

10 › Adding Flexibility to Higher Education Using OERS

Lessons from the Open University

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As director of OpenLearn (www.open.ac.uk/openlearn), I am often asked, “The site is impressive, but does it give more flexibility to what people can do in terms of teaching or learning?” I get asked that as much by people within the Open University (OU) (www.open.ac.uk) as by people outside it, especially by senior management, who expect more impact than just winning awards and acclaim. Publishing open educational resources (OERS) costs money, and while senior managers are seeking a return on investment to at least cover those costs, they still think that OERS may fundamentally change or disrupt teaching and learning practices—in particular, by disaggregating the different elements of teaching, learning, and assessment—and they want to be prepared to move the OU along with those changes (Lane 2008b, 2008c). So what is my response to the question “Do OERS add flexibility to how teachers can teach and how learners might learn?”

First, some background. The whole rationale for OERS is that they are to be used, taken away, adapted, and adopted by others (D’Antoni 2009). The flexibility provided by applying an open licence, such as those devised by Creative Commons (www.creativecommons.org), in principle gives people much more personal choice or control over access to educational resources, whether they are teachers or learners. The Massachusetts Institute of Technology (MIT), through its 2002 OpenCourseWare initiative (ocw.mit.edu), has shown a latent demand for access to an online store of quality educational resources supporting classroom-based teaching and learning from among a well-educated audience. MIT also inspired many other educational institutions to follow its example (www.ocwconsortium.org). However, while such educational resources may be open, the question remains: will they create significant change and greater flexibility in

educational practices? By *flexible*, I mean that learners around the world are able to construct their own learning paths to suit their own learning styles, teachers from all continents are able to draw upon high-quality resources and learn new strategies and tactics for teaching their chosen disciplines, and eventually universities everywhere can restructure how they offer teaching and learning services. Alternatively, might OERS just reinforce existing educational practices and divides, with the educationally and technologically privileged gaining more than those who suffer multiple deprivations and who currently have little or no access to higher education or appropriate technologies (Lane 2008a)?

This was the starting point in 2005 for the OU's own deliberations over what it should do to join this new movement. Much of the discussion was founded on reinterpreting our mission of "openness," the assumption being that OERS and the OU are a natural match (Gourley and Lane 2009), which, in particular, raised the issue of how far openness and flexibility go hand in hand (Iiyoshi and Kumar 2008). Among several challenges we wanted to explore were these:

1. How do we make it easier or more effective for adult learners of all abilities to engage with OERS and to gain from that experience?
2. How do we make it easier or more effective for teachers to use, reuse, rework, and remix OERS for their own purposes?

A further factor was that to be of any use in testing what is possible, an initiative had to be of sufficient speed and scale to make the outcomes more robust and applicable than would be the case for a small pilot project. An \$11 million, two-year start-up phase began in 2006. (For more detail, see <http://www.open.ac.uk/openlearn/about-openlearn/about-openlearn.>)

DESIGN FOR FLEXIBILITY

So how have we faced up to these two challenges? Using the lens of design decisions, I will first outline the features and functionality that we thought would give learners and teachers the choices and the ability to effectively incorporate OERS within their learning and teaching practices.

I will then look at how learners and teachers have responded to what we have offered.

Four significant early decisions shaped our approach and helped us to keep flexibility for the users in focus. The first distinguished us from other sites: we decided to have two closely linked websites, one aimed at learners (the LearningSpace at <http://openlearn.open.ac.uk/>) and another at educators (the LabSpace at <http://labspace.open.ac.uk/>). By creating different spaces for different functions, we hoped to avoid mixing together the possible communities of practice.

The second decision was to go beyond having a store of content to displaying the content within a formal learning environment. (Moodle was chosen as the basis of the open-learning environment because the OU had decided to use it as the basis for its third-generation virtual learning environment [VLE]). Users could then variously engage with the content and communicate and collaborate with fellow users, and, in the case of LabSpace, upload revisions of our content or their own. We thus could treat LearningSpace as the safer, more robust site and use LabSpace for greater experimentation with tools and content, such as the use of video conferencing and knowledge mapping.

The third design decision was to avoid being too prescriptive about which educational content to publish. We chose a representative sample of study units from the breadth and depth of the OU's existing courses and programs to see what users found most interesting or valuable. There was also variation in the size and nature of these study units to again see what topics and forms users would find most valuable for their own needs.

