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SOME EXAMPLES OF BEST PRACTICE IN OPEN EDUCATIONAL RESOURCES:

- ▶ Athabasca Open CourseWare
- ▶ OpenLearn UK
- ▶ Otago Polytechnic OER
- ▶ OpenCourseWare UOC

Dr Frances Gray
Dr Carina Bossu



DEHub *Innovation in distance education*

University of New England

NSW 2351

Australia

Email dehub@une.edu.au

Worldwide web: <http://www.dehub.edu.au/publications/occasional-papers/>

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Some Examples of Best Practice in Open Educational Resources:

- › Athabasca Open CourseWare
- › OpenLearn UK
- › Otago Polytechnic OER
- › OpenCourseWare UOC

Introduction

The examples of best practice in Open Educational Resources (OER) that follow typify a change in learning and teaching practices that has been ushered in with the development of and increased access to Information and Communication Technologies (ICT). These developments have been occurring over the past fifteen to twenty years in tertiary educational institutions around the world. Open courseware, open access, open practices, that use OER, have become a state of the art orientation towards teaching and learning for many teaching and research practitioners and students. This is the case above all in the area of distance education, where online and electronic delivery of courses has become commonplace.

Of course, debates have arisen over the nature of *open* learning, open educational resources, *open* courseware, *open* access, *open* practices. What do such terms mean? What implications does 'open' have for tertiary education, for educators, authors and researchers, and for students? What theory can underpin OER? What does OER mean in relation to distance education? What does online and open education mean for student-lecturer relations (Anderson, 2011)? Such debates are not unusual in educational theory. If they follow the pattern of other educational debates, they will reach their peak, ferment, be dismissed and glossed over, be resurrected, be transformed. Whatever the case, they occupy an important place in the pedagogical imagination, particularly in light of the marketing of education within a global context. And marketing is an important issue in itself: funding, sustainability, advertising and promotion, all have implications for the integrity of teaching and learning, and for attracting students. Along with this is the idea of the student as a consumer or as a client, language transferred across from the consumerist society in which many of us live.

OER does not exist in a morally neutral world. This is reflected in the socio-ethical concerns of the four cases of OER practices presented. Each of the four providers of OER is deeply aware of their social obligations to indigenous and/or disadvantaged groups within their sphere of educational influence and interest. A recurring theme is that education *ought* to be available to everyone, that such education *ought* to be the best available, and that it *ought to be free*. This amounts to what could be seen as profound idealism. Such idealism is especially evident in the documentation and web-sites of Athabasca and OpenLearn.

That said, the examples of practice in OER discussed here reveal implicit assumptions about the ubiquitous nature of information and communication technologies. It is not the case that information and communication technologies are available equally, or even at all, in every place in the world. Class, race, ethnic and gender distinctions operate in many societies. These distinctions preclude universal availability of education of any kind to every social group, never mind those that rely on computers and computer technologies (themselves dependent on the availability of electricity and other services regarded as basic to the privileged in affluent societies). Nor is it the case that everyone actually wants a tertiary education. These are debates not addressed here. Further information about each subject in these examples of OER adoption can be found by following up the bibliographic information.

The examples of practice in OER are an explicit result of the availability of open access to various web-sites and documents on the web. Hence, there is a direct relation between what each institution aims to do and the possibility of producing a document such as this: open-ness in terms of freely available enabled this research and is an indication of what can be done within an educational research environment that is committed to collaboration and dissemination of information and insight.

Four examples of best practice in OER are explored in this document. They are: Athabasca Open CourseWare from Athabasca University in Canada, OpenLearn initiative from the Open University in the United Kingdom, Otago Polytechnic OER from the Otago Polytechnic in New Zealand, and OpenCourseWare UOC from the Universitat Oberta de Catalunya (Open University of Catalunya) in Spain. Each example follows a similar structure. A rationale for choosing these examples was that these were successful cases of OER adoption at the time of this research. Also, it is believed that these institutions represented a diverse range of educational providers located in different countries and continents. Thus, they also provide a diverse, and so richer, range of insights in relation to the adoption of OER.

Athabasca Open CourseWare

Athabasca University

Background

Athabasca University (AU) is a research university that specialises in on-line and distance education. It is a founding member of the Open Education Resource Foundation (Athabasca University, 2010). AU also hosts WikiEducator (Athabasca University, 2009). It is a member of Campus Alberta and eCampus Alberta and is a founding member of the OER University network. It is also a member of the Canadian Virtual University (CVU) /L'Université Virtuelle Canadienne (UVC) collaborative network. It boasts many international collaborations,

partnerships and institutional alliances. In 2010, AU reports that it had received \$150,000 over two years from the Hewlett Foundation. The purpose of this funding is to promote 'co-operative and collaborative actions... to launch an open educational resources network with focus on action and collaboration' (Athabasca University, 2010).

