# What do academic libraries have to do with Open Educational Resources?

Theme: Long term sustainability of open education projects first steps to start up

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#### **Abstract**

This paper will discuss the possible roles of academic libraries in promoting, supporting, and sustaining institutional Open Educational Resource initiatives. It will note areas in which libraries or librarians have skills and knowledge that intersect with some of the needs of academic staff and students as they use and release OERs. It will also present the results of a brief survey of the views of some OER initiatives on the current and potential role of academic libraries.

#### Keywords

OER, libraries, UKOER, open education, universities

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# Introduction

Open Education and Open Educational Resource (OER) initiatives looking at the release and use of open educational content are related efforts at different stages of maturity which are attempting to find operating models that will allow them to be both sustainable and scalable. There are a number of possible models which could be developed some, but not all, of which assume a role for universities and related academic institutions. This paper will focus on the current and possible roles of academic libraries in support of the release and use of OERs. As such it assumes some ongoing role for institutions in OER and Open Education initiatives. There are related possibilities for other types of libraries but they are outside the immediate scope of the paper.

Last year JISC and the Higher Education Academy ran the United Kingdom Open Educational Resources programme a major pilot programme to explore different approaches to embedding of the release of OERs and this year a second programme is underway. In the context of my role providing support and guidance to these programmes I have wondered about the possible role of libraries in embedding and sustaining some of the efforts around OERs, what follows is an exploration of possible points of contact between OER initiatives and academic libraries, some very brief illustrations of these connections from the UKOER programme, an initial discussion of the results of survey about this topic, and some thoughts on the possible future development of such connections. Substantive parts of this publication have previously been released on my blog for comment (Robertson, 2010).

# Institutions, openness and change

The growth of the Open Access movement is transforming how institutions view, manage, publish, and access their research outputs – irrespective of any local commitment to Open Access. Funding bodies often now that require publications based on publicly funded work are made openly available (University of Nottingham, 2010); often this requirement is fulfilled through the use of an institutional repository. Institutions are also exploring the value of making their research more visible and investigating what other benefits or possibilities arise through managing and making available their research outputs.

In a similar manner the growth of freely available learning materials from institutions around the world is, like Open Access, an opportunity, a challenge, and a potential catalyst for institutional change. It offers the institution an opportunity to showcase their courses to potential students, enhance the reputation and visibility of the university among its peers and the general public, be seen to providing value for any public funding they receive by making knowledge more accessible, and promote a more flexible pattern of learning for enrolled students. They also, however, present challenges as the process of providing OERs is not straightforward and it accelerates the shift from understanding a university as a place where one goes to receive knowledge to understanding a

university as a context for a community of learning in which students construct knowledge and a context for a student experience in which good facilities, pedagogy, and accreditation combine. If a student can access resources from many universities to support their learning, the quality of what a single institution adds to that content is crucial.

Despite occasional protestations that self-archiving should be the norm, academic libraries play a vital role in the Open Access movement and often provide skills, training, advocacy and may manage the required infrastructure. They are playing a role in challenging pricing models for electronic resources and helping explore alternative models of publication through Open Access journals. This is not to say that Open Access is fully mature, nor to say that libraries have whole heartedly embraced it, but rather to make the point that libraries have played a significant role in helping Open Access move from a niche activity carried out by sections of the physics community to a more mainstream and institutionally embedded approach to scholarly publication. Libraries are also beginning to play a role in the emerging world of Open Data and Open Science, but their involvement in the OER movement has thus far been limited, as has their involvement more generally in the management of learning materials.

# Open educational resources and libraries

With a primary focus on research materials and textbooks, Libraries often don't have very much to do with the management of teaching materials as such. They may hold syllabi, and past exam papers and may offer materials supporting information literacy and research skills, but they often play a lesser role in the management of lecture notes, presentations, or formative assessment materials. Such materials are often held only by the lecturer, tutor, or department providing the course. Where they are available digitally they are often in virtual learning environments to which the library may not have access. Furthermore learning materials, where they are available, may be poorly integrated into the user's view of library resources (Tony Hirst, 2009). There may be plenty of legitimate historical reasons for this divide but as the range of digitally available materials increases, and in particular as the range and number of OERs increase libraries have an opportunity to capitalise on their already important role in the student's studies, the academic's professional development, and institution's public portfolio.

