

Using OpenCourseWare to Enhance On-Campus Educational Programs

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Abstract: The OpenCourseWare movement has generated excitement in many circles through its potential contributions to both lifetime learning and ubiquitous learning. These courses are certainly beneficial to such groups, but OpenCourseWare can also make valuable contributions to traditional educational environments. Referencing established courses at some of the most prestigious universities in the world provides educational institutions of all types a means through which they can expose their students to the very highest levels of course design and subject matter. This paper will introduce the OpenCourseWare movement, its scope, and also how the materials may be applied to traditional educational environments.

Introduction

The OpenCourseWare Consortium defines OpenCourseWare (OCW) as “...free and open digital publication of high quality university-level educational materials. These materials are organized as courses and often include course planning materials and evaluation tools as well as thematic content” (OCW Consortium, 2010). Such materials offer great potential for lifelong learning and can certainly benefit learners with an interest in a particular topic who want the information but are not concerned with earning academic credit. Potential also exists, however, for practicing educators and students who are pursuing for-credit opportunities.

One of the primary views of learning is that it is an inherently social activity; it is based on active participation. Hong and Sullivan (2009) explain this idea as, “Learning as participation suggests learning is a process of participating in various cultural practices and shared learning activities (p. 2). In classrooms this exchange is often seen as an instructor facilitating a live discussion. Asynchronous exchanges work the same way, even if the transmission, reception, and cognition steps are separated over time. An author conveys knowledge to a reader who frames the information in their own experiences and prior knowledge. In its most basic implementation OCW is much like the exchange between an author and a reader; however, if OCW is integrated into a more active learning exchange, the material can greatly enhance educational environments.

OpenCourseWare and Open Educational Resources

The discussion of freely available online educational materials in the literature includes

two broad categories, OpenCourseWare (OCW) and Open Educational Resources (OER). “Open Educational Resources are digitised materials offered freely and openly for educators, students and self-learners to use and re-use for teaching, learning and research” (Huyen, 2005, p. 1). The distinction between the two is that OCW resources are organized as courses, while OER resources may take any digitized form. So, for the purposes of clarity, OCWs are OERs, but not all OERs are OCWs.

The purpose of this distinction is to form a basis for conversation about OCW, which will include relevant literature about OER. Because the two fields are so similar, both focusing on the free provision of educational materials over the Internet, it is difficult to discuss one without the other. While the focus of this paper is on OCW the foundations of OER are relevant and will serve to better frame the discussion of how OCW can be applied.

The History of OpenCourseWare

OCW is a relatively recent addition to the online educational experience, launched by the Massachusetts Institute of Technology (MIT) in 2001 with content for over 1600 courses (Abelson, 2007). The stated goal of the program is to “...provide the content that supports an education” (Kirkpatrick, 2006, p. 53). Since MIT’s launch of OCW in 2001 the movement has grown, with the OCW Consortium boasting a membership of hundreds of universities and related organizations at the time of this writing (OpenCourseWare Consortium, 2010). Beyond this measure, there are an unknown number of organizations participating in OCW but not part of the OCW Consortium and a truly unknowable number of individual courses available online.

The growth of OCW is not only in the number of institutions offering OCW materials but also in the number of people taking advantage of the service. At the start of 2011, MIT’s OCW offerings alone had over ten million users (Edudemic, 2011). While comprehensive data is not available on the total number of users across all OCW products, the ten million using MIT’s offerings is a large population, and the number of total users will only increase as data is gathered on other offerings.

Using OCW

The real promise of OCW may be best introduced by Almgren (2005) as, “One of the greatest promises the internet has fulfilled over the last decade is an almost unlimited access to information for individuals almost anywhere in the world” (p 1). OCW provides both students and faculty members with the opportunity to access the most prestigious educational institutions in the world and learn from their faculty. While both students and faculty members can learn from the content of OCW courses, faculty can learn from the structure and design of the courses.

OER as a whole are primarily used as a tool to support course development, although the resources can also be helpful to students directly (Koohang, 2007). OCW specifically may play a valuable role in supporting course development. A 2004 survey of educators

using MIT's OCW found that 57% used OCW for course or curriculum development and 47% have adopted elements of MIT materials for use in their classrooms (Marguiles, 2004).

The process of using OCW materials in a course is not as simple as just directing students to the OCW course online and then asking for feedback. OCW is a resource, an aid in course planning, not a substitute for original design and careful development by the instructor delivering the material. Rennie and Mason (2010) provide a five step process through which OER materials, including OCW, are used to design a course:

1. Identify the main generic headings for course content (key topics for discussion and learning)
2. Search for relevant resources that can be re-used for these headings
3. Write 'wrap-around' materials that contextualize and support the learning resources
4. Add your new materials to the common pool (if required)
5. Select a format for sharing (a wiki, etc)

If this list seems like a familiar process then it probably is. A general approach like the one described by Rennie and Mason is much the same as any course design. The difference in the case of OCW is that instead of starting from a blank canvas an instructor has the advantage of beginning with a course and then selecting the best parts of it to use in their specific environment, for their students.

It is the tailoring of an OCW course that demands an instructor know their students and the environment in which they operate. Of the five steps listed to utilize an OCW course three of them, steps 3-5, relate to the instructor's students and the learning environment. Even step 2, searching for relevant resources, includes the needs of the intended audience because it recognizes that not all material is relevant and material that is not relevant should not be adopted.

Ultimately the successful adoption, or perhaps the better word would be adaptation, of OCW courses lies with the attentions of the instructor in any particular course. In order to be used properly OCW adapters must know the needs of their learners, the capabilities of the instructional environment, and the desired outcomes of the learning experience. If all of these factors are present then OCW materials can greatly enhance a successful course design.

OCW in Practice

There are several institutions currently employing OCW resources as part of their curriculum. OCW can benefit institutions anywhere, in any type of situation. The cases that follow are just two examples of how OCW is impacting education around the world.

Following hurricanes Katrina and Rita in the United States in 2005, broad areas were left with enormous infrastructure damage. The Department of Education for the state of Mississippi, an area that suffered great damage, was able to offer displaced college

students more than 1,300 free online courses made up of contributions from thirty-eight states (Bonk, 2010). The Open University of Catalonia based in Spain is including OCW and OER as a component of their five year strategic plan for 2009-2014 (Griset & Lopez, 2010). OCW is not only useful, it is international. There are many other cases of OCW integration and as this resource finds more attention in the literature these will be more visible for both researchers and practitioners.

Conclusion

OCW is still a relatively new concept in education. The United States Distance Learning Association cites the first accredited online university as Jones International University in 1993. So, at the time of this writing online education, a discipline still evolving and earning its legitimacy in the world of higher education, is eighteen years old. With OCW launching at MIT only ten years ago, it is a very new part of the higher education landscape.

Even though OCW is still maturing and finding its place in learning spaces there is great value to be gained by appropriately bringing the resources into classrooms today. For instructors who are capable of accurately assessing their learners' needs and properly framing OCW materials to meet those needs, their educational environment can be greatly improved.

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