AU's central mission is to reduce barriers to post-secondary education through excellence, openness, flexibility and innovation. AU is committed to the democratisation of tertiary education through opening educational possibilities to all members of Canadian society, especially those for whom tertiary education has not been an option; for example, First Nation and Métis Albertans, students with disabilities and those who need support in the gap between school and post-secondary education (Athabasca University, 2009-2010, 2012a, 2012b)

Through their Open Courseware site, AU offers open access to some of their courses that are typically taken in their degree programmes (Athabasca University, 2012c). This courseware material is free of charge. It offers down-loadable OER Flash Learning Objects containing interactive puzzles, games and diagrams, as well as video material across of range of different disciplinary areas.

The initiative

AU has a 'longstanding commitment to adult and lifelong learners, to aboriginal communities, to learners in remote, rural and northern areas, to under-served urban populations and to programme students at other universities who seek to accelerate degree completion' (Athabasca University, 2012a). AU has an open admissions policy that means that a student's previous academic experience and achievement is not the basis of admission to AU to either AU's degree programmes or the OER initiative. AU has committed \$89,530.152 over the next 10 years to its Open Learning Environment, of which \$80M has been requested from the Albertan Government (Athabasca University, 2012a). AU has also developed a Comprehensive Institutional Plan 2012-15 that gives a detailed account of its philosophy around open education, its commitment to access for all Albertans and for long-distance education students, especially those who are isolated. The plan cites five main goals:

- › 'Leading quality open and distance education
- › Ensuring sustainability and fostering adaptability
- › Recruiting and retaining excellent people
- › Promoting excellence in research
- › Building communities' (Athabasca University, 2009-2010, 2012a).

Included in this plan is a commitment to the development of educational technology for Athabasca's Open Learning Environment.

Intended outcomes

AU regards its place in the on-line market as well-credentialed given its expertise in on-line teaching and its well-grounded history. AU highlights its main goals in the context of priority initiatives, expected outcomes and performance measures. AU aims to recruit and retain students from regions and backgrounds from which university student populations are not typically drawn, to contribute to the development of its partners (Campus Alberta and e-Campus Alberta), to strengthen funding for students through scholarships and bursaries and to expand student access through pedagogically insightful learning technologies.

The benefits

AU's comprehensive institutional self-study (2009-2010) is available only to students and staff. The results of that study are included in the Institutional plan; however, there is no description of benefits experienced by either practitioners (teaching staff, for example) or students. That said, what comes through in the Institutional, Business, and University Plan Highlights is a very optimistic view of the future of AU as an online teaching institution in collaboration with various government and non-government enterprises and other educational institutions. The Highlights document states that 'the community-based, participatory planning approach used in developing this plan emphasized inclusiveness and collaborative decision making' ensuring that 'every member of the AU community had an opportunity to participate in the planning process' (Athabasca University, 2009-2010). Thus, we can infer that the self-study, as the foundation of those plans, was itself well-disposed towards the educational outcomes and research being carried on at Athabasca. Its commitment to the removal of barriers to higher education for not only Albertans, but for adult learners across the globe, would see profound benefits for all of those involved.

While the benefits of the Open Learning Environment, in terms of free on-line open course material, are not specifically highlighted here, we might see the open course programme as an integral part of Athabasca's over-all educational objectives and philosophy. AU argues that there are many benefits for students studying in the distance education mode: accessibility, flexibility, affordability and adaptability. There is no reason to believe that the OER initiative does not follow suit.

Lessons learned

AU identifies access issues for rural, aboriginal students and for students with disabilities. It sees its ability to provide appropriate academic and student support to the latter group as one of its weaknesses. They argue that there are social and legal challenges from the latter group to 'programs, facilities and technologies' (Athabasca University, 2012a). AU argues that these are not issues confronted by itself alone: they are issues across Canada and the world. AU also understands that there are demands for industries and employers for more on-line education specifically suited to the needs of employer groups, students and governments. The digitising of education can accommodate tailored courses with flexible options for on-going learning. AU seeks to embrace this consideration, even while recognising the challenges of a demand-led, competitive, on-line educational market. Indeed, AU sees the growing levels of competition as one of the major threats to its expansion and delivery of its on-line programmes.

AU acknowledges its potential weakness in relation to learners' 'escalating expectations'. AU also acknowledges the economic barriers to participation, given the current state of the world's economy. Its budgetary commitments and institutional plan are indicative of its realisation that major technological investment is necessary and that, along with expansion of technology, there will be other implications. Its commitment to excellence in all areas can be seen as a way of dealing with these issues.