There are signs that librarians are beginning to engage with the Open Educational movement, most notably an ACRL Forum on the issue at a recent ALA Midwinter. In summarizing the panel's views, Belliston (2009) states:

"Librarians can help by contributing their own OERs to the commons; screening for, indexing, and archiving quality OERs; using OERs in their own teaching; and participating in discussions leading toward responsible intellectual property policies and useful standards."

This summary highlights some of the key ways in which librarians can begin to be involved, but, perhaps, fails to consider how librarians can engage in the wider issues around the creation of OERs and their use. It interacts with Open Education in a way that parallels (to a degree) how librarians

interact with Open Access, without considering the different challenges educational resources offer and without yet considering the active role librarians can play in the initial description, management, and distribution of OERs, as well as in supporting their use. For example, In CETIS's engagement with many of the institutional projects in Open Educational Resources programme we observed that many are engaging with their university libraries, not only to seek advice about resource description and the application of metadata standards but also to consider the long term role institutional repositories might play in managing these assets and the possible role of the library in the OER production workflow (an observation reflected to some degree by the survey results which follow).

# How could libraries support OERs?

Although many academics in the releasing OERs have thus far had success making their learning materials available informally on personal websites or through tools like SlideShare or YouTube, the process is more complex for an institution – especially if it is considering how it might maximise the return on its investment in openness (whether that return be in terms of publicity, goodwill, efficiency, or an improved student experience). It is also not without cost: for example, both MIT and Oxford have taken the approach of developing production workflows around a centralised unit which is responsible for branding and checking rights (and *may* be considering how to offset this cost Parry, 2010).

Whichever way an institution chooses to approach sharing resources, the general failure of a Learning Object economy points to the need to develop less complex, more scalable and sustainable approaches to sharing OERs (Downes, 2002). Approaches to sharing and processes use need to be informed by an understanding of resource description and metadata standards as they apply to the specific tools intended to disseminate the resources – whether that be a proprietary application (iTunesU), a generic search engine, a repository, or some combination of the above. Libraries can fill in parts of this picture – though library advice needs to be tempered with the context of learning materials and current working practices.

As the ACRL panel also outlines OERs become additional resources that subject librarians can reference in supporting students; they are also, however, a new form of resource which students need appropriate information literacy skills to assess (skills such as assessing the quality of the material, its origin, currency, and fit with the student's current learning patterns) and they introduce (or will introduce) a new set of discovery tools for students and staff to be familiar with (such as Jorum – a national learning object repository in the United Kingdom, or aggregator services like OERCommons or DiscoverEd).

To review what has been discussed so far, it is suggested that libraries can offer advice to institutions, academic staff, and students as they engage with OERs in the following areas:

- Metadata and resource description
- Information management and resource dissemination
- Digital or Information literacy (finding and evaluating OERs)
- Subject-based guides to finding resources
- Managing Intellectual Property Rights and promoting appropriate open licensing

Having set out these possible points of contact between libraries and OER initiatives, it is worth considering the example of digital literacy in some more detail, before outlining briefly the results of a survey.

## **Digital Literacy**

One of the ways in which libraries might be involved with OERs (and more widely in Open Education) would be through extending some of the work they already often do in the provision of information literacy classes to encompass supporting students in selecting and evaluating OERs. This isn't to suggest a new thing called 'OER Literacy' but rather to place the discovery and use of OERs within an existing framework – as the skills needed to find and use OERs draw on a number of recognised skills relating to information literacy, to study skills, and the promotion of self-regulated learning.

The digital literacy skills required for OERs include:

- 1. Evaluating the resource
  - 1.1. Where does the resource come from?
  - 1.2. Who produced it?
  - 1.3. Does it have use appropriate sources?
  - 1.4. How current is it?
  - 1.5. Is it coherent/ self-contained?
  - 1.6. What cultural context does it assume?
  - 1.7. What legal jurisdiction does it assume?
  - 1.8. Is it specific to any given accreditation process?
- 2. What can I do with resource?
  - 2.1. Are there any licence restrictions?
  - 2.2. Is the resource format suitable for adaptation?
- 3. Resources assumed to use the resource
  - 3.1. Does it require access to particular digital resources (course readings)?
  - 3.2. Does it require access to particular software
  - 3.3. Does it require access to particular tools/ infrastructure?
- 4. Type of interaction assumed by the resource
  - 4.1. Does it assume any particular type of interaction (group work?)
  - 4.2. Does it assume any form of online interaction/ community?
  - 4.3. Does it assume expert assistance?
  - 4.4. How does it fit with my patterns of learning?

