Open educational resources: A new creative space

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Several agencies in the UK are funding a national programme to develop an infrastructure to support Open Educational Resources (OER). Policies and procedures are being defined and repositories and metadata are being established. Much of the graft involves Intellectual Property Rights (IPR) clearance. But the greatest challenges are with the educational value of the material that is deposited and how they can facilitate and enhance learning. The ambition is for OER to contribute to the teaching-research nexus, where staff and students can meet in a creative space, co-creating resources within an active, co-dependent and interactive curriculum. This paper describes how one University in the UK is currently developing an OER at the institutional level and the challenges that are being encountered.

Keywords: OER, cultural change, curriculum design, staff development, UK Copyright / IPR, Metadata, Repository, JISC, Open Exeter

Introduction

The availability of OER has the potential to challenge those pedagogic models that currently focus on the development of academic knowledge through the creation of informational content, with the academic as the primary source of expertise. OERs can contribute to an alternative more constructivist and connectivist pedagogy whereby teachers and learners co-create knowledge and understanding. In addition, in response to government edicts and economic pressures, many institutions are re-examining the appropriateness of multiple replication of content-driven repositories of course material, locked behind their institutional authentication and thereby inaccessible to others.

In 2009, significant funding in the UK (see: http://www.jisc.ac.uk/oer) was made available to further the exploration of the usefulness of OERs. Explicitly, the aspirations were identified as follows:

> Our objectives in investing in this area are to promote the sharing and reuse of learning resources, and to provide a reputational benefit to UK higher education through the promotion of high quality learning resources world wide.
>
> We expect to see benefits to the institutions involved and the UK HE sector as a whole in terms of overseas recruitment and academic reputation as a result of the work started by this programme.

Clearly the motivations are not exclusively altruistic. There is expected to be a reputational and recruitment return on the investment. As outlined by McGill et al. (2008), in such expectations, misunderstandings abound. HE worldwide is increasingly required to articulate its activities in terms of business benefits which invariably is then translated into some measure of cost effectiveness and identifiable products. However, such language sits uneasily with learning and teaching practitioners and can be a source of internal conflict with those whose responsibility it is to manage institutions (Charlesworth et al., 2007).

What are open educational resources?

According to Wikipedia (see: http://en.wikipedia.org/wiki/Open_educational_resources) the term Open Educational Resources was first adopted in 2002. From the very beginning the vision was to promote, to a

global audience, free access to educational resources. Some may argue that Wikipedia is an unwise choice to quote as an acceptable source of information. Clearly, its authenticity does require verification but it is an interesting example of co-created and reusable material.

OER are not completely synonymous with mere informational content, though the latter undoubtedly has a significant role in learning and teaching.

A reasonable definition for OER is:

> digitised materials offered freely and openly for educators, students and self-learners to use and reuse for teaching, learning and research (OECD, 2007).

Thus, at best, an OER can be regarded as a suite of assets, which can be used and reused in creative educational ways that invariably involve interactions between staff and students in order to promote learning. It is the term 're-use' that provides OER with its greatest potential and opens up the possibility of forming new creative spaces. OERs could include full courses, course materials, complete modules, notes, videos, assessments, tests, simulations, worked examples, software, and any other tools or materials or techniques used to facilitate learning.

The international scene

It is important to recognize that the OER agenda has a history and is international in its dimension. Several bodies have already been pro-active in driving this agenda and have produced invaluable guidelines and case studies, e.g. United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2009), Open eLearning Content Observatory Services (Guntram, 2007), Organisation for Co-operation and Development (OECD, 2007) and the William and Flora Hewlett Foundation (2009). OER initiatives are global in their aspirations. OECD (OECD, 2007) has identified materials from more than 3,000 open access courses (open courseware) currently available from over 300 universities worldwide and arguably the most widely cited example is the MIT (see: http://ocw.mit.edu/). The Open Courseware Consortium (see: http://www.ocwconsortium.org/about-us/about-us.html) is proving to be an important catalyst for the promotion of the OER methodology. A wide ranging review of the OER movement has been written by Atkins et al. (2007) and explicitly for HE by Yuan et al. (2008).