Summary and reflections

It appears that AU's commitment to open education and to the OER movement has been, so far, highly successful. However, there is not a lot of information about how the courseware intersects with AU's more generalised degree programmes. Implicit in their documentation is the notion that there will be some recruitment from the OER options into their degree programmes. The OER options would prepare students for the on-line experience integral to full enrolment in an AU course. In a paper released through Technology Enhanced Knowledge Research Institute (TEKRI), the research arm of AU, the problem of receiving appropriate academic recognition for their learning through OER, is discussed. The paper argues that this issue could be addressed by modifying current Prior Learning Assessment and Recognition (PLAR) practices and tapping into the knowledge, research and experience of open learning providers (Technology Enhanced Knowledge Research Institute, 2011). The problem is revisited by Conrad and McGreal (2012), who discuss perceptions of prior learning, assessment protocols and costs in relation to OER.

Athabasca is a leader in OER in Canada. As well as hosting WikiEducator, its research centre hosts the Canadian Institute of Distance Education Research, and it publishes the *International Review of Research in Open and Distance Education*. Given AU's commitment to removal of barriers to post-secondary education, it is very surprising that there is

no mention of OER on AU's homepage. It is also difficult to tell just how successful the OER programme is, if part of its objective is to create opportunities for the communities mentioned earlier to progress into the degree system. It is early days yet for OER, even at AU. But AU has the technological infrastructure and distance education credentials to fulfill its mission.

OpenLearn

Open University UK

Background

Open Learn is an open content or open educational resource (OER) initiative of the Open University UK and the Hewlett Foundation. Launched in 2006, OpenLearn uses current or archived teaching and learning material from Open University Course materials. Materials in OpenLearn are made available through the LearningSpace, primarily a site for educators, where they are adapted for a wider group of students than those enrolled at Open University.

Open University initially envisaged that the principal users of OpenLearn would be educators and students. It has, however, identified three types of users or visitors to the OpenLearn site: volunteer students, social learners and 'bounce visitors' (those who visit the OpenLearn site only once). It appears then, that not all visitors are learners in the sense that they follow up with any formal approach to what they find in the site. Open Learn was able to survey 6,196 registered learners, who volunteered to participate in Open Learn questionnaire research, amongst whom they identified low users (30 minutes or less as registered users) and high users (>30 minutes as registered users). OpenLearn gave shorter questionnaires to low users than to high, in the belief that the low users' experience of the site was more limited than that of high users. Questionnaires focussed on the backgrounds of students, their reasons for visiting the site, their attitudes to learning content and the tools for its use, together with student intentions for the future. Students included retirees and holders of PhDs, and ranged from introductory learners to advanced.

The learning environment can be conceptualised in terms of what was available to learn and what kinds of support students had. In 2006, 4,100 hours of open learning content was available for personal study. In providing OER, the Open University aimed to support students through the use of up-to-date management tools for learners, to encourage and facilitate open collaborative learning communities and to contribute to international research into the use and dissemination of digital technologies for higher education learning. According to Andy Lane, the Director of OpenLearn, this 'had increased to 5,400 hours of current Open University content through over 450 Study Units ranging from

1 to 50 hours in study time, from all academic levels, in a LearningSpace mainly aimed at learners; that same content plus a further 8,100 hours of archived content of almost complete courses in a LabSpace mainly for educators' (Lane, 2008). For many students, both the social and content learning aspects of OpenLearn are of high importance (McAndrew et al., 2009).

The initiative

Funding for OpenLearn up to the end of 2008 came from the Open University (£1M) and the William and Flora Hewlett Foundation (also £1M) with an allocation of £700,000 for a further 12 months from 2008. The Open University plans to maintain and extend the OpenLearn programme because of its commitment to OER, which it now sees as an integral aspect of its business. It outlines a four-pronged approach to sustaining the OER commitment:

1. 'to embed the development and use of OERs within all existing activities;
2. to secure additional recurrent and project grant funding from a variety of sources to build upon this core work and to work with partners around the world;
3. to investigate new business models arising from differentiated or disaggregated services that support learning to very large numbers using digital technologies; and
4. to explore the potential of combining the best in current technology developments' (McAndrew, et al., 2009).

OpenLearn offers a multi-disciplinary range of units based on Open University course materials. Unlike the Open University model, which has a Supported Open Learning (SOL) philosophy and practice, OpenLearn is a content-only programme. There is no interaction between tutor, content and assessment, and learner. Hence, learning materials need to be modified to address the difference between the two different teaching and learning programmes. Indeed, the difference in programmes can be identified in terms of the targeted users: those who do not typically have access to tertiary education or tertiary resources are the grass root users of OER. That said, OpenLearn does offer open support learning tools (via Moodle) to students to facilitate their own learning and to provide peer support through social networking relevant to their learning.