Some of this information addresses the types of question which heavyweight elearning metadata standards tried to capture and to universally abstract into metadata. Even when implemented properly, the actual use of such standards is often erratic – however, all the careful reflection that went into creating such standards does highlight that there is a need to ask that type of question of a

resource when we go to use it. The burden of understanding is though, not in cataloguing and metadata but rather in the digital literacy skills of the student or lecturer.

It should be noted that there are other skillsets involved as well - OER require more than information literacy to use. Discovering, selecting, and using OERs should, on some level, also consider with the design of materials and required study skills. These 'literacies' are probably covered by study skills courses offered by teaching and learning support services. Consequently supporting the use of OERs becomes an area in which libraries and teaching and learning centres collaborate in supporting students and academic staff (On a related note, the Solstice Centre for Excellence in Teaching and Learning at Edge Hill University has developed an Open Content Literacy Framework for those seeking to release OERs based on the work of the ReForm project: http://www.edgehill.ac.uk/solstice/docs/OpenContentLiteracy.pdf

# **Investigating library involvement**

I've proposed that academic libraries have a role to play in embedding sustainable OER initiatives and I'm planning to explore this more fully in the coming year but, as part of developing this paper and in collaboration with Open.Michigan, I carried out a brief survey this summer targeted at OER projects and initiatives. The anonymised data is available: <a href="https://spreadsheets.google.com/ccc?key=0AuN3UUVNPUJ1dEdkY0k0dU9kRG9PMHpLYTBsU">https://spreadsheets.google.com/ccc?key=0AuN3UUVNPUJ1dEdkY0k0dU9kRG9PMHpLYTBsU</a> GtoRnc&hl=en

### **Audience**

The survey was designed for those involved in OER initiatives and it initially went out to a number of specific email lists, but was subsequently tweeted more widely. One consequence of this was that as time progressed there was a marked increase in the number of incomplete responses; at the time of data analysis there were 37 incompletes for 36 complete (incomplete results excluded from the results that follow).

The responses were predominantly from the United Kingdom (13) and United States (12) but as illustrated in Figure 1 a broader geographic coverage was achieved. The organisations involved were predominantly from higher education (86%) and included four university libraries. The full range of organisations is shown in Figure 2. The Educational Initiatives noted are Higher Education Academy Subject Centres. The responses from both an Open Access publisher and Company developing software connected to OERs highlight that any discussion of OER initiatives will need to consider a wide range of participants who are contributing to the process of embedding.

53% of respondents were based in libraries and were librarians; there were no responses from non-librarians in libraries or librarians not in libraries. Given the dissemination channels this survey went through this was a higher number of librarians than expected.

In considering the respondents involvement in OER initiatives there was also a good range of types of involvement. Figure 3 shows the results (respondents could choose multiple answers; three

skipped this question). Just under 2/5 of the respondents were involved in project-based OER initiatives (nine of whom were from the UKOER programme), so the results reflect a wider view than purely project-based attitudes.

## **Viewpoints**

The survey considered four further questions to gather information about respondents views; a set of three questions addressing the degree of involvement of libraries and librarians and a more complex grid of potential or actual types of involvement.

In considering how involved libraries are in the release of OERs (Figure 4 below) there is a broad distribution of involvement from leading initiatives to probably not being aware of them. The neutral answer was chosen by the most respondents (10; supporting OER as institutional effort but especially not involved) but 12 respondents indicated active library partnership of some form (and 12 indicated little library support). Allowing for the 2 skips this is a little more than a third of respondents with active library involvement in the release of OERs.

Figure 5 considers the library's role in the use of OERs and Figure 6 considers the role of individual librarians in the use of OERs. Both sets of results are dominated by support for OERs in so much as for other digital resources and in both cases this answer was chosen by around half the respondents. This raises an interesting question – is it enough to support the use of OERs in the same way as other resources or do users need OER specific support – the discussion of digital literacy above has suggested that they might need additional support but the results of this survey suggest this isn't (yet?) happening in practice. One difference between the results for libraries and those for librarians are the secondary choices – there is a lack of engagement with OERs recorded in the library results but more engagement recorded for individual librarians. These results may indicate that the view proposed earlier that libraries don't have much to do with the management of teaching materials has some validity. It also indicates a degree of involvement by individual librarians that could indicate some 'early adopters' and the beginning of a wider involvement in supporting OERs or it may reflect a niche interest – hopefully the former.