The UK national scene

In the UK, the Open University has released a range of their distance learning materials via its OpenLearn project (see: http://openlearn.open.ac.uk/) and is invariably posted as the UK exemplar. It primarily employs a distance learning model on a large scale and as such it is not necessarily representative of UK HE as a whole. Recently in the UK, the Cabinet Office (HM Government, 2005) stated that the Government must move to a shared services culture, accompanied by a deepening of planning, delivery, management, skills and governance of Information Technology (IT) enabled change. The same imperatives apply to UK HE and accordingly the Higher Education Funding Council for England (HEFCE, 2006) wrote to HEIs indicating that the sector would benefit from taking cognisance of the government's paper. Professor Cooke (Cook, 2008), in his submission to the Government ministry then known as the Department for Innovation, Universities and Skills (DIUS) stated that although the UK is regarded as world class with respect to Information and Communications Technology (ICT) in many respects, we 'lag behind in generating and making available high quality modern learning and teaching resources'. The Joint Information Systems Council (JISC), a funding agency which receives money from HEFCE and the other UK funding councils has responsively stimulated much groundbreaking work through its Repositories Programme (http://www.jisc.ac.uk/whatwedo/programmes/digitalrepositories2005.aspx) and eLearning Programme (http://www.jisc.ac.uk/whatwedo/themes/elearning/programmeelearning.aspx) and also through the JISC Centre for Educational Technology and Interoperability Standards (http://www.jisc.ac.uk/whatwedo/services/jisccetis.aspx).

The funding model

In 2009 HEFCE announced an initial £5.7 million of funding for pilot projects to open up existing high-quality education resources from English HEIs. Two agencies, the Higher Education Academy and the JISC have been tasked to work in partnership to deliver the 12 month pilot projects. These will run at institutional, subject and individual level. They will be assisted by JISC-funded support services such as

JiscLegal (see: http://www.jisclegal.ac.uk/) for IPR issues and Jorum (see: http://www.jorum.ac.uk/) which is a repository service. McGill et al. (2008) have written a very useful report, making the case for OER but identifying the challenges, as part of the preparation for the funders in preparing their tenders. The projects were formally launched in April 2009. Learning materials will be shared locally, nationally and globally to support learning. Exeter was one of seven successful universities in England that obtained funding to establish an institutional OER and our project is called Open Exeter. More information on our project is available at: http://projects.exeter.ac.uk/oer/about.htm.

Exeter is also participating in subject consortia with two Academy Subject Centres, for Economics and also for Geography, Earth and Environmental Sciences. In the case of Earth Sciences, the theme of Climate Change was identified and relevant departments invited to join a consortium. It will be interesting to compare this more community of practice approach, coupled with its support framework with our institutional model. There is some evidence that suggests that sharing occurs within naturally developed communities of practice, based around some shared meaning, which may be a disciplinary subject (Kemp & Jones, 2007). Within such communities, often of peers that have a familiarity with each other, levels of trust, confidence and understanding may be greater than within more anonymously constructed OERs.

Exeter's response and positioning

Having achieved our objective of being in the top10 UK Universities by 2012 three years early, Exeter's next ambition is to be in the top 100 internationally in the near future. The University has performed impressively in the most recent Research Assessment Exercise (THE, 2009) and with respect to the 2009 National Students Survey. This survey is conducted in most UK HEIs and, using a standard format, it asks final year undergraduates to provide feedback on their courses. Primarily a campus-based University, Exeter is already one of the country's most popular destinations for home undergraduate students and the University's growing reputation for student satisfaction and research excellence is enabling it to greatly increase its international intake. The University, when it was considering responding to the tender to bid for OER funds, took the view that the OER agenda was sufficiently convergent with its own ambitions. Clearly, here we can detect an institutional business case that is focusing on marketing Exeter's educational 'brand'.