OpenLearn aims to develop learning confidence for students who might not have previously considered the possibility of taking University courses, to encourage thinking skills and to develop the skills of regional workers through the use of OER. Students in the North West of England and other ethnic minorities are amongst the target groups for the acquisition and development of these skills.

Intended outcomes

Andy Lane points out that 'educational resources are championed as a public good' (Lane, 2008). OpenLearn is aimed at potential students who would not have had access to tertiary education and who subsequently might then see themselves in a position to move to enrolling in University courses. However, the lack of opportunity for many people to have access to any tertiary educational resources remains a primary incentive for the development of OER.

Although formalising educational experience by registering for Open University courses might be a possibility for OpenLearn students, this was not part of the initiative as originally conceived. However, there is a correlation between web-site visits and recruitment of students (McAndrew, et al., 2009).

The benefits

All of those involved in the establishment of OpenLearn can identify beneficial outcomes for the project, and from its continuation. Support from Open University indicates that they see OpenLearn as a wonderful learning and business opportunity that has both national and international implications, student numbers, research opportunities and business investment.

The original model of the student user was based on what was seen as the typical student at Open University. However, OpenLearn distinguishes between enthusiasts, registered users and visitors. This tripartite distinction enabled formulation of different approaches to learning, to the content of the learning modules and to those who have an interest that is not followed up (the inquisitive). The function of this distinction turned on the enthusiasts' preparedness to talk about what they did with OER content, to use the content as planned and, also, to release themselves to the potential creativity offered through the unboundedness of OER. Clearly, many enthusiasts have benefited educationally and socially from the twin components of content and social networking opportunities offered by OpenLearn, and their patterns of interaction were easily identifiable to OpenLearn researchers.

Researchers were able to trace registered users and visitors through the investigative potential of web tools, such as logs and Moodle for the former and IP addresses search engine hits and cookies for the latter. Registered users were also canvassed for their willingness to participate in research, and about 50% of users agreed. The bulk of research by researchers emerged from the registered users group.

The direct, positive, impact of OER on the educational orientation of students is echoed in the research prospects engendered by the OpenLearn initiative. This is not simply in terms

of the amount of research material (book chapters, research papers, for example) that has amassed. It is, also, in terms of the international research collaboration made possible and its inspirational effects in the newly developing OER environment.

At an institutional level, OpenLearn acknowledges that there are different motivations for collaboration, depending on what collaborators want. Fielding Graduate University, California; OpenLearn Scotland Collaborations; University of the Third Age U3A, UK; UnisulVirtual, Santa Catarina, Brazil; UNIDERP, Campo Grande, Brazil were each interested in, and experienced different ways of using tools, community and content. Of particular interest is the transformation of teaching and learning that can be effected by collaborative approaches to teaching and learning. Provision of learning tools and content and mentoring, for example, were both part of the collaborative package. There was a strong emphasis on the open nature of the tools and content, what they could be used for and how.

Institutions have different reasons to collaborate with OpenLearn. They like the freedom to collaborate in the ways that most suit them: their needs, their visions, their resources. As with individual users and educators, institutions have motivations that represent their commitment to open content and distance education in general. It is also an opportunity to be associated with Open Univeristy without having a legal partnership – OpenLearn allows a much more fluid and informal relationship (McAndrew, et al., 2009).

At a student level, the possibilities afforded by open content, with its emphasis on flexibility and the possibility to move creatively in the learning process, means that students are encouraged to explore and interpret tools and content at their own pace.

Lessons learned

McAndrew, Santos and Goodwin (2007) identify four areas where difficulties might arise in OpenLearn: academic, technical (production), technical (tools) and research and evaluation. They focus on transformation of content, the kind of tools needed, bringing in 'content from the world', giving 'life to new things the world values', student numbers, reaching 'the world' and learning. In their view, all of these issues required attention.

Pedagogically, materials that originated in the Open University required true-to-the-source modification for use by neophyte learners. There are issues with the modification and provision of content materials intended for longer more complex courses and learning (Ferreira, & Heap, 2006). This entails a high degree of expertise in the reformulation of content. The use of open support learning tools attempts to ameliorate the absence of the human presence in the learning environment.

Further, some academics experienced difficulty with the idea of ‘repurposing’ materials they had written for other modes of delivery and programs. Others wondered why, in the language program in which they were involved, they ‘would be interested in putting all this work into it—download, translate and put my version back there... What am I going to get from all this?’ (McAndrew, et al., 2009).