The final survey question (aside from comments and feedback) was a grid asking respondents to comment on a number of potential ways in which libraries might be involved in OER initiatives. It asked respondents to identify which of these areas they were working in, which they thought libraries could be involved in, and which they knew of actual library involvement in. As illustrated in Figure 7 the proportions of the results a pattern that might be expected from the previous answers – with much less actual library involvement than possible involvement or areas of work by the responding OER initiative. It should be noted the format (chosen to reduce repetition) caused some confusion- respondents treated the actual and possible columns as mutually exclusive. Looking at the results for possible library involvement there is a clear expectation that libraries could support tagging and metadata, identify and index quality OERs, and more generally support discovery and use of OERs by academic staff and students. Figure 8 is an overview of just the responses about actual library involvement. For any given activity the identified involvement ranges from 2 out of 32 to 10 out of 32 responses. There was most library involvement in the provision of IPR guidance, and least involvement in identifying and indexing quality OERs and in providing guidance about metadata. The lack of library involvement in these two areas fits to an extent with the survey

participants being established OER projects who would have had to put in place ways to address these issues prior to any library involvement. The wider question about a library role in helping with IPR is perhaps a question of sustainability rather than necessity, and may depend on the exisiting university provision for such matters.

# **Conclusion**

There are indentified points of contact between libraries and OER initiatives and ways in which they could collaborate to better support academic staff and students. This paper has sought to sketch out some ideas and report on a preliminary survey exploring the views and practice of OER initiatives in this area. It is clearly only the first stages of any investigation into the roles of libraries and there are some critical questions, outside the scope of this study, around the compatibility of teaching and library cultures and the differences in how teaching materials are found and used that would need to shape that future work. The survey results as they stand, however, demonstrate that there is some library involvement in OER initiatives and common areas of interest that a greater role for libraries is one route that could be explored in making OER initiatives more sustainable.