How then, might the OER agenda be reflected in Exeter's view of learning? Exeter positions itself as a research-intensive University. It is currently revising its Education Strategy, placing greater emphasis on designing student experiences, supported by the use of appropriate new technologies and contextually located within a rich array of learning materials. It is promoting active learning in which students and staff can 'range' across disciplinary boundaries. In addition, it is increasing its international intake. OER is seen as having the potential to influence the University's educational culture in underpinning a research-informed learning and teaching agenda. The vision is to leverage OER to inform and support widespread transformations in learning and teaching to encourage sharing and reusing, allied to an array of social networking tools, thus enabling a more communicative, active and independent learning style appropriate to its mission of developing a teaching-research nexus (Jenkins et al., 2007). OER will thereby become an integral component of curriculum design and delivery. Exeter places a high premium on being a research intensive university and the concomitant career rewards, which adds urgency to the ambition to ally teaching with research. OER, in fostering this nexus should enable academics to regard it as a valuable way of raising their academic profile, prestige and reputation nationally and internationally and as someone working within the context of a top research-intensive university.

But this enhanced educational focus will place considerable attention on the development not only of academic staff but also on the staff developers. It also has an impact upon the expectations that the institution imbues within its students in order to promote that virtuous circle of appropriate student / staff engagement.

Why does Exeter want to participate in an OER programme?

Given the number of related projects already undertaken internationally, and the availability of comprehensive guidance and toolkits both internationally (e.g. UNESCO, 2009) and in the UK (e.g. JISC, 2009a), why is there a need for yet more funding? The particular dimension that Exeter wishes to engage with is to raise the profile of OER within the UK to a scale that is commensurate with an institutional level. Also, although much can and is being learnt from previous projects there is a recognition that the HE sector is still at a stage where we need, as a community to 'learn for ourselves' in the UK context.

Exeter already has some track record of engagement. Much valuable experience has been gained from running several externally-funded projects, all which have synergies with this OER project, e.g. in creating a high quality infrastructure around various special collections. This new project, targeted at the institutional level, could therefore be viewed as an exercise in scaling up. This will involve harnessing many more strategic relationships within the University and using OER to frame those relationships. Indeed, an *institutional* OER infrastructure requires harnessing and creating synergies between many disparate teams, each with their specialist knowledge and who may not have had prior reason to engage with each other in a significant way. Exeter has all the individual building blocks - technical, procedural and staff expertise throughout the University, including numerous academics and also professional support staff with expertise in for example IT, databases, libraries, education, and IPR. The glue that will circumscribe all these teams is positive cultural change, which highlights the need for both staff development and the channelling of students' expectations.

Preparing, publishing and promoting these resources is providing a testbed for the challenges involved in this process and invaluable mechanisms and templates for others who wish to draw on the project's experiences. This project is testing existing OER design and production processes and adapting these to our own requirements. Once we are confident that these processes are robust we shall provide access to them and report on their use in order to support the wider community. We already have an active blog, which is accessible via our website noted earlier and within which deliverables are already being made available. Internally, we anticipate that Open Exeter will have a profound and positive impact on Exeter's institutional practices and culture and ultimately on a much wider community.

Relevance and coverage of materials being made available

The funders require us to make available a minimum of the equivalent of 360 credits of material. This clearly will be a definable deliverable. But the funders arguably more importantly really want to capture the story of how we have gone about making them available – problems, pitfalls, how we have overcome them (or not). In order to demonstrate institutional commitment, we had to put forward resources from several departments. Accordingly, material was selected from Geography, Economics and the Department of Lifelong Learning. Mostly, the material is pitched at Levels 1 and 3. The material includes PowerPoint presentations, html-based content, past examinations and answers, essay guidelines and individual and group activities. In addition we are making some co-curricular material available; this is not directly credit bearing but is used by many academics as part of their supportive armory. Much of it has been produced by the University's Skills Team within a Professional Support team called Education Enhancement. Typical examples of the material include dissertation management, teamworking, time management and avoiding plagiarism. They have already been written with IPR issues in mind and with adherence to interoperability standards. They provide exemplars of how the OER agenda has already begun to influence practice.