Summary and reflections

Overall, OER through OpenLearn appears to have had a positive impact on three levels: for students, institutionally for the Open University and for researchers. The aims of the programme seem to have been achieved at a learner level, and there has been some positive flow-on to the Open University that seem to provide a new pool of prospective students. What is less obvious is the impact on academics whose materials have been seconded into use by OpenLearn. Academics could well be seen as producers of a product (information, content) for consumers (students/users). We see here a transformation of language and the idea of education and learning. While this may not be all good, it is not all bad either. One wonders what content might be given to the term ‘educator’, what is the role of the academic, how research would be envisioned, what effect the individualisation of learning will have on students. One of the issues for staff and students involved with OpenLearn was that they did not all have the technology literacy to keep up with or even use, the sophisticated technology that was employed. This is a pressing issue that needs to be addressed.

Otago Polytechnic OER

Otago Polytechnic New Zealand

Background

Otago Polytechnic (OP) is in Dunedin, New Zealand. It is a vocational education and training institution that is publicly funded. OP has been a signatory to the Cape Town Open Education Declaration since 2008 (Capetowndeclaration.org, 2012). OP has adopted a default Creative Commons Attribution IP policy, and it hosts the international head office of the Open Educational Resources (OER) Foundation (Otago Polytechnic, 2012a; Wikieducator.org, 2012b, 2012c). OP has four institutional priorities: to lead the vocational tertiary sector ‘in the achievement of educational excellence’; ‘to be financially sustainable’; to ‘achieve the highest level of confidence from our communities, anticipating and exceeding their expectations, including our commitments to Kai Tahu’; and to lead the tertiary vocational sector as ‘a socially responsible and sustainable organisation’ (Otago

Polytechnic, 2012a). OP supports OER, and has developed and has made available its own OER courses. It also uses external web services as a source that it adapts and develops for its students. OP encourages staff to use and develop OER and supports staff in developing the skills necessary for this development (Otago Polytechnic, 2012a). Students at OP can participate in OER courses from a range of disciplinary areas from *Sustainable Futures to Art to Horticulture to Midwifery to Research*. It also provides the opportunity for students to experience Wiki-based courses (Wikieducator.org, 2012e). Its commitment to OER is consistently clear from the amount of online information available through the web, the structure of its own webpages and its presence on Wikieducator. Students come from a variety of backgrounds and 'Student Stories', accessible from the homepage of OP's website, pay testimony to their good experience at OP.

The initiative

OP's OER initiative is based on their commitment to free and open access to educational materials through Creative Commons attribution licencing. With Creative Commons attribution, an author can decide on the level of copyright they want to protect their work, so that specific works can be used by others, provided they attribute authorship in the way determined by the author. To respect and protect Maori culture, OP has developed, in consultation with the local Maori Ngai Tahu law office, a different concept of ownership of IP instantiated in a Maori IP Policy. 'Broadly speaking, the Polytechnic's role in this area is one of guardianship of Maori IP and knowledge. The concept of guardianship has also been extended to students' IP' (Wikieducator.org, 2012d). This commitment is to the Dunedin area of New Zealand, to New Zealand more generally and to the expansion of OER internationally. With this background and with their affirmation of the Cape Town Open Education Declaration, OP has dedicated itself to the advancement of learning for its local communities, across the range of its curriculum. It sees itself as an active protagonist for its communities in terms of focusing on workforce skills and for making delivery of the associated educational programmes accessible in its regional centres, workplaces and people's houses (Otago Polytechnic Council, 2006).

OP's Strategic Directions include a commitment to financial sustainability for its academic programmes. OP has engaged in a project that evaluated the use of social media in OER and research practices. The detailed analysis of the project titled, 'Measuring Our Open Education', looks at usage, including gains, savings and costs, and also at staff reactions to OER. As well as examining what has already taken place, the analysis contains projections for the social media platforms, Wikieducator, YouTube, Slideshare, and Blogging. Gains, compared with training costs and returns of staff from the various social media platforms indicate Slideshare and Blogging are enterprises that are expensive to set-up and maintain, but Wikieducator and YouTube give a good return on training investment. However, the sample sizes were very small, so no definitive conclusions can be drawn from the figures available (Wikieducator.org, 2012a).

Intended outcomes

OP professes that OER 'is the means by which education at all levels can be more accessible, more affordable and more efficient' (Wikieducator.org, 2012c). This, together with the use of the Creative Commons Attribution Licence, is the fundamental philosophy underpinning OP's move towards OER. OP aims to share learning and teaching practices on the basis of open and free access to course materials and research with the idea of producing novel and inventive ways of using what is already available across curricula. Collaboration is central to this philosophy to access the 'untapped potential' of individual teachers and lectures that would enable, for example, low-enrolment courses to become cost-effective (Wikieducator.org, 2012c).

