

How Relevant and Practical are Open Educational Resources?: A Case for a Little Humility About the Potential

There is a huge amount of public interest in recent initiatives from MIT and Stanford in the development of massive open online courses (MOOCs) and in open educational resources such as Apple's iTunes University and the Khan Academy. There are also less publicized, but equally interesting, MOOCs such as Change11 developed by enterprising Canadian and American thought leaders such as George Siemens, Stephen Downes and Curtis Bonk. Other significant developments are the OERu, which is aiming to provide formal accreditation based on open educational resources supplied by a number of 'open' universities, and collections of OER materials for specific markets, such as OER Africa. Some of the promoters of these initiatives and the mainstream media tout these developments as 'revolutionizing' higher education, and as bringing higher education to the masses.

Considerable differences in approaches to the use of open educational resources

All these initiatives are centered around the provision of free and open online educational resources. OERs are certainly going to have a major influence on post-secondary education. Making digital resources publicly and freely available is definitely a move in the right direction, having potential to reduce the costs of post-secondary education and for increasing access to learning opportunities, especially in countries where there is a severe shortage of university and college education.

It is important though to understand that there are considerable differences in approaches to the use of open educational resources within and between these highly publicized initiatives. It is also important to understand that there are other approaches to the use of OERs that could have much more relevance for formal post-secondary education in North America that are getting nowhere near as much attention from the mainstream media. In fact, most hyped initiatives have little practical relevance for the formal, degree-granting work of universities and colleges, compared with other potential approaches to OERs.

It's not all about content. Process matters. A lot.

Open educational resources have two key elements: content and process. What is significant about the more publicized approaches to open educational resources are the processes used to bring OERs to the public. In the Stanford and MIT cases, these have been offered as packaged, complete courses, offered to very large numbers, but providing no formal qualification. Students who successfully complete an automated assessment process are awarded a certificate, but at neither Stanford nor MIT will the 'credit' be accepted towards a formal degree, unless the student is already admitted to a degree program at the relevant institution.

In that sense these courses do not 'open' admission to MIT's or Stanford's formal degree programs.

Second the choice of content is not 'open', but selected by the professors offering the courses. The Stanford and MIT courses are in fact (as one would expect from computer scientists) highly automated, with a strong objectivist approach to teaching

(right or wrong answers, for instance).

MOOCs such as Change 11 are very different animals to the MIT or Stanford models, but still follow a structured 'offering'. These MOOCs usually involve a wide range of invited 'experts' who change from week to week. Learner participation in the form of blogs and comments are an important component of the experience. These courses are closer to a community of practice model, and are much more constructivist in their approach to learning. Nevertheless the main content is usually chosen and delivered by the invited experts, often in the form of webcast lectures. There is usually no formal assessment and no qualification awarded.

Another model developed by Carnegie Mellon University is the Open Learning Initiative, which is the most formal and structured of the OER initiatives. Here a team of subject experts, cognitive scientists and software engineers design whole, complete courses with assessment questions and student activities as well as content, which individual college instructors can deliver, either as designed, or modified as necessary to meet specific college needs.

The MIT/Stanford and the Change 11 models can all be seen as structured or semi-structured processes that follow the traditions of continuing education or non-formal learning. Both are characterized by a high rate of non-completion, although 'full course completion' may not be the goal of many of the learners - it is the experience of participating in at least those parts of the course that is of interest to them that matters. The Carnegie Mellon model on the other hand is focused on formal degree or certificate programs, but still follows a highly structured process.

What is significant about all these types of OER 'programs' is that the whole process is open, content as well as teaching, and that the content itself is to a large extent predetermined, created and structured by the organizers of the resources. This structure is taken to the ultimate level at the OERu, which aims to organize open content into courses and credits that will lead to a degree

There is another category of open educational resources that is based around collections or repositories of open resources that are formally designated as 'educational'. These would include the MIT OpenCourseWare project (organizationally quite separate from the MITx or edX initiative), MERLOT, iTunesU, the Khan Academy, the UK Open University's OpenLearn, and OER Africa.

These are all formal education resources such as recorded lectures, online course materials, or podcasts, but although they may be loosely organized under different categories, they do not constitute a structured course or program, although someone else, a secondary user, could do that, and indeed most of the material originated as part of a structured, formal program. However, there are no qualifications associated directly with these OER repositories.