Content as information versus content for learning

It may be argued that attempting to tease out the difference between viewing content as information or as a vehicle for learning sets up a false dichotomy. There is a laudable momentum behind digital preservation, much benefiting from national funding. But underpinning the debate is the contention that different motivations lead to different outcomes. The advent of Virtual Leaning Environments (VLEs) has proved to be a great catalyst for the creation of content but ironically they have hindered the development of an OER culture because people have constrained access behind their internal authentication. At worst, they have encouraged a fixation with content production and a warehousing of knowledge, with the content being regarded as the 'crown jewels', a resource highly prized and highly protected rather than viewing the material as merely the precursor to learning. An attempt to provide focus on the learning dimension is the concept of re-usable learning objects (RLOs). A JISC-funded programme (see: http://www.jisc.ac.uk/whatwedo/programmes/elearningpedagogy/sharingtheload.aspx) in the UK summarized the potential of capturing 'holistic learning designs containing learning activities that support defined learning objectives', incorporating pre-existing RLOs. As indicated by Blackall (2008), in describing OER developments at Otago Polytechnic in New Zealand, RLOs have fallen out of favour, both as a term and as a concept, though its more open and scalable characteristics have arguably been subsumed into OERs.

Repositories as guardians of the new creative space?

The project funders require us to establish our own repository but also to deposit our material into a central service known as OpenJorum (JISC, 2009b). Previously known as Jorum, it began as a pilot

project in 2002 and is now a fully supported JISC service. It was originally anticipated that it would prove a popular destination for the deposition of resources and a place where materials could be found and repurposed. However, culturally, the community had not embraced this vision and problems such as IPR concerns appeared overwhelming. Also, the organizational access was somewhat forbidding; signing up for an institutional access licence required institutional and individual user agreement to the terms and conditions. Jorum is now being revamped alongside the current national OER funding programme of which Exeter's project is a part.

We have yet to determine how we will ensure consistency and replication between Open Exeter and OpenJorum and whether they might perform distinct but complementary roles. We need to manage this carefully, both from the point of view of the depositor and also those seeking to find resources and how we ensure re-purposed material is properly and most effectively located.

As with much IT infrastructure that is centrally funded and supported, often at considerable institutional expense, conventional repositories have latterly been challenged by more community led environments e.g. Flickr and YouTube as part of the Web 2.0 movement. Tagging, social bookmarking and RSS feeds are now familiar means by which participants can create creative spaces of communities of practice. A combination of repository storage combined with Web 2.0 manipulation of those resources may be more appealing because it uses social networking tools that are already embraced, particularly by students.

Interoperability between creative spaces

Since the concept of OER builds on the idea of reusing and repurposing materials, interoperability is vital. Currently differing technical standards and repository requirements pose problems for academics wanting to use OER materials in these ways. We are ensuring that the materials produced at Exeter follow existing IMS content packaging standards to try and provide mobility between different creative spaces. It is anticipated that if new standards are adopted rapidly then the flexibility of this current standard, and adoption within VLE platforms (open source and commercial) will aid end users to adopt OERs.

Within our Exeter infrastructure, rather than have our OER eccentric to our integrated central infrastructure, we are embedding it as a core service. This necessarily implies that hardware and software expenditure cannot be targeted exclusively to OER provision, but is apportioned within a much wider university provision of related resources and services. This helps its sustainability and demonstrates the institution's long term commitment to OER.

We already have several repositories, including one for institutional research and another for special collections. Both are based upon the open source DSpace software. DSpace supports the use of more than one metadata schema and we could just have one instance supporting special collections and other resources. However, this would require the implementation of several metadata schemas on DSpace to support the differing collections and objects. Searching on one instance of DSpace is more difficult when there is more than one collection, especially when the collections are so diverse as would be our case because the digital assets differ in their formats. Therefore we have decided to set up a dedicated DSpace repository for our packaged OER resources.

How can the material be found?