The benefits

Staff and students at OP are enthusiastic about the benefits of OER, although this is by no means a universal feeling at OP (Buston, Ferguson, & Thomson, 2010). For example, the research conducted with a small sample of academic staff to trace how they have understood and interacted with OER reveals very mixed reactions, understandings and struggles with the ideas and technology. The researchers remark that uptake of OER practice has been slow in spite of the fact that there is obvious institutional support, typically from researchers and management (Otago Polytechnic, 2012b). On the other hand, students are enthusiastic about their learning at OP, even though they do not mention OER in particular.

Lessons learned

Academic and teaching staff have reservations about OER, ranging from concerns about the percentage of the world's population that has access to computers and internet to a blasé attitude amongst some students because 'it's only a wiki so we don't have to show up', to comments about face-to-face being better than OER and OER not really working since it was online. They also reported that students might think they know it all already, because 'it's all there on the internet, so they don't have to do anything else', and that they feel overwhelmed by the technology, because they are actually neophytes with the technology and are 'scared of the wiki' (Buston et al., 2010). On the other hand, some lecturers have openly embraced the technology (Wikieducator.org, 2012d).

Summary and reflections

There appears to be a discrepancy between the enthusiastic promotion of OER by management, some academics and researchers, the experience (and inexperience) of other academics and lecturers, their training and expectations and the experiences of students. It is early days for OER. Recognition of the need for a separate IP Policy for Maori and the desire to democratise education to produce the best results for students is pedagogically and morally admirable. Clearly, for some, the introduction of OER has been exciting, challenging and rewarding. Others have understandable pedagogical reservations and proceed with caution in terms of their own expertise. Conversation between advocates and antagonists will need to take place with effective plans for change and training being sorted out.

OpenCourseWare UOC

Open University of Catalonia (Universitat Oberta de Catalunya - UOC)

Background

The UOC is an online distance university with 60,876 students currently enrolled across a diverse range of courses. Learning takes place in what they call 'virtual classrooms', which is basically their Learning Management System (LMS), equipped with the necessary media for lecturers and students to communicate: forum, discussion board, email, calendar, etc. The learning resources used by students are available through the LMS and also in the UOC Open CourseWare website and in the O2 institutional repository (see <http://openaccess.uoc.edu/webapps/o2/?locale=en>), which is an open repository accessible to all users, not only UOC students.

The Initiative

UOC is part of the Massachusetts Institute of Technology (MIT) OpenCourseWare Consortium (OCWC) (see <http://ocw.uoc.edu/>). The Consortium now comprises more than 250 educational institutions spread across the globe. UOC OCW website hosts free, open and high quality educational resources organized as subject areas taught at the university, which are: Health Sciences, Law and Political Science, Economics and Business Administration, School for Cooperation, Arts and Humanities, Information and

Communication Sciences, Computer Science, Technologies and Multimedia, Languages and Cultures, Psychology and Education Sciences and Tourism). These resources are also available to the broader community: teachers, students and self-learners worldwide for use and adaptation under an open license, in this case, Creative Commons licenses. UOC does not provide certification to learners who are not enrolled in its degrees, which is a common practice amongst OCWC members. The process of producing educational materials at the UOC appears to be complex and thorough at the same time. In the UOC, educational resources are designed and developed specifically for online learning. UOC believes that the system for creating materials is quite well-established. Lecturers must anticipate the need to create new materials one year in advance so that the necessary funding can be allocated in the budget. They must then find authors to review these new materials and submit the original resources four months prior to the beginning of the academic year. Then, these resources are sent back to the authors to be revised before being uploaded in the LMS. The materials are developed in XML. They are available in multiple formats, which are generated automatically. This system allows them to control the production and implementing of the educational resources developed by the university via a top-bottom approach.

Despite UOC claims that this production system is well-established, there was no evidence of its practicality and efficiency. There is definitely a quality assurance process, but the whole process seems to have far too many stages to be followed and is very timing-consuming for academic staff. Further, given the current rate of deployment, which has increased with the implementation of the new European Higher Education Area (EHEA), the creation of new material for each subject is proving to be unsustainable. This situation is further compounded when the material in question must be constantly reviewed and updated. Using open educational resources already available online would seem to be an alternative to cut costs and make the development of resources less arduous for academics. The above issues might have been some of the reasons that encouraged UOC to be part of the OCW initiative. Other reasons might have been the institutional philosophy and current university strategic plan, which is further discussed below. To support its open education approach, the university has also developed internal open policies to enable the adoption of open educational resources in their curriculum and the re-use of these resources internally.

Intended outcomes

The university's most current Strategic Plan (2009-2014) devotes an entire section to OER. It is within the framework of this plan that the university has seriously begun to consider the position and actions it should take in relation to this topic. The report drafted by the working group covered three main points: objectives, analysis and actions. The objectives refer to the developments that the university would like to achieve; the analysis describes the current lay of the land; and the actions refer to what needs to be done to achieve the desired outcome within the timeframe of the strategic plans. The objectives with regard to the adoption of OER are twofold. First, the university aims to make its internal content

available worldwide. This entails a series of benefits and obligations. Second, it aims to take advantage of resources created by others. Both lines of action have considerable potential and implications for the university.

