The Creation and Use of Open Educational Resources in Christian Higher Education

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Running Head: OER in Religion Education

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Abstract

A significant movement in education concerns the use of open educational resources

(OERs). By "open" it is generally meant that the resource is freely available to others to

reuse in different contexts. These resources could include books, lesson plans, syllabi,

slide shows, etc. There are several examples of individuals and institutions providing

open educational resources; this openness is also specifically manifest in the field of

religious education. I discuss different levels in which OERs can be "open" and the

implications of these levels when creating OERs. Common motivations and obstacles to

creating OERs are discussed. A particularly significant issue regarding openness

concerns copyright issues. I discuss copyright implications both in terms of reusing

resources others have made (resources that may or may not be copyrighted), and using

Creative Commons licenses to license OERs so as to give the desired level of copyright

protection. Although OERs are not appropriate in all situations, they can be an important

part of improving pedagogy and increasing access to education.

"The Creation and Use of Open Educational Resources in Religious Education"

Introduction

A significant movement in education concerns the use of open educational resources (OERs). By "open" it is generally meant that the resource is freely available to others to reuse in different contexts (McMartin, 2007). These resources could include books, lesson plans, syllabi, slide shows, etc. There are several examples of individuals and institutions providing open educational resources. Perhaps the most well-known institutional program is MIT's OpenCourseWare Program which provides open materials for over 1,800 courses. Other significant providers that share completely open courses include Carnegie Mellon's Open Learning Initiative, Yale's Open Courses and Stanford's Engineering Everywhere courses. Some institutions, instead of offering full courses, offer small units of instruction such as a class module, flash video file, lesson plan. Curriki and Rice University's Connexions are examples of institutions providing these smaller units of educational content.

This sharing takes place by individual teachers as well as institutions. Individual teachers have uploaded lectures to YouTube, posted PowerPoint presentations to SlideShare, and shared photos of religious sites to Flickr.

Open educational resources are being shared with increasing frequency. This trend is occurring throughout education generally, and also specifically in religious education. Yale Divinity School publishes a course on the Old Testament, Notre Dame has three religion classes available and MIT OpenCourseWare has a class called "The Bible." More than twenty religion courses are offered on iTunes University.

The increasing number of available OERs leads to several questions. What does it mean to be "open?" Why would teachers want to share their educational resources? What are obstacles to creating OERs, and how does copyright affect openness? In this paper I will discuss answers to these questions. Let's begin with the question, what does it mean to be "open"?

<div align="center">A Closer Look at "Open"</div>

As stated previously, "open" generally means that the resource is freely available to others to reuse in different contexts (McMartin, 2007). More specifically, Wiley (2009) has described four "R's" of openness. Each of these R's represents an increasing level of openness. These R's are as follows:

Reuse—This is the most basic level of openness. People can use all or part of the work for their own purposes (e.g. download a copy of a song to listen to at a later time).

Redistribute—People can share the work with others (e.g. email a digital article to a colleague).

Revise—People can modify, translate, or change the form the work (e.g. take a book written in English and turn it into a Spanish audio book).

Remix—Take two or more existing resources and combine them to create a new resource (e.g. take audio lectures from a course and combine them with a video from another course to create a new course).

The following diagram represents these R's in terms of how they can be combined to increase openness.

Increasing openness

Reuse, Revise, Remix and Redistribute

Reuse and Redistribute only
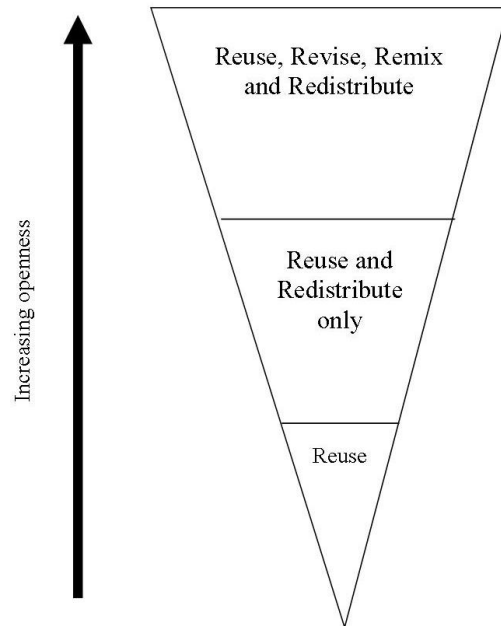
Reuse

Any open item allows reuse. A more open approach is to allow individuals to reuse *and* redistribute the work. To allow others to revise, remix *and* redistribute resources is the most open approach. Depending on the goals of the creator of a particular OER, different levels of openness will be appropriate (Gurell, 2008). How the OER is licensed, a subject discussed later in this paper, also affects how open the OER will be.