Fourth, we wanted to provide the content in a number of different formats (currently eleven in total, including viewing online) and were able to do this because the OU was developing an in-house XML schema to provide greater flexibility in its new e-production systems. Again, this gave greater choice to users to manage how they technically used or worked with the OERS.

As well as these design decisions, we wanted to explore the differences between self-directed users of the OERS who had to make their own decisions about how to engage with them, and users who were supported in some way as part of an informal group or defined project. Thus, the support units in the OU were particularly important for engaging

hard-to-reach users, as they were already very active in providing information advice and guidance to prospective and existing students and were involved in a range of outreach and widening participation activities throughout the UK.

OUTCOMES AND LESSONS FOR LEARNING AND TEACHING PRACTICES

The split of the site into two has generally worked well in giving a different focus for different users. Most use one or the other and not both, although most (over 90%) visit LearningSpace. Interestingly, those who do use both are much more likely to register for a regular OU course. Naturally, we were interested in how the OERS within OpenLearn changes practices other than Web-surfing habits, so we used a variety of methods—tracking, observation, surveys, and interviews—to explore this.

We tried to offer flexibility in choices by adding to Moodle functionality through a perpetual beta approach with four monthly releases of revisions and new features. We often had difficulty assessing the usefulness of some of these functions when frequently the only measure was apparent use rather than impact on practices. We had made an early decision to allow browsing users to see almost everything on the site but required registration if users wanted to use online functions such as instant messaging, posting to forums, and keeping learning journals. However, while we have had lots of visitors (100,000 per month at launch; now, three years later, closer to 400,000 per month) we have had far fewer registrants (200,000 over five years). This reflects the fact that most visitors come via search engines and seem to be “information seekers” rather than active online learners (although some so-called bounce visitors only go online long enough to download what they want—see below for more on this).

Testing of some functionality, therefore, has not been as effective as we would have liked because there are still not enough heavy users or because users did not immediately find the functionality appealing or of any use. For example, after two years, there had been minimal use of the instant-messaging software, so we dropped it. This is due in part to insufficient people being online at the same time, but it is also because most

users were not interested in such functionality. Cluster analysis of the characteristics of surveyed heavy users found that most were interested in content and assessment and seemed to be “volunteer students,” with a smaller proportion equally as interested in communicating and collaborating with peers (“social learners”). In contrast to such synchronous technologies, the use of asynchronous technologies has become more popular, with the number of people using these technologies growing as more content is made available. In particular, the visibility and permanence of forum postings give other users value beyond that of the primary content itself. What has been more surprising and supports the theme of additional value is the number of registered users who are willing to make postings to their personal learning journal, sometimes very lengthy and in response to activities and exercises within units they have studied. That is, they liked the flexibility to augment the content they looked at, and sometimes made those entries publicly available to all users. But undoubtedly, just providing tools is not enough if users are not ready for them or do not see the value they might add to their teaching and learning practices.

These features are very closely tied up with a study unit. Others, such as the free video-conferencing facility (FlashMeeting) are greatly liked by some users, not as an adjunct to their study of units but simply as a useful technology in its own right. Other functionalities, such as users being able to create their own forums, which some users asked for and which we instantiated as learning clubs (modelled on book clubs), have been created but are not used seriously for learning by many users. Our research has shown that most registered users are happily working as individuals and not particularly wanting to communicate with others (that is, they like the flexibility to do their own thing without directly or immediately involving fellow learners).

Most registered users (over 90%) are not OU students; many of these outside users like the flexibility of mixing and matching the free and open provision on OpenLearn with their regular studies. Thus, they find some study material particularly interesting and useful in between their formal courses because it enables them to enrich their study and cover topics they could not fit into their degree program. Other students use forums, for instance, as yet another channel to make contact with others who are

studying, or about to study, the course they have signed up for (that is, they like the flexibility to communicate by whichever means they prefer—we have seen similar off-campus activity on social networking sites like Facebook). In other words, where social or group activity occurs, it is usually associated with existing real-world groups or social activity, and this is even more the case for people who would not traditionally expect to undertake higher-education study. It is clear from our experience that the less confident computer users and learners find an open facility daunting. However, guided informal study in community-based face-to-face settings has encouraged a growing number of women from Asian communities in the north of England, who do not traditionally enter higher education, to register for formal study with the OU or other local providers.

