



Open Research Online

The Open University's repository of research publications and other research outputs

Big and little OER

Conference Item

How to cite:

Weller, Martin (2010). Big and little OER. In: OpenED2010: Seventh Annual Open Education Conference, 2-4 November 2010, Barcelona, Spain.

For guidance on citations see [FAQs](#).

© 2010 The Author

Version: Accepted Manuscript

Link(s) to article on publisher's website:
<http://openedconference.org/2010/about>

Copyright and Moral Rights for the articles on this site are retained by the individual authors and/or other copyright owners. For more information on Open Research Online's data [policy](#) on reuse of materials please consult the policies page.

oro.open.ac.uk

Big and Little OER

Martin Weller
Institute of Educational Technology
The Open University
Walton Hall
Milton Keynes
MK7 6AA
United Kingdom
Email: m.j.weller@open.ac.uk

Biographical notes: Martin Weller is Professor of Educational Technology at the Open University. He chaired the OU's first major elearning course, which attracted over 12,000 students annually. He has been the director of VLE and the SocialLearn projects. He is the author of two books on elearning and is currently authoring one on digital scholarship. He blogs at edtechie.net

Keywords: OER, granularity, attitudes, reuse, openlearn, user generated content

Abstract

Much of the attention around OERs has been on institutional projects which make explicit learning content available. These can be classified as 'big OER', but another form of OER is that of small scale, individually produced resources using web 2.0 type services, which are classified as 'little OER'. This paper examines some of the differences between the use of these two types of OER to highlight issues in open education. These include attitudes towards reputation, the intentionality of the resource, models of sustainability, the implicit affordances of resources and the context of their hosting sites.

Introduction

Much of the focus on OERs has been around large-scale, externally funded OER projects such as MIT's Open Courseware and the Open University's OpenLearn projects. These have been successful in raising the profile of open education, creating a semi-politicised open movement and in generating impressive download figures of resources (eg Carson 2005).

If one broadens the definition of OERs to encompass resources produced by individuals and shared on sites outside the formal education portals eg YouTube, Slideshare, Flickr, then a continuum of resources can be considered. These vary in granularity, quality and explicit learning intentions. Drawing on the experience of an EU funded project which explored the uptake of OERs in developing countries (Sidecap), the OpenLearn project and individual blogging experience this paper aims to explore some of the issues these types of OERs raise.

We can broadly characterise these two types of OER as 'big' and 'little' OER (from Hoyle 2009), where:

Big OERs are institutionally generated ones that arise from projects such as OpenLearn. These are usually of high quality, contain explicit teaching aims, presented in a uniform style and form part of a time-limited, focused project with portal and associated research and data.

Little OERs are the individually produced, low cost resources. They are produced by anyone, not just educators, may not have explicit educational aims, have low production quality and are shared through a range of third party sites and services.

Using this broad generalisation we will explore some of the issues around the use of OERs in education. This is drawn on the following experience:

- OpenLearn – the Open University launched OpenLearn in October 2006 as a result of a grant from The William and Flora Hewlett Foundation. In the first two years, OpenLearn grew to include over 8000 study hours of learning materials from Open University courses, and had over 8 million visitors (Lane *et al* 2010)
- The Sidecap Project was funded by the EU (ACP-European Union Cooperation Programme in Higher Education), and had partners in Scotland, England, Mauritius, West Indies and Fiji. (EDULINK). The project ran for 32 months (until Spring 2010) with the objective of promoting multilateral activity amongst the partners through practical activities, networking and hands-on exercises designed to improve the quality of teaching and support for students. The project particularly focused on the uptake and use of OERs to create a sample course in each institution.
- Blogging – having kept a blog for over four years (edtechie.net), I have used it as a means of experimenting with different styles and as an output for a range of content and media. The blog acts as a central hub for a distributed academic identity across multiple services including Flickr, Slideshare, Twitter and YouTube.

This experience has highlighted the different ways in which OERs are used, and how the implicit and explicit messages contained within big and little OERs are interpreted by users. The main issues are as follows.

Status

All of the ACP (Asia-Caribbean-Pacific) partners in the Sidecap project reported reluctance by academics to reuse content from others. Much of this resistance was allied with notions of identity and status. To reuse someone else's content in teaching was interpreted as a sign of weakness, or a threat to their (often hard-won) status as expert. This objection was somewhat alleviated when the provider of the content was a recognised university with an international reputation. In this case, the big OERs have an advantage, because there is both a sense of mistrust about the type of material produced for little OERs, and also an anxiety that their use would be perceived as unprofessional. The large scale OER projects tend to have a pre-publication filter policy, so only high quality material is released. It also has the associated university brand linked to it, so there is a quality 'badge' and recognised reputation which can be seen as enhancing the individual lecturer's quality and teaching.