The essential element to getting OER materials used is the ability for practitioners to search for and find relevant materials. Therefore the taxonomy or folksonomy used to describe or tag OERs is essential to the success of their being found. OpenCourseWare Finder (see: http://www.ocwfinder.org/) is an interesting example of a structured research capability but is limited to just a handful of institutions. In reality, a well constructed search via Google will be most people's approach. There is a conflict between making the metadata so bland that resources cannot readily be found via a well constructed search or so complex that it acts as a deterrent to making the resource available. From a sustainable perspective, it is essential that ultimately the depositor, who ought to have most expertise on the content constructs the metadata. We have therefore devised a schema that we anticipate will enable the material to be readily found but only requires information that is available from the course validation documentation by which the credit awarding course was approved. In effect, this provides descriptions of the resources available in our new creative space.

DSpace currently uses the Dublin Core metadata schema. However, we have determined that a dedicated schema for our materials such as Learning Object Metadata (IMS LOM) is now more appropriate and so we are mapping between the two schema. Adopting IMS LOM will allow harvesting and transferring of

metadata across platforms – an additionally important aspect of interoperability. Using IMS LOM schema also meets many long-term preservation requirements as well as making it possible to join any future repository mappings.

Whose quality is it anyway?

Although courses have to go through rigorous validation protocols, all this is completed before materials are produced and their quality and particularly their usefulness to stimulate learning are rarely if ever evaluated. We therefore needed to devise some protocol to determine whether the materials to be released are of sufficient quality. But what do we mean by 'quality'? As noted earlier, in relation to a view of institutional reputational branding, quality needs to be 'high'. But we may then fall foul of producing high quality informational content divorced from any learning context. Even then, the learning contexts can be very varied, and on occasions, unanticipated because it is in re-purposing that pedagogic purposes are also adapted. So how do we determine what may be regarded as 'good enough' quality?

We have identified two phases for determining quality. The first is when a potential depositor offers material. In order to provide some measure of subject specific oversight, the head of that department, or nominee 'signs off' the materials. These materials then undergo the rigour of IPR clearance checks, currently by our central team employed by the project. Our overwhelming experience is that the materials need to undergo considerable repurposing to become IPR compliant in an OER context. How much time should be spent in seeking e.g. alternative copyright free images or seeking third party permissions continues to greatly exercise us. But rather than merely signposting to deal with what otherwise would be black holes in the material, again our overwhelming experience is that depositors are extremely keen, for their own reputation, to ensure the materials retain coherence. The project funders stated that they anticipated materials being offered 'as is'. This was part of an exhortation that material was not to be written explicitly for OER. But the reality has proved much more complex.

Once this stage is completed, we invoke the equivalent of an 'editorial board' that considers whether the materials remain good enough to be worth depositing. This board is made up of a mixture of academic and profession education staff and standard peer review competencies will be employed. We still need to address the term 'good enough' and thus we have a sliding scale that will provide a measure of reputational credibility. We must be as inclusive as possible in what is deposited but we must be mindful of how others view us as an institution. This more centralised approach will also be devolved to subject-specific forums once any lessons around developing coherent reputational criteria have been fully assimilated.

Embedding new practices, sustainability and our exit strategy

Lane (2008) provides a brief review of the literature, particularly with respect to sustainability at an institutional level and a core requirement of our work is to capture the momentum generated by our project and to sustain it within the normal working practices of the institution. We are confident that this will be assured through embedding processes into our normal governance and the incorporation of new policies and procedures into standard working practices. The real challenge lies in bringing about the deepening of the cultural change in our pedagogic practices. As Hamma (2009) notes:

> Our ability to realize more efficient scholarship based in information and communication technologies far outpaces our institutional capacity to make policy, financial, and organizational decisions that would support this scholarship.

Fundamentally, for institution buy-in, it was essential that we had the active support of University senior management. Secondly, it was essential that OER methodology was built into our Education and Technology Enhanced Learning Strategies, which conveniently are currently being revised. Our Infrastructure Strategy is being similarly revised. So our 'top down' direction is well catered for. But none of this will necessarily bring about changes of culture. Our view is that to be sustainable, OER must become an integral part of our curricula, not something bolted on. This is expanded upon later.

