

OpenCourseWare and Open Educational Resources: Forward to Credentialed Learning Outcomes?

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Abstract: OpenCourseWare (OCW), one part of Open Educational Resources (OER), is now past its first decade. Phenomenal growth has occurred in the first ten years and entering into the next phase of development there is now a movement to officially credential OCW experiences with certificates. This paper will explore the potential of this future movement and the possible implications for lifelong learning.

Introduction

OpenCourseWare (OCW) is a specific category of Open Educational Resources (OER). While OER can be almost any digital educational material OCW resources are designed in a course format. To date, OCW has proven to be helpful to learners directly but has primarily been used as a course development tool for educators (Koohang & Harman, 2007).

There are suggested methods for building courses from OCW resources, such as the five-step process outlined by Rennie and Mason (2010). This is of use to educators who are building courses from an OCW foundation, but how does OCW benefit learners? Clearly there is a demand for OCW resources as MIT's OCW has grown to over ten million users from its launch in 2001 to 2011 (Edudemic, 2011). The question going forward is what kind of materials do users really need and what will best benefit higher education as an industry.

The gap in OCW practice to date has been that between learning for learning's sake and building verifiable credentials that can be displayed to potential employers or other professional contacts. This shift to credentialed learning outcomes may be the future of OCW and a powerful force in higher education as a whole. The charge is being led, again, by MIT, but others are already engaged in this early market and there are indications that demand for these resources will continue to increase.

Why Credentialed OCW?

Higher education around the world is in a state of change. Many believe that this change is centered on online education and, for many years, this has been true. Traditional

online education, however, may no longer be at the cutting edge of educational practice. Wiley and Hilton (2009) explain the foundation of this shift as, “The economics of distributing information digitally, which make per unit distribution costs all but disappear, have enabled widespread, free sharing on a scale never before seen” (p 3).

There are six identified aspects of change in the context of higher education: analog to digital, tethered to mobile, isolated to connected, generic to personal, consumers to creators, closed to open (Wiley & Hilton, 2009). This contextual shift can be seen in the changing delivery methods of education across the world. The growth of online and blended programs, where classroom contact is either minimized or eliminated, reflect the changing ways in which students and the world in general choose to operate and interact.

One of the attractions to OCW is, “...because of their promise and potential for promoting individualised/personalised learning practices and facilitating lifelong learning.” (Hanna & Wood, 2011, p 540). The first item on a list of open education opportunities is, in fact, bringing people back into the educational equation (Baraniuk, 2007). As a logical extension of this movement students are more open to different solutions to their learning needs. With different solutions now more accessible and students more open to them there is a threat that traditional higher education delivery will no longer dominate the educational landscape (Wiley & Hilton, 2009).

What is important in this discussion is not the potential for traditional higher education delivery systems to lose their dominance but the potential opportunity for more learners to actively and productively engage in the educational process. Weiland (2011) explains:

But virtually all accounts of American higher education recognize that its vitality reflects the choices of individual scholars and teachers in organizing learning around differing views of what works best. Surely there is a place for the self-paced course, with its content and instructor oriented forms of interaction (p 4).

If, going forward, what works best for many learners is OCW then change is likely to come. The change has, in fact, already started, as can be seen by early entrants into the credentialed OCW market.

Early Entrants into Credentialed OCW

In any new venture there are always those entrepreneurial firms that recognize the opportunity early and are the first into the market. Sometimes these become dominant players in the emerging market and sometimes they serve as examples of how not to compete, but their experiences are always in some way instructive. At the start of 2012 multiple organizations are entering into the emerging credentialed OCW market. These entrepreneurial-minded organizations may help higher education understand the potential of this new delivery method.

In a Chronicle of Higher Education article published on January 26, 2012, Jeff Selingo identified three organizations that had launched open education ventures in just the past month: MITx, StraigherLine, and Apple. These efforts followed the already established Khan Academy and the badges program being funded in large part by the MacArthur foundation (DML Central). Each of these programs takes a different approach to credentialing open learning, but all are focused on a central theme of giving independent learners an opportunity to earn both knowledge and credentials in an open environment.

While these and other credentialed solutions are coming to the market the focus of this paper will be on MITx. MIT created OCW in 2011 and now, eleven years later, they are among the leaders shifting OCW to a credentialed learning solution. Announced through the MIT news office on December 19, 2011, MITx will:

- organize and present course material to enable students to learn at their own pace
- feature interactivity, online laboratories and student-to-student communication
- allow for the individual assessment of any student's work and allow students who demonstrate their mastery of subjects to earn a certificate of completion awarded by *MITx*
- operate on an open-source, scalable software infrastructure in order to make it continuously improving and readily available to other educational institutions.

The core of the program is clearly recognizable to those familiar with OCW. Courses are digitized, organized, and posted online where they will be freely available for learners. The next step taken by MITx is the interactivity and assessment options that can lead to a certificate of completion. The certificate option gives learners an option that to date OCW has not offered; an ability to document for employers and others the fact that they have mastered some new skill set.

Other efforts to capture OCW learning have existed before MITx. The KNEXT program focused on guiding users through the development of a portfolio to capture the content of experiential learning and student mastery of it and Kaplan University uses a self-developed portfolio assessment system to examine student portfolios for the award of academic credit (Ouelette, Gitin, Prost, and Smith, 2010). What makes MITx and other emerging programs different is that they are not focused on trying to document outside learning, rather they are providing, assessing, and awarding credentials as a single entity, which should allow for a more efficient and reliably validated learning experience.

Future Opportunities

Credentialed OCW is a difficult topic to discuss because the concept and practice is so new that there is not yet very much documented evidence to consider. MIT plans to launch MITx sometime during the spring of 2012, so at the time of this writing the likely largest and most influential player is not yet active in the market. It is exactly because of this newness, however, that practitioners and researchers in higher education need to start the discussions now.

The potential exists today that in the next few years higher education will see an entirely new and unique market rapidly grow and change what learning looks like. Imagine what a forward-thinking researcher might have experienced if they started to look at the potential for online education in 1990. The difference that may be seen with credentialed OCW is that because of the faster dissemination of information and ever-shortening product life cycles across all industries this new market may grow far faster than did traditional online education from launch to today.

Existing higher education providers with recognized brands will have an opportunity to capitalize on their brands and enter into credentialed OCW early. There will also be opportunities for entirely new organizations to come in on the ground level and build their brand in a new sector. Online education saw new entrants build billion dollar firms around that emerging market. Whether or not credentialed OCW will see a similar boom is yet to be seen, but the potential is certainly there.

Conclusions

Both practitioners and researchers are in a unique position today to follow this new market and take part in forming what it will ultimately be. Generally, academic papers are supposed to answer questions, but this one is focused on asking questions. What will credentialed OCW look like in five years, or in ten? What does this mean to existing educational practices? How, as an industry, will higher education react to this shift? How, as consumers, will learners react to this and how might their opportunities be broadened?

Working in technology often means living on the bleeding edge where nothing is certain and everything is unstable. Increasingly, working in education is moving closer to this same edge. With inevitable change coming, the industry must be proactive in considering what will happen next.

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