Big OER could be viewed as a 'colonizing species', whereby their presence changes the environment to make it more favourable for subsequent acts of reuse, such as little OERs.

Aggregation and Adaptation

Many of the big OERs have explicit learning aims associated with them, or at least an intended level and audience. Little OERs on the other hand are created for a variety of purposes and rarely have explicit learning metadata associated with them. This means that big OERs are a useful starting point and can often be used 'wholesale', ie without adaptation. Indeed the experience of the OpenLearn project has been that very few units are changed or adapted for use. The OpenLearn research (McAndrew *et al* 2009) report states

"In relation to repurposing, initially it was thought:

1. that it was not anyone's current role to remix and reuse;
2. the content provided on the site was of high quality and so discouraged alteration;
3. there were few examples showing the method and value of remixing;
4. the use of unfamiliar formats (such as XML) meant that users were uncertain how to proceed."

There were a number of collaborative projects established between the OpenLearn team and other institutions whereby content was adapted for use, eg by translation.

With little OER their use is often unpredictable, precisely because they are a smaller granularity and do not have the same level of intentionality associated with them. An example might be an image shared on Flickr, which depicts, say a collection of toys, and is used in a presentation as a representation of diversity within a community. The resource may not be adapted, but it is used in an unintended and unpredicted context. This is an example of what Zittrain (2008) terms generativity which he defines as “a system’s capacity to produce unanticipated change through unfiltered contributions from broad and varied audiences”. Little OERs are high in generativity because they can easily be used in different contexts, whereas the context is embedded within big OERs, which in turn means they are better at meeting a specific learning aim.

This may indicate different patterns of use will operate for big and little OER. With the former the emphasis is on adaptation, taking large chunks of content and expending resource in adapting it to local use. An example of this is the essay writing course developed at the University of the South Pacific (<http://www.usp.ac.fj/studyskills/CFDL/module1.html>), which was adapted from a course developed by three New Zealand tertiary institutions. Little OER use tends to be focused less around adaptation and more around aggregation, ie taking a number of different resources and creating a cohesive educational narrative that brings these together.

Models of sustainability

The sustainability of big OER projects has been an issue of concern since their inception. As Wiley (2007) puts it

“the William and Flora Hewlett Foundation has put millions of dollars into university-based open educational resource projects around the world. Given the current budget climate for education, a concern naturally arises about the future of the university-based open educational resource projects. What will happen when the targeted external dollars dry up? Will the initiatives themselves also dry up? How are these initiatives to sustain themselves over time?”

Big OER projects have a variety of models of funding, and Wiley highlights three of these demonstrating a range of centralisation: a centralised team funded by donors and grants (MIT); linking it into teaching responsibilities (USU); decentralised collaborative authoring (Rice).

The costs vary for these approaches, with MIT estimating it costs approximately 10,000 USD per course, and the Rice model being near to free as courses are created by interested parties, as with open source software. The returns for institutions may vary also, for example the OpenLearn project was responsible for generating around 7,000 course registrations in one year, improving the Open University’s global presence, generating publicity, operating as a basis for research funding and a means for establishing partnerships. This was partly a function of the OERs being direct OU content, unlike the Rice model.

The sustainability of little OER is less of an issue and is probably closest to the second of Wiley’s models. These types of resources can be seen as near frictionless outputs from standard academic practice, which we will look at in more detail in Chapter XX. For example, if a presentation is given then uploading it to Slideshare is a zero cost activity, and adding a synchronised audio file to create a slidecast takes only a modest amount of time. The result is a shareable OER that can be aggregated and used elsewhere.

The key to sustainability for little OER then is to encourage the use of such tools and the generation of new habits which make their production second nature.

Affordances of OERs

Both Wiley and McAndrew *et al* state that individual users don't tend to adapt OERs (by which we mean big OERs). The reasons for this are varied, including technical complexity and motivation. One other reason which the OpenLearn team suggest is that the "content provided on the site was of high quality and so discouraged alteration". This is an interesting observation as it seems to indicate that high quality content encourages a somewhat passive acceptance. In this sense big OER may be seen to be akin to broadcast content. The OpenLearn team also reported that social interaction was not a high priority for most users: "a large choice of content is considered the most important feature of OpenLearn and that interacting with other learners is low on this list" (although there was an active subset of users who were identified as social learners and made extensive use of forums).