Benefits

According to UOC, the benefits of joining the OCW initiative and to have a more open approach to offer education are many. The benefits at institutional level are:

- › Cost savings by reusing available materials
- › Brand positioning
- › Showcasing UOC quality resources
- › Access to a whole range of resources
- › Analytics and statistics of website use for better understanding of users' needs
- › Enhancing quality of resources by the repurposing and remixing of these resources
- › Social responsibility by contributing to educating the broader society, which is one of the university's missions.

The benefits for lecturers are:

- › Resources accessible from anywhere
- › Analytics of the use of the website
- › Showcase of teaching materials
- › Professional recognition and prestige
- › Create and expand networks
- › Encourage collaborative work
- › Avoid duplication of effort through the reuse of available resources

As for the learners, the benefits are:

- › Resources available to learners anywhere, anytime
- › Opportunities for lifelong learning
- › Access to quality educational resources to disadvantaged learners
- › Assist learners to make decisions regarding their future studies and possibly enrol in an UOC course.

Lessons Learned

UOC OCW seems to have faced some challenges regarding software updates and migration of resources to different platforms. However, details of this were not made available to the authors. What is known is that there was an update of eduCommons, their content management system, mainly to improve interoperability and allowing automatic compatibility from other platforms (institutional repository and virtual classrooms). Maybe these challenges were not anticipated by the UOC OCW team.

Most of UOC resources currently classified as open are subsidised by the Spanish Ministry of Culture under the e-Alquimia Programme. External funding to OER programmes and initiatives worldwide seems to be a recurring feature at educational institutions. However, UOC is aware that it is necessary to determine new business models to support the open education movement, beyond government funding.

Summary and Reflections

UOC OCW offers educational resources of 180 open courses in three different languages: Spanish, English and Catalan. UOC is also an UNIVERSIA member, which facilitates collaboration with other institutions part of the OCWC platform and assists the development of communities of practice. There have been institutional implications in the development and application of an OER policy within the UOC 2009-2014 Strategic Plan. As a result, UOC University's Governing Council (on 19th January, 2011) agreed to make all UOC OCW educational resources available under a Creative Commons (CC) license; Attribution-NonCommercial-ShareAlike. Even though the adoption of a CC license represents a great move towards openness, this is not the most flexible and accommodating of the CC licenses with a few restrictions for users to consider.

UOC believes that one of the most innovative practices has been to make the educational resources accessible through mobile devices. Learners can find resources in a range of formats: ePub, mobi/pocket, web, pdf, audiobook (Daisy) and videobook (MP4). These formats enable personalized learning and increased accessibility for learners with disabilities. Despite the concerns with social inclusion and the intentions to provide access to quality resources to learners worldwide, it appears evident that UOC's move towards openness is also market-driven, according to the information provided for this work. They believe that

"it is not enough to open content to the public and post it in the institutional repository. It must be publicised, as it is part of the university's brand and serves as an advertisement for its training offer. A specific marketing plan must thus be crafted for OERs that contemplates strategies for the dissemination thereof". (Griset, & Lopez, 2010, p. 8)

Conclusion

According to the four examples of OER practices discussed in this document, the OER movement and its ramifications are still in their infancy compared with other fields of educational theory and research. There is still much to be investigated and understood in this arena. It can be seen, however, that these educational institutions are committed to offer high quality learning experiences, not only to their own students, but also to learners worldwide who would not have the chance to access these resources otherwise. Despite the differences in context, including government policies and funding strategies, some challenges in adopting OER appear the same, including academic staff commitment and professional development, learners' expectations, technological and financial resources, institutional and governmental policies and so forth.

At the time of this research, the examples presented here were some of the most prominent OER initiatives, but the OER landscape is expanding rapidly and this might not be the case in a few months' time. However, the authors hope that the issues discussed here provide the readers some basis for reflection on current and future OER programmes and an opportunity to understand the diverse range of insights of the OER movement worldwide.