The challenge of IPR and copyright

The biggest challenge of OER, certainly within the scope of this project, has been to navigate the complexities of UK copyright law. The Copyright, Designs and Patents Act 1988 (OPSI, 1988), is the principal legislation covering intellectual property rights in the United Kingdom and the work to which it applies. Within an education context institutions purchase licences which allows the use of copyrighted

materials for teaching purposes, mainly for face-to-face presentation. These licences and exceptions within the act do not apply to materials released under OER and therefore pose many challenges. Furthermore, given that OER is global in its reach, it must necessarily have to deal with different cultural interpretations of copyright (see McCracken, 2006)

We are allocating much time and many resources into this stage because we recognise that IP law is a highly specialised area requiring expert knowledge and can take considerable time. We have access to our Research and Knowledge Transfer, Legal, and Insurance and Liability services and through them, if necessary, to our University lawyers. We also have access to JiscLegal as noted above and we are encouraged to make full use of this service. It is essential that we audit all our IPR checks and record 'due diligence' throughout our work We are passing the material through a plagiarism programme. We have a rapid take down policy. But ultimately, the fear of litigation has obliged us to be quite conservative in what we accept. In common with many projects that have preceded ours, at times it feels as if we are overwhelmed in issues which can only be resolved on a case by case basis and even then any response is hedged by an 'it all depends'.

Academics are given a simple markup scheme that is used to provide an initial indicator of the provenance of the materials in so far as they know or can recall. However, some of the material has been authored by people who were contracted to write it and may now be difficult to trace. This is problematic because we need to determine the contractual arrangement under which that material was written. The detailed checking is then undertaken by project staff employed for the duration of the project. We are capturing all this knowledge in an online FAQ so that in the design of materials, a deeper understanding of IPR issues is absorbed into normal working practices. This awareness is forming part of our subsequent staff development.

IPR is an arena where initial enthusiasm can become severely dimmed. Currently, awareness of IPR issues amongst many academics is not very high, nor is an awareness of the consequences of being noncompliant, nor, indeed is there much interest in such issues. Worryingly, many of these issues are just as valid to material that is obscured from public scrutiny behind VLE authentication as it is in a globally accessible OER. How stimulating will this new creative space be if much of the anticipated material has to be withdrawn and its coherence undermined?

IPR is also an arena where confidence can be severely dented. Understandably, part of any reputational benefit relies upon legally binding conditions by which an author contributes materials to the repository (known as 'licence in') and the terms under which that material can be repurposed by the global community (known as 'licence out'). Underpinning both these licences must be a firm acknowledgement that the author retains copyright (within the context that the University's customary practice is to waive its own rights).

It is particularly important to give the academic choices regarding who they want to share with. We are using the now widely employed Creative Commons Licensing scheme and to date have been able to give generous 'licence out' permissions, albeit non commercial ones. But we must be prepared, if requested, to constrain some of the share alike, no derivatives and attribution options. This flexibility will help build trust.

Who is accessing our OER and why?

It is important that we understand what users value about our resources (content, tools, services) to ensure we create a community not just of consumers but also of co-creators. We are currently employing a simple method, i.e. Google Analytics to determine *what* is being accessed but of much greater interest is *why* it is being accessed. We are working collaboratively with the UK Open University using their CloudWorks (http://cloudworks.ac.uk/) tool, exploring its efficacy as a value-added tracking 'wrapper' around an OER, with the ambition of creating a social network of engaged users around particular artifacts. Such an approach fits well with discussions that have taken place on a blog (Jyri Engeström's blog, cited in McGill et al., 2008, pg 16) where it is argued that social networking really takes place around some mutually shared object rather than just between individuals. We anticipate this phase of the project becoming active from January 2010.

Griffiths et al. (2008) make the point that not-for profit availability of resources cannot be assumed to be sufficient reason to assume the resources will be found and used. There is little point in creating a new creative space if it is mostly idle. Effective marketing is still necessary. This activity now forms part of our staff development in relation to our learning and teaching ambitions.