In contrast the low production quality of little OERs has the effect of encouraging further participation. The implicit message in these OERs is that the consumer can become a producer – they are an invitation to participate precisely because of their low quality. Whether this is in writing a blog post that links to it, or in creating a video reaction, the low threshold to content creation is a feature of little OER. Not all users of a site will become creators YouTube claim that "52 percent of 18-34 year-olds share videos often with friends and colleagues" (http://www.youtube.com/t/fact_sheet) whereas the majority of wikipedia edits are performed by a small group of users (Ortega 2009). But taken as a whole, there has been a revolution in content production. For example The CEO of Google has declared that now, society produces more information in two days than was created from the beginning of human history until 2003, stating "the real issue is user-generated content." (<http://techcrunch.com/2010/08/04/schmidt-data/>).

In educational terms it may be that both have a role to play within a learning context, or course. Learners may want to feel the reassurance of the quality brand material for core content, but also want a mixture of the more social, participatory media that encourages them to contribute also.

Portals and sites

The traffic to many of the big OER sites is impressive, with MIT OpenCourseWare averaging 1 million visitors a month. Most big OER projects have a specific site associated with them, although their content may be used to populate other portals and repositories also.

Little OER tends to be found on third party, 'web 2.0' type services, such as Slideshare, YouTube, Scribd, etc. There are advantages and disadvantages to both approaches, which can be summarised as

	Specific Project Site	Third party site
Advantages	Greater brand link	Greater traffic
	Link through to courses	Cheaper
	Control	Greater serendipity
	Ability to conduct research	Expertise in social software development
Disadvantages	Requires specialist team	Can lose service
	Requires updating	No control eg over downtimes
	Lower traffic	Loss of ownership of data
	More expensive	Other non-educational content also present

So for example, Slideshare is a site for sharing powerpoint presentations, which you can add audio too, favourite, comment upon and embed elsewhere. It attracts significantly more web

traffic than MIT's OpenCourseware site, but of course features presentations about all manner of subject. This raises a number of questions such as

i) Are people more likely to share content through a service such as Slideshare? If so, why? Is it because it is easier or because they will get a greater number of views?

ii) Is the basic unit of sharing (the presentation) at Slideshare, a granularity people understand more than courses and units at OER sites?

iii) Is the comparison fair? Can we consider Slideshare an OER repository of sorts?

iv) Are commercial operations better at developing sites and adding in the necessary functionality than educational ones?

v) Are people 'learning' from Slideshare? If so, how does it compare with learning from OERs?

vi) What are the dangers that your resources will be lost on Slideshare, and what use is your data being put to?

At the moment we are too early in the development of OERs and these third party services to answer many of these questions, but the different hosting options of big and little OERs raise these issues for educators.

The role of context

Some of you may have heard this story, which is true, but was set up by the Washington Post:

A man sat at a metro station in Washington DC and started to play the violin; it was a cold January morning. He played six Bach pieces for about 45 minutes. During that time, since it was rush hour, it was calculated that thousands of people went through the station, most of them on their way to work.

In the 45 minutes the musician played, only 6 people stopped and stayed for a while. About 20 gave him money but continued to walk their normal pace. He collected \$32. When he finished playing and silence took over, no one noticed it. No one applauded, nor was there any recognition.

No one knew this but the violinist was Joshua Bell, one of the top musicians in the world. He played one of the most intricate pieces ever written, with a violin worth 3.5 million dollars.

Two days before his playing in the subway, Joshua Bell sold out at a theater in Boston and the seats average \$100.

It's usually taken to demonstrate that we don't stop and appreciate what is around us, and in our busy lives we can pass by things of beauty and value. But it has some lessons for our discussion of OERs also.

The first may be that people don't value free things, or are suspicious of free. We have become accustomed to roughly equating monetary price with value or quality. Free is therefore obviously low quality or suspicious at least. Online there is a general expectation that resources will be free, although the success of iTunes apps is beginning to challenge this. But in education there is still an expectation that high quality education costs. OERs are of course, only part of the educational offering – they are the content, and just as important is the associated support and assessment that forms a higher education degree. But in this

respect big OERs have a relationship to price when they are the learning materials used by the universities. The message then is that some people have valued them highly enough to pay for them (and the associated services). Little OER by its very nature has not been paid for and so one variable people use to judge value is absent, namely whether someone would pay for it.