References

- Anderson, T. (2011). *The Theory and Practice of Online Learning* Edmonton, AU Press.
- Athabasca University (2009). *Annual Report 2008-2009*. Athabasca, Canada.
- Athabasca University (2009-2010). *Strategic University Plan 2011-2016 Highlights*. Athabasca, Canada.
- Athabasca University (2010). *Annual Report to Alberta Advanced Education and Technology*. Athabasca, Canada.
- Athabasca University (2012a). *Comprehensive Institutional Plan 2012-2015*. Athabasca, Canada
- Athabasca University. (2012b). *Athabasca University Home Page*. Retrieved 30/07/2012, from <http://www.athabascau.ca/>.
- Athabasca University. (2012c). *Athabasca Open Courseware*. Retrieved 30/07/2012, from <http://ocw.athabascau.ca/>.
- Butson, R., Ferguson, S., & Thomson, C. (2010). *Otago Polytechnic Staff Perspectives on the Practice of Open Education*. University of Otago; Report to the Otago Polytechnic.
- Capetowndeclaration.org. (2012). *The Cape Town Open Education Declaration*. Retrieved 30/07/2012, from <http://www.capetowndeclaration.org/>.
- Conrad, D., & McGreal, R. (2012). Flexible Paths to Assessment for OER learners: A Comparative Study. *Journal of Interactive Media in Education*.
- Ferreira, G., & Heap, N. (2006). From print to web: issues in re-purposing for an open resources repository. *EADTU Conference November 2006: Widening Participation and Opportunities by e-Learning in Higher Education*, Tallinn, Estonia, EADTU.
- Griset, G., & Lopez, J. M. R. (2010). Use of Open Educational Resources at the UOC. In *Open Ed 2010 Proceedings*. Barcelona: UOC, OU, BYU
- Lane, A. (September 2008). Reflections on sustaining Open Educational Resources: an institutional case study." *eLearning Papers*, 1(10), 1-13.
- McAndrew, P., Santos, A., & Godwin, S. (2007). Opening up for OpenLearn: issues in providing open educational resources. In: *CAL07: Development, Disruption and Debate - D3*, 26-28 March, Dublin, Ireland.

McAndrew, P., Santos, A., Lane, A., Godwin, S., Okada, A., Wilson, T., Connolly, T., Ferreira, G., Buckingham Shum, S., Bretts, J. & Webb, R. (2009). OpenLearn Research Report 2006-2008. The Open University, Milton Keynes, England.

Otago Polytechnic (2011). *Otago Polytechnic Strategic Direction 2011-2013*. Otago, New Zealand.

Otago Polytechnic. (2012a). *Open Education*. Retrieved 30/07/2012, from <http://www.otagopolytechnic.ac.nz/schools-departments/educational-development-centre/open-education.html>.

Otago Polytechnic. (2012b). *Otago Polytechnic Te Kura Matini ki Otago*. Retrieved 30/07/2012, from <http://www.otagopolytechnic.ac.nz/>.

Otago Polytechnic Council. (2006). *Otago Polytechnic Charter*. Otago, New Zealand.

Technology Enhanced Knowledge Research Institute (2011). Open Educational Resources (OER) for Assessment and Credit for Students Project: Towards a Model and Plan for Action.

Wikieducator.org. (2012a). *Otago Polytechnic: Measuring our open education*. Retrieved 30/07/2012, from http://wikieducator.org/Otago_Polytechnic/Measuring_our_open_education

Wikieducator.org. (2012b). *Otago Polytechnic Home*. Retrieved 30/07/2012, from http://wikieducator.org/Otago_Polytechnic.

Wikieducator.org. (2012c). *About: Otago Polytechnic*. Retrieved 30/07/2012, from http://wikieducator.org/Otago_Polytechnic/About.

Wikieducator.org. (2012d). *Featured Institution: Otago Polytechnic*. Retrieved 30/07/2012, from http://wikieducator.org/Otago_Polytechnic:WikiEducator_helps_advance_open_learning_at_the_Polytechnic.

Wikieducator.org. (2012e). *Otago Polytechnic Open Education*. Retrieved 30/07/2012, from http://wikieducator.org/Otago_Polytechnic/OER_Projects_-_Otago_Polytechnic_Open_Education

Athabasca University. (2009). Annual Report 2008-2009.

Athabasca University. (2009-2010). Strategic University Plan 2011-2016 Highlights.

Athabasca University. (2010). Annual Report to Alberta Advanced Education and Technology.

Capetowndeclaration.org. (2012). The Cape Town Open Education Declaration, from <http://www.capetowndeclaration.org/>

McAndrew, P., Santos, A., Lane, A., Godwin, S., Okada, A., Wilson, T., et al. (2009). OpenLearn Research Report 2006-2008. Milton Keynes, England: The Open University

Otago Polytechnic Council. (2006). Otago Polytechnic Charter.

Technology Enhanced Knowledge Research Institute. (2011). Open Educational Resources (OER) for Assessment and Credit for Students Project: Towards a Model and Plan for Action.

Wikieducator.org. (2012e). Otago Polytechnic Open Education from http://wikieducator.org/Otago_Polytechnic/OER_Projects#Otago_Polytechnic_Open_Education