Embedding cultural change

Given that the use of OER challenges established educational practices and given that awareness of their potential is currently not very high, we are building appropriate awareness into our staff development programmes. We have two well established programmes, one for e.g. educational technologists and librarians who have a considerable role to play in this agenda but do not necessarily have direct teaching involvement and another for example academic staff, who are on the learning and teaching frontline. All new academic staff, as part of their probation, take the latter programme. Each programme has been accredited by the UK Higher Education Academy and bestows the title of Associate Fellow or Fellow respectively. Both programmes are being revised so that concepts of OER, especially issues relating to copyright, sharing and reuse, are seen as an integral part of scholarly endeavour, to be factored into our modules on course design. By updating these two programmes, we will 'capture' all new staff and inculcate them with affordances that OER can bring and the new creative spaces they can inhabit with their learning and teaching. To achieve these ends we are working closely with colleagues at the Open University in the UK, who, drawing upon many years of experience, are running several interactive and participatory workshops on how to integrate OER into the curriculum. The end game is that at the end of the workshop, 'participants should have an understanding of the steps involved in reuse of OER content within teaching practice'.

But how can any tangible benefits of OER at Exeter be measured? Performance indicators in relation to technology enhanced learning are notoriously difficult to quantify and any improvement in e.g. international recruitment or student satisfaction are invariably multi-faceted. Also, it cannot be denied that there exists some resistance to the OER methodology. We have already encountered one instance where materials are currently being produced with the express purpose of marketing them. Such aspirations may or may not be misplaced, but it would be counterproductive to insist on an exclusively OER model. Trust and confidence are fragile commodities and can easily be undermined. But a model that is under consideration is invite academics to record their commitment to OER in preparing their own resources and their reuse of other material as part of their annual review, which is then taken into account in relation to career rewards. This is yet another demonstration of how the institution, at a senior level, is grappling with the implications of OER.

Open Exeter: More than just a repository

We are also fortunate to be able to mesh with another important activity that is taking place at Exeter. We are at an advanced stage of changing our VLE from a proprietary product to the open source Moodle platform. We are employing a number of graduates and placing them with our departments to work alongside the academics to assist them in any issues that may arise when their material is moved onto Moodle. A key role the graduates will be undertaking is to enhance the online materials and review the content that will become available online. This presents us with a valuable, but time-limited opportunity to get alongside individual academics to discuss the merits of taking a more OER attitude to their resources as they are transferred. Earlier 'top down' attempts to reach such staff by contacting e.g. Heads of Department and hoping information will get cascaded down have proved to be relatively ineffective. We will host the OER content on Moodle, in addition to making available the downloadable IMS content package (ZIP file) from the repository. Moodle also allows us to provide access without authentication to these resources, unlike our previous proprietary VLE. The ability to allow such access fits in with core University outreach priorities in our Education and Internationalisation strategies.

Conclusion

To satisfy the conditions set by our funders the OER project at the University of Exeter has a number of objectives. We must make a substantial quantity of information available within an OER and we must 'capture' our story in a reflective and transparent manner. But for the project to have lasting value we must create a model of sustainability. This most important component of that model is effecting cultural change in how resources are viewed and how they can be used. Only if this proves effective can we say that the project ultimately was successful. Only then can we say that we have expanded the definition of what is understood by 'space', in this case to include an arena where staff and students can use and repurpose resources in such a way that shared learning and creativity can take place.

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References

[All links in references and body text viewed 12 October 2009]

Atkins, D, E., Brown, J, S. & Hammond, A. L. (2007). *A Review of the Open Educational Resources (OER) Movement: Achievements, Challenges and New Opportunities* http://www.oerderves.org/wp-content/uploads/2007/03/a-review-of-the-open-educational-resources-oer-movement_final.pdf

Blackall, L. (2008). Open Educational Resources and Practices. *TESL-EJ,* March, 11(4), 1-19. http://tesl-ej.org/ej44/a8abs.html

Charlesworth, A. Ferguson, N., Schmoller, S., Smith, N. & Tice, R. (2007). *Sharing eLearning Content – a synthesis and commentary report* http://ie-repository.jisc.ac.uk/46/1/selc-final-report-3.2.pdf