But perhaps what is more significant about the violin story is what it says about context. The reason many people passed the violinist by was because of context – they are in an underground station, which is an unpleasant place to be, and want to get out of it as fast as possible; Because they are probably on their way somewhere and want to be punctual; Because they're not expecting to encounter classical music there and so have a different mindset in place; etc.

Building on the distinction made in the last section, big OER is often found in a specific repository and people have come to it with the intention of learning. It is placed within an educational context. Little OER is often placed on third party services which will contain a range of content and people may not have learning as their goal when encountering these resources. This may mean that a different audience is reached, but it may also result in any educational intention in the content being misconstrued or missed.

The importance of educational context was one outcome in a project I ran recently. In a project at the Open University a number of volunteer academics were given Flip cameras and over the course of three months encouraged to become producers of video content (Weller 2010). They uploaded their content to YouTube and to a wiki. As one of the contributors commented:

“No amount of creativity in the making of an artefact will compensate for the absence of a framework within which to disseminate it. My Facebook postings (of links to my 2 videos) received brief comments from 3 of my 67 'friends'. Nothing on Twitter or Youtube. This demotivated me to continue investing the time. If I'd had, say, a teaching forum with students working on intercultural semiotics, I'd have had more of an impact”

As was suggested above, little OER encourages aggregation and through this, the creation of context. While this offers greater flexibility, it also requires greater effort, whereas the educational context of big OERs is inherent in both their location and their content.

Conclusion

The categorisation of educational resources as big and little, ie those produced institutionally or individually, provides a lens on some of the issues and uses of the open education movement. One key difference is that of intentionality, where big OERs are created for the specific purpose of learning, whereas little OERs may be created from a variety of motivations, but can have an educational intention ascribed to them by someone else.

There are significant differences between the way in which these types of OERs are used and interpreted by audiences, which relate to quality, reputation and ease of production. It may well be that a 'mixed economy' of both types of OER is the best route to realising open education. Big OER is a useful means of raising the profile of open education and an initial way of approaching reuse that overcomes many of the objections based on quality and reliability. Little OER represents a more dynamic model that encourages participation, and may be more sustainable. For learners, a mixture of both may also create a varied, engaging experience.

References

Carson S (2005) *MIT OpenCourseWare 2005 Program Evaluation Findings Report*.
http://ocw.mit.edu/ans7870/global/05_Prog_Eval_Report_Final.pdf

Hoyle, M (2009) *OER And A Pedagogy Of Abundance*
<http://einiverse.eingang.org/2009/11/18/oer-and-a-pedagogy-of-abundance/#more-181>

Lane, Andrew; Connolly, Teresa; Ferreira, Giselle; McAndrew, Patrick and Wilson, Tina (2010). Reusing, reworking and remixing open educational resources. In: Marshall, Stewart and Kinuthia, Wanjira eds. *Cases 'n' Places: Global Cases in Educational and Performance Technology. Educational Design and Technology in the Knowledge Society*. Charlotte, NC: IAP - Information Age Publishing.

McAndrew, P.; Santos, A.; Lane, A.; Godwin, S.; Okada, A.; Wilson, T.; Connolly, T.; Ferreira, G.; Buckingham Shum, S.; Bretts, J. and Webb, R. (2009). *OpenLearn Research Report 2006-2008*. The Open University, Milton Keynes, England.
http://oro.open.ac.uk/17513/1/Researchfinal_low.pdf

Ortega, F (2009) *Wikipedia: A quantitative analysis*. PhD Thesis.
<http://libresoft.es/Members/jfeliipe/thesis-wkp-quantanalysis>

Shirky, C (2008) *Gin, Television and Cognitive Surplus*.
http://www.edge.org/3rd_culture/shirky08/shirky08_index.html

Wiley, D (2007) *On the Sustainability of Open Educational Resource Initiatives in Higher Education*. OECD. <http://www.oecd.org/dataoecd/33/9/38645447.pdf>

Weller, M (2010) *The Podstars Lessons*
http://nogoodreason.typepad.co.uk/no_good_reason/2010/07/podstars-as-.html

Zittrain J (2008) *The Future of the Internet, and how to stop it*. Yale University Press