The 'push' model

Both structured approaches to OERs and repositories of OERs can be considered as 'push' models for the use of OERs: institutions or professors pushing out materials as OERs and 'legitimizing' them through association with a 'recognized' institution. However, it is not just educational institutions 'pushing' out OERs; increasingly publishers such as Pearson are finding ways to make online materials available for free, within some kind of structured environment such as a learning management system or web site that sells other services such as texts.

The 'pull' model - the real future of OERs

These are important developments, but there is a major difference between products labeled and 'pushed' as OERs, and resources on the Internet that are free and available to everyone. It is argued here that anything on the web, in essence, is a potential OER.

What is often missed by the mainstream media in discussions of OERs is that there are other, legitimate models of online learning that have been around for nearly 20 years. It is these models that will start to adapt and incorporate OERs (a pull model), but still within a structured framework of learning (such as an LMS or personal learning environment). Indeed, it will often be the learner who selects and uses OERs.

The real impact of OERs will be when learners and instructors realize that all the content learners need is already freely available over the Internet (not necessarily labeled and stamped as OERs). The issue then will be the facilitation of learning, and the development of skills in finding, analyzing and applying content, rather than the delivery of content. This is much more likely to be done by individual instructors and learners assembling content and developing the skills around 'customized' or personalized content, rather than taking products assembled and organized by someone else. This is the 'pull' model of OERs. It is also likely the real future of OERs.

Such a use of OERs will not however reduce the demand for instructors; in fact the opposite will be true, because what students will be looking for is assistance in learning and guidance on what and how to learn. But this in turn will change the kind of instructors that we need, with perhaps a division between creators of new knowledge (research professors), and teachers who assemble existing knowledge and help learners. The issue then becomes, will they be teaching faculty with equivalent status to research professors or will they become cheap adjunct faculty?

Whether the future will lie in massive free courses pre-structured by a small elite of institutions (the push model), or whether it will lie in the pull of individual instructors and students customizing learning for the specific needs of individual learners is not just a cost and technical decision, but one which revolves around what is considered to be good teaching and learning.

The class system of accrediting studying with OERs

The issue of accreditation is still very much unresolved. So far, initiatives such as edX and Udacity are really what we would call 'continuing education'. Harvard, Stanford and MIT are not offering full degrees for OER courses. Thus we risk two 'classes' of education: high status campus-based instruction reserved for the elite; and mass automated online education for the rest. It is argued here that we need a third way that is based on the 'pull' from learners and a vast array of individual teachers looking for customized materials that have personal meaning and value.

There is more than a whiff of imperialism and hubris in some of the OER initiatives, but cloaked in the disguise of democracy. MIT and Harvard are deciding what will be available for free and what constitutes 'true knowledge' and the rest of us will have to suck it up. MIT and Stanford do not 'own' OERs or the web. There are other, more educationally sound models for using OERs than theirs.

In particular, the stated desire of MIT and Harvard through the edX project to automate course design around the collection of 'big data' and learning analytics collected from large numbers of learners is inherently dangerous. Let's be clear first about learning analytics. They do not yet exist in a form that will enable this. Thus any attempts to do what MIT/Harvard are planning is based on pure speculation that learning analytics can deliver what is claimed. Second, MIT understandably has a computer science view of teaching and learning: everything can be automated. That may work for certain levels of math, science and technology, but it is a very dangerous route to go. It certainly won't work in areas such as humanities, social sciences and business, where meaning, interpretation and the application of values and qualitative assessment are critical. Thus the current model of OERs being promoted by MIT in particular is extremely dangerous.

OERs as a "push model" is a passing fad

In summary, OERs as they are currently being promoted (the current 'push' model), will be a passing fad with respect to mainstream university and college education, because the core assumptions on which initiatives such as edX are based are false. However, OERs in terms of resources freely available over the web will be a game-changer, but in a 'pull' rather than a 'push' model. The one exception to this will be in the area of continuing education for the masses, where there will be continuing demand for structured, prepackaged courses built around the edX model.

In other words, we need a little more humility about the potential role of OERs. There are niche markets such as continuing education that can still be very large that can be served by initiatives such as edX and MOOCs. But the real value of OERs will be to shift instructors away from the creation and delivery of content to focusing on how best learning can be developed and facilitated for, in and by our students. This way we will avoid developing automatons and instead will be developing people who can think for themselves.