In addition to these four R's, there are other considerations that authors of OERs should take into account when designing for openness. Even if a work has been licensed so that users are free to reuse, redistribute, revise and remix it, the format in which the work is stored can make a large difference in how open it is. Some file formats are easier to open and edit than others. For example a scanned document that has been turned into a .pdf file is easy to open with free software, but is not easy to edit. Because free software exits to both open and edit a .doc file, this might be considered a more "open" format. Thus openness is increased when file formats are used that are easy to both access and

edit. Another way to increase openness when distributing OERs is to make them available in as many formats as constraints allow.

Motivations for Sharing Open Education Resources

There are several reasons why individuals and institutions might be motivated to openly share resources. Four common motivations are to (1) receive increased exposure, (2) do some good, (3) give new life to out-of-print works, (4) improve the quality of educational resources.

Receive increased exposure

One benefit of openly publishing OERs is that it has the potential to increase the distribution of your work. James Boyle, a law professor at Duke University openly released a book entitled *The Public Domain.* Within six weeks of publication the book had sold 3,000 copies (a figure with which he and the publisher were both pleased). In addition, the book was downloaded 25,000 times in those six weeks. Boyle believes that the downloads do not represent lost sales (he believes that most people who downloaded the book would not have purchased the book anyways). Rather he believes that the downloads represent an increase in exposure (Boyle, 2008).

Allowing content to be revised can also significantly increase the impact a work can have. Lawrence Lessig of Stanford University published his book *Free Culture* in 2004. Although the book has sold tens of thousands copies, the free digital version has been downloaded several hundred thousand times (L. Lessig, personal communication, January 17, 2009). Perhaps more importantly, it has been translated into seven different languages, audio versions are freely available, and it has been put into sixteen different file formats (Free Culture Derivatives/Remixes, n.d.). All of these translations and format

changes are freely available for others to download. Allowing others to remix *Free Culture* vastly expanded its reach.

Although not all OERs will be translated into multiple languages or revised in multiple formats, even small OERs often benefit from increased exposure when shared. For example, a PowerPoint presentation on the subject of open education has been downloaded from http://slideshare.net 5,809 times (2009). This increasing visibility of one's work can build one's reputation within a given community of practitioners (OECD, 2007).

Doing good in the world

A second reason for creating OERs is simply to do some good in the world. Many students cannot attend college. On-campus students might like to learn about the content of a specific course, but not be able to fit that course into their schedules. Some teachers would benefit from reusing educational resources created by others.

An individual might say, "If I've already made a set of PowerPoints for a class I teach, why not post them for others to view? If I can post electronic copies of articles I've published to others, why not let them benefit? If my campus's Center for Teaching made a flash video to help me explain conflict in the Middle East, why not put it online?"

Give new life to out-of-print works.

A third reason to create OERs is to give new life to out-of-print works. A significant problem in the publishing world relates to orphan books (Boyle, 2008). These are books that are out-of-print, and the copyright owner of the books cannot easily be identified. As time passes the out-of-print book becomes increasingly unavailable, as publishers merge and authors change locations, it can become impossible to locate. One

religion professor wrote a book discussing the results of a significant longitudinal study. Once the book was out-of-print, he was frustrated because he felt that the study needed to be seen by many more people. Posting the book online and referring people to the book's website when he spoke on the study would allow the book to receive new attention and bring new life to a book that would have otherwise not been seen again.

Improve the quality of educational resources

A fourth reason to create OERs is that it may improve the quality of both the resources and student learning. When an educational resource is published openly it may bring about the mechanisms of peer review (Wiley, 2009). If people know their educational resource will be viewed by others they might desire to make it better than they ordinarily would. In addition, as others use the resource they may improve it and return the revised version to the creator, who then benefits from the improvement.

For example, suppose a teacher creates a PowerPoint presentation featuring quotes from world religious leaders and puts it online. A teacher on another continent has a collection of related audio files and attaches some to the slides. A third teacher has a video clip of one of the quotations and adds that into the presentation. The resulting work may in some contexts be a better educational resource than the original, and everyone can benefit from the improved resource.

Openness has a tendency to lead to better material used in courses not only because faculty can build on other open resources, but simply because teachers can more easily see what other teachers are doing. Just as observing others teach has been shown to improve teaching (Elmore, 1997), observing the educational resources that others use in the classroom may also improves teaching. Thus OERs benefit both the teachers who

used them and the students who receive them. In addition, because the resources are openly available on the Internet, teachers can refer students to the resources directly so that they can be utilized outside of class.

<div align="center">Obstacles to Openness</div>

Although there are many reasons why an educator might want to create and share OERs, there are also obstacles to creating such resources. Four common obstacles are the following: 1. the amount of time necessary to put the OER in a format that can be shared. 2. A desire to keep the resource from being seen by others. 3. There are few if any external reward mechanisms for creating OERs. 4. Some educators are concerned that nobody will want to use the OERs they create.

A primary obstacle to creating OERs is that although they are shared freely, they are not completely free to create. For example, suppose a professor wants to podcast her lectures. Although she will be preparing and presenting her lectures anyway, there is an additional cost in time needed to record and upload the lectures. Even for a technologically proficient individual it might take five minutes to publish a new lecture. And if a professor does not have the technical ability to publish a podcast, the costs in time increase. In some cases this obstacle can be overcome by outsourcing the additional steps to "open the resource" to a Teaching Assistant with the requisite time and technical skill.