Cooke, R. (2008). *On-line Innovation in Higher Education. Submission by Chair of JISC Board to the Secretary of State for Innovation, Universities and Skills* http://www.dius.gov.uk/policy/documents/online_innovation_in_he_131008.pdf

Corbyn, Zoe (2008). RAE 2008: The results. *Times Higher Education*. 18/12/2008. http://www.timeshighereducation.co.uk/story.asp?sectioncode=26&storycode=404786&c=2

Guntram, G. (ed) (2007). Open Educational Practices and Resources. *OLCOS Roadmap 2012*. http://www.olcos.org/english/roadmap/

Guthrie, K., Griffiths, R., & Maron, N. (2008). Sustainability and Revenue Models for Online Academic Resources. *An Ithaka Report*. Version 1.1 May.http://sca.jiscinvolve.org/files/2008/06/sca_ithaka_sustainability_report-final.pdf

Hamma, K. (2009). Professionally indisposed to change. *EDUCAUSE Review,* 44(2) (March/April 2009): 8-9. http://www.educause.edu/EDUCAUSE+Review/EDUCAUSEReviewMagazine Volume44/ProfessionallyIndisposedtoChan/163802

HEFCE (2006). *Shared services: the benefits for higher education institutions* Circular letter number 20/2006, 10th August. http://www.hefce.ac.uk/pubs/circlets/2006/cl20_06/

HM Government. (2005). *Transformational Government Enabled by Technology*. http://www.cabinetoffice.gov.uk/media/141734/transgov-strategy.pdf

Jenkins, A., Healey, M. & Zetter, R. (2007). *Linking teaching and research in disciplines and departments.* HEA. http://www.heacademy.ac.uk/assets/York/documents/LinkingTeachingAndResearch_April07.pdf

JISC (2009a). *IPR Toolkit: Overview, Key Issues and Toolkit Elements*. Document No: 568a Version 1.1, June. http://www.jisc.ac.uk/media/documents/publications/scaiprtoolkitoverview.pdf

JISC (2009b) Jorum to move to open access. http://www.jisc.ac.uk/whatwedo/programmes/elearningpedagogy/sharingtheload.aspx

Kemp, B., & Jones, C. (2007). Academic Use of Digital Resources: Disciplinary Differences and the Issue of Progression revisited. *Educational Technology & Society*, 10 (1), 52-60.

Lane, A. (2008). Reflections on sustaining Open Educational Resources: an institutional case study. *eLearning Papers. 1, No. 10 September.* http://www.elearningeuropa.info/files/media/media16677.pdf

McCracken, R. (2006). Cultural responses to open licences and the accessibility and usability of open educational resources. *Expert meeting on Open Educational Resources*, Malmo, Sweden, 6-7 February. http://www.oecd.org/dataoecd/48/38/36539322.pdf

McGill, L., Currier, S., Duncan, C. & Douglas, P. (2008). *Good intentions: improving the evidence base in support of sharing learning material*. JISC http://ie-repository.jisc.ac.uk/265/1/goodintentionspublic.pdf

OECD (2007). *Giving Knowledge for Free: the Emergence of Open Educational Resources* http://www.oecd.org/document/41/0,3343,en_2649_35845581_38659497_1_1_1_1,00.html

Office of Public Sector Information (OPSI). (1988). *Copyright, Designs and Patents Act 1988 CHAPTER 48*. http://www.opsi.gov.uk/acts/acts1988/UKpga_19880048_en_1.htm

UNESCO (2009). *OER Toolkit*. http://oerwiki.iiep-nesco.org/index.php?title=UNESCO_OER_Toolkit

William and Flora Hewlett Foundation (2009). *Making High Quality Educational Content and Tools Freely Available on the Web.* http://www.hewlett.org/Programs/Education/OER/

Yuan, L., MacNeill, S. & Kraam, W. (2008). Open Educational Resources – Opportunities and Challenges for Higher Education. *Educational Cybernetics: Reports.* Paper 1. http://digitalcommons.bolton.ac.uk/iec_reports/1

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