Teachers or educators appear to be similar in wanting support and favouring the familiar (Wilson 2008). We have variously added functionality that allowed registered users to do more in terms of reworking our own content or adding their own content to LabSpace, but the significant growth in such activity is largely due to existing groups within institutions who were given or already had permission and support to pursue such experimental activity. Again, there can be apparent flexibility in that it is possible to do lots of different things, but this flexibility to experiment is curtailed partly because it takes a great deal of time and partly because it is not technically straightforward for a novice (a consequence of our choice of technologies). The competence needed and the learning curve for those without that competence means that supported groups are more likely to succeed. Flexibility, in terms of an open invitation to innovate, requires a certain degree of courage, both for teachers and learners, and we have long debated whether to change LabSpace to a different technology such as wikis or blogs, which more people are familiar with. Even so, there are many courses now available from these external sources, and in one or two cases, educators have used their LabSpace course as a principal feature of a formal course they are teaching at their own institution. In other words, we are hosting much of the course content and activity away from the confines of an internal VLE.

A final lesson to report here is that formatting flexibility for content matters. One of the things we wanted to do was to make our own content available in as many formats as possible for download (as well as being

able to study on screen and online) so that users could choose the format they would find most useful. We began with only three formats (OXML, the one we developed and from which all others are effectively generated; a plain zip file of assets; and a Moodle backup and restore, since we were using Moodle anyway) and have expanded to eleven (adding unit content XML, RSS feeds of unit content, an HTML print version, IMS Content Package, IMS Common Cartridge, SCORM, epub, and Word document options). We have also made downloading possible from both LearningSpace and LabSpace, not just LabSpace (although uploading is still only to LabSpace) and by browsing users, not just registered users. This has meant that after three years we were seeing over fifteen thousand printings of study units each week and around ten thousand downloads of all the other formats each week. So users like to take away our content and appear to like the flexibility of having a choice of formats, although it is interesting how popular hard copy (print) still is for many users. A bigger question and one we are no closer to answering clearly is, what are they doing with all this takeaway content and is it changing practices at all?

CONCLUSION

So how do I answer the question posed at the beginning: do OERS add flexibility to how teachers can teach and how learners might learn?

OERS through OpenLearn are making a difference because they are raising awareness and giving choices where none existed before. People value access to high-quality educational resources when they want them. Often learners use these resources to fit in with their other learning activities, mixing informal and formal learning opportunities. OERS are beginning to change some people's practices, both inside and outside the OU, as access opens up options that were previously unavailable, but this has yet to gain significance in relation to existing educational provision. OERS appear to be gaining more traction with informal adult learners than with formal students (outside the OU), but mostly they appear to be in addition to or in support of existing informal provision and have not dramatically changed that provision (yet). In some cases, users are only prepared to

(initially) engage with OERS as part of a guided and facilitated exploration of higher-education study—a mix of face-to-face and online provision—while many are seeking ways to have their study assessed or recognized in some way.

What would we have done differently if we were starting again? We would have approached it purely from the social networking side and not the content side; we would have taken the content from existing provision and tried to provide the services that enable users to engage with the content using tools they are familiar with already rather than imposing a technological solution through a learning environment. (Actually, a separate OU project called SocialLearn, launched in late 2009, is attempting to do just that, but that’s another story.)

What features could other OER providers take or replicate from OpenLearn? The answers are not definitive since even now, all this is too new for all involved to understand the impacts, but augmenting the existing content through forums and learning journals seems important, as does having material in a number of formats. The biggest message, though, is that whatever the intended audience, it takes focused measures and much time to develop communities of practice that are durable. These communities have to base their use of OERS in augmenting what they currently do, and they need help to innovate. Offering apparent flexibility does not necessarily lead to flexibility in practice.

So are we asking the wrong question? Is openness really part of flexibility, and is flexibility only suitable for the sophisticated learner and/or teacher because it requires confidence and competence? Do most people still like the comfort and safety provided by existing, less flexible, educational provision because someone else does the scaffolding work to make sense of an often complex and messy business such as education? I do not think it is the wrong question, but the answers are yet to emerge.

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ABOUT THE AUTHOR

Andy Lane is still trying to make sense of the world and his place in it. He trained as a plant scientist but then moved into looking at the social-technical side of environmental problems. This led to him join a systems group, part of a technology faculty at the UK Open University, teaching and researching systems thinking and practice. Here, he developed an interest in the use of diagrams for capturing, representing, and facilitating knowledge and decisions. Having extended his activities with the systems group, Andy continues to try weaving together ideas about environmental decision making, systems thinking, diagramming, technological innovation, teaching, and learning, and he shares those ideas with others in ways he hopes are useful to them. He was director of OpenLearn from 2006 to 2009.