A second obstacle to creating OERs is that an individual may not want others to see the resource. This could be due to a professor not wanting to publish half-finished research, or a fear that others could copy ideas and profit on them. In some cases this is a legitimate obstacle. Openness is not the right solution for all educational resources. It is

also important to note that how an OER is licensed, a subject discussed later in this paper, can sometimes ameliorate this concern.

Another obstacle to using OERs is that in most institutions there is little external motivation for doing so. An individual might want to increase exposure, or do some good by sharing, but feel a pressure to focus on activities such as publishing or committee work that will lead towards tenure. For example, one individual took a book he had written about a city and turned it into an online resource for information about that city. When it came time to review his publications from the previous year, the academic committee did not know what to make of this online resource. Although this is a problem likely to remain in academia for some time, there are glimmers of change on the horizon. Some have suggested that in order to resolve this problem that a peer-reviewed outlet for publishing OERs could be created to provide external motivation (OECD, 2007). Others report that some OERs (such as contributing a chapter to a book that is openly distributed) may be included in a Vita (Bazerman, et al., 2008).

A fourth obstacle that may prevent some from creating OERs is the thought that nobody will use the resource (Brown, 2008). If nobody utilizes the OER some fear that the time spent creating may have been wasted. It would be like planning a big party, but having nobody attend. This obstacle is an important issue with respect to OERs (Dholakia, King, and Baraniuk, 2006). Attention does need to be focused on creating resources from which others will benefit, as well as developing a community of users sufficiently large to have a collective impact. This obstacle can be related to the question, "If a tree falls in the forest, does anybody hear it?" In today's world, the answer is, "If Google hears the tree fall, then others will hear it also (Wiley, 2009). As individual and

collective capacities to effectively search online increase, it will become easier to locate and reuse OERs.

Another obstacle that prevents people from creating Open Educational Resources concerns copyright issues. This is a significant issue that is discussed in the following section.

Copyright Considerations

There are two key copyright issues with respect to OERs. First, ensuring that you have appropriate permissions to use existing resources as part of your OER, and second choosing a license for your OER.

Permissions

One professor teaching a Hebrew literature class used a series of articles as part of the class readings. Because these articles were copyrighted he was not able to openly distribute them as a packet for others to use. Another professor wanted to upload his PowerPoint presentations but was not sure whether the images used in the presentation would constitute "fair use" and was worried about copyright violations. These are common concerns.

There are two ways that the permissions challenge can be overcome. One is to simply substitute open resources for copyrighted ones. Although not possible in all in all cases, it becoming increasingly easier to accomplish. For example at http://flickr.com one can search for photos that have been licensed for non-commercial use. There are 8,321 such photos of "The Dome of the Rock," and 277 photos of "St. Peter's Tomb." Such photos might easily take the place of copyrighted photos in a PowerPoint presentation.

Similarly, teachers sometimes can utilize articles that are already available for free on the Internet and combine them into a packet that can be used by others.

A second way to overcome the permissions challenge is to modify resources before they are openly shared. For example, if a teacher wanted to share a packet of course materials, the copyrighted materials could be removed prior to online distribution, and the rest of the resource could be openly shared.

Licensing Open Educational Resources

How an individual licenses an OER will significantly affect its openness. United States law states that anything you create is automatically copyrighted; therefore it is legally "closed" unless the author takes steps to open it (Lessig, 2004). One remedy to this situation is to use a Creative Commons license. Creative Commons provides several licenses to help creators of content license their work in ways consistent with their desires for openness. There are four important provisions of the Creative Commons licenses. They are: Attribution, Non-Commercial, No-Derivatives and Share-Alike. The Creative Commons website defines these terms in the following way:

> *Attribution*. You let people copy, distribute, display, perform, and remix your copyrighted work, as long as they give you credit the way you request. All CC licenses contain this property.

> *NonCommercial*. You let people copy, distribute, display, perform, and remix your work for non-commercial purposes only. If they want to use your work for commercial purposes, they must contact you for permission.

> *ShareAlike*. You let people create remixes and derivative works based on your creative work, as long as they only distribute them under the same Creative Commons license that your original work was published under.

> *NoDerivatives*. You let people copy, distribute, display, and perform only verbatim copies of your work — not make derivative works based on it. If they want to alter, transform, build upon, or remix your work, they must contact you for permission. [Note: the NoDerivatives clause would

prevent individuals from revising or remixing the work.] (Creative Commons, 2009).

If people wanted their resources to be as open as possible they could simple license them by asking for attribution. If a university did not others reusing its resources for commercial purposes it could license the resource in such a way so as to prevent commercial use. If authors do not want their works to be revised or built upon then they could use the "NoDerivatives" clause. These licensing options provide creators of OERs the ability to license their works in ways that are consistent with their desires for openness.

Conclusion

As the world becomes increasingly connected, open educational resources provide a significant opportunity to share both content knