers met to discuss the outline, examine the objectives and the outcomes. In addition, they discussed the pedagogy as well as the theoretical bent of the presentation. All were encouraged to search for and use OER resources to avoid the need to seek permissions or copyrighted materials and perhaps have access restrictions on the resulting product. For quality assurance, the project contracted an external quality assurance person who made inputs on the various drafts and returned them to content developers to make improvements. In addition, the quality assurance contractor sourced relevant OER resources and distributed them to content developers according to the theme each was developing.

I developed a module on “Academic Discourse.” Here again, I used the Advanced Search Option in Google to set my parameters under “usage rights” to search only what was free

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### Table 12 Reversioning OER on “Communication Skills”

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<thead>
<tr>
<th>What we took</th>
<th>What we changed</th>
<th>What the new course included</th>
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</thead>
<tbody>
<tr>
<td>Module 4: Listening Skills Pp. 32-49; Adapted the pedagogy, especially the 2 types of activities: Self Study, and Seminar Activity</td>
<td>Replaced all references to Bunda College with University of Jos; Replaced/provided trade union-specific scenarios and examples; added <strong>the controlling listener</strong> as a sub-type of listener to contrast with the empathetic listener; added the process of listening: predicting, receiving messages, attending, &amp; assigning meaning.</td>
<td>Creating and delivering effective speeches (taken from The Writing Centre, University of North Carolina and Chapel Hill, licensed under the Creative Commons <a href="http://www.unc.edu/depts/wcweb/handouts/speeches.html">http://www.unc.edu/depts/wcweb/handouts/speeches.html</a></td>
</tr>
</tbody>
</table>

B: **Contributing a Module on “Academic Research Writing”**
to “use, share and modify.” I located a resource developed by the Learning Development unit of the University of Wollongong in Australia (Unilearning@uow.edu.au). Although my Google search turned up this resource, it was not clear on the site itself whether the resource was OER, and if it was, what kind of licence governed it. So in order to play safe and not expose the Faculty and the University to possible litigation in future, I decided to write and request permission, which was granted. As it turned out, the Wollongong resources were actually licensed as OER. If I had known more about OER then and searched specific OER sites, I would not have had any anxiety over what was or was not OER. My search would have been faster, and the results richer.

One major consideration in selecting a resource for use or re-use is: “is it fit for your purpose?” In the case of this resource, it was. Although it could not be used in its original form, and was not complete itself, its major use was that it outlined broadly most of the issues that needed to be covered in an academic writing course. The research component needed to be added, and I needed to also enrich the content and upgrade the level of discussion to meet the needs of my learners.

4.3.1 Addressing Quality Control: One objective of all the projects that were developed under the auspices of the Jos-PHEA ETI programme was to share the developed resources as OER. To that effect, efforts were made to use research which had been released under the open licence, and multimedia artefacts created using local examples were preferred to ready-made proprietary material. The projects adopted the iterative quality assurance mechanism. The iterative evaluation model was adapted from Dabbagh & Bannan-Ritland’s (2005) Integrative Learning Design Framework and was designed to account for periodic formative evaluations during the various stages of course design as well as pilot and an eventual summative evaluation. At each stage, the framework allows for a loop-back to improve on what is found to be weak or ineffective before proceeding to the next stage. Thus, the academic research writing course was peer-reviewed through a rigorous weeklong retreat as well as by external assessors. Such a process reduces the likelihood of expending time and money in designing and building a course only to realize that it failed to achieve its intended purpose. The figure below illustrates the iterative evaluation model.
5. Conclusion

In working with various departments to create courses and multimedia content under the PHEA, I have found that academics involved in these projects have strong concerns over intellectual property rights. At two of the seminars held in the Faculty of Law, these concerns loomed large in the deliberations. An extreme case was in the Department of Microbiology, where the project leader for the multimedia project was so sensitive about the ownership of what they produced that he would not even permit the funders’ external evaluator to have web access to the material. He insisted that he needed to consult all members of the team and seek their consent before permitting the material to be exposed on the web even for evaluation. These concerns revolve around two main issues. The first is the thought that if one has spent time, energy and intellectual resources to create a resource, it would be improper to give it away “free” by releasing it as OER. Second is the fear that if resources are released as OER, the authors may lose their attribution. Although the OER licence clearly addresses these concerns, it would take more advocacy to convince many.

Quality assurance is also a concern. For content created as part of a funded project, such as the PHEA or Carnegie, there are quality assurance mechanisms set in place for deliberate, systematic quality checks. This helps to improve the quality of the final product. In fact, in the case of the PHEA, created content was even evaluated by external assessors. But such systematic quality control mechanisms are otherwise lacking in faculties and departments across the University. As more individuals and departments consider sharing their content and intellectual resources as OER, it would be useful for quality assurance to be deliberately included in the process of content design and creation.

The creation of OER at the University of Jos is at present an initiative which is being sustained by donor funds, such as the Jos Carnegie Partnership’s ICT Intervention and the
PHEA ETI. Neither the utilization of existing OER for teaching or learning, nor the creation, adaptation or re-purposing of OER is being done University-wide outside these projects. For this situation to change, and to ensure sustainability, institutional policy frameworks must be put in place and incentives established for educators to excel in OER. Such institutional policies which build on educators in the creation and sharing of OER will need to invest considerable effort in training and support (Yuan, MacNeill and Kraan 2008).

Appropriate mechanisms need to be put in place for sustained public awareness of the community on the OER agenda. This is because, as Yuan, MacNeill and Kraan (2008:16) observe, “to make OER initiatives work and keep them for the long run, it is important to first gain and maintain a critical mass of active, engaged users, increase usability and improve quality of the resources created.” The aim must therefore be for the whole institution to buy into the OER movement, not just one individual pioneer faculty. Such institutional buy-in will make it possible for institutional resources to be committed to sustain it.

Deliberate and systematic effort must be made to encourage the culture of sharing and re-using content within the institution. Yuan, MacNeill and Kraan (2008) list the following as critical areas that such a policy will need to address:

1. Curriculum development
2. Financial support
3. Intellectual property
4. Culture of sharing
5. Assessment and accreditation
6. Quality assurance
7. Staff development
8. Student support
9. Technical infrastructure/software, and
10. Institutional model.
6. References and Bibliography


Learning Development unit, University of Wollongong in Australia.Unilearning@uow.edu.au.