## **Figures**

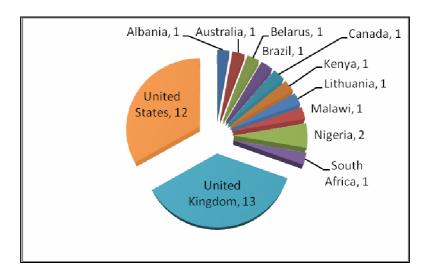


Figure 1 Survey respondents by country

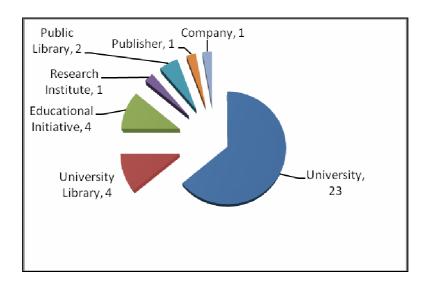


Figure 2 Survey respondents by organisation type

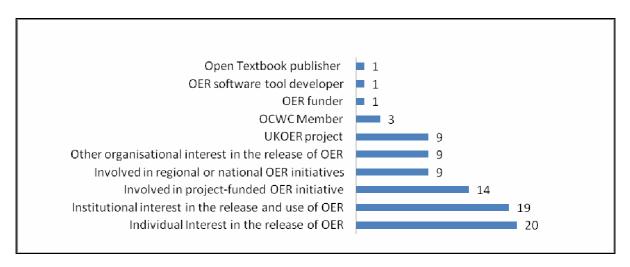


Figure 3 Types of Involvement in OER Initiatives

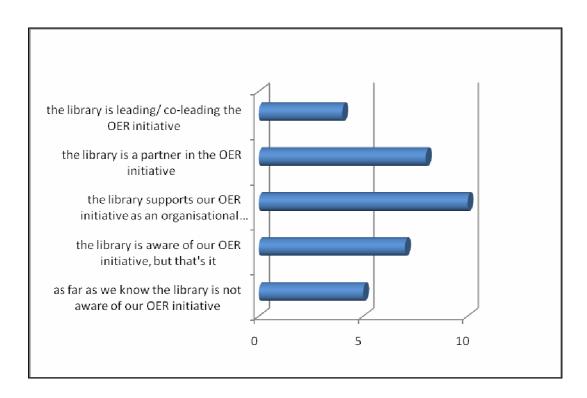


Figure 4 involvement of the library in OER release

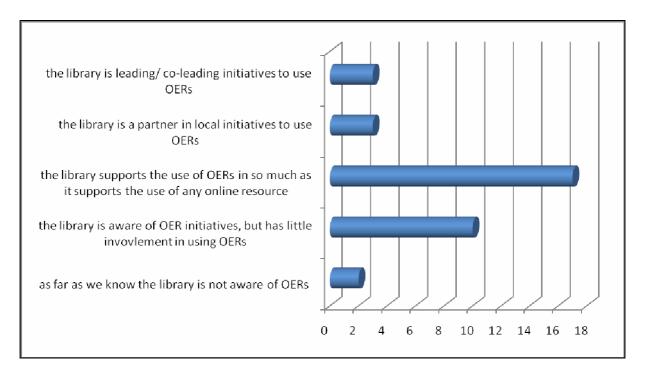


Figure 5 Involvement of the library in OER use

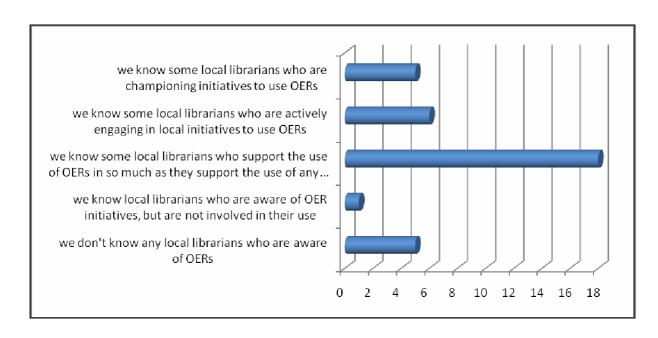


Figure 6 Involvement of individual librarians in the use of OERs

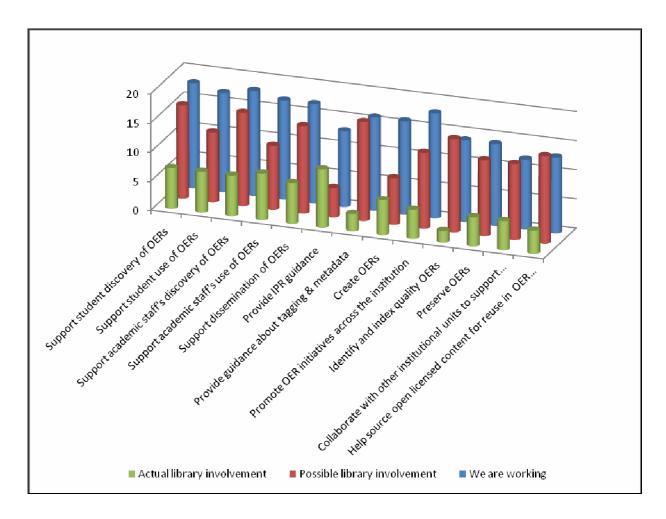


Figure 7 Library roles

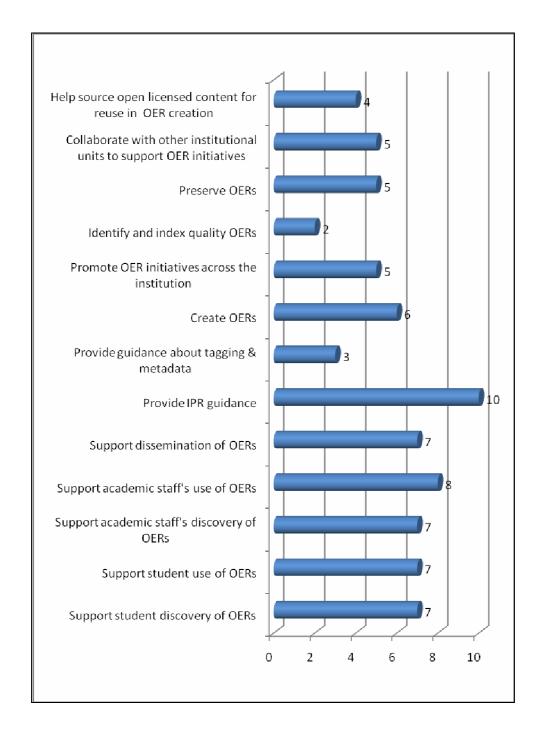


Figure 8 Actual library involvement

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John works for CETIS (Centre for Educational Technology and Interoperability Standards) - one of the Innovation Support Centres funded by JISC (Joint Information Systems Committee) to: represent Further and Higher Education in the development of relevant standards and specifications, nurture relevant developer communities and innovation, and provide guidance and support for JISC development programmes. John currently supports JISC's work in Open Educational Resources. A librarian by training, his professional background is in development and support projects around the management of digital assets, repositories, digital libraries, and metadata; he also has an ongoing interest in the role of community and personal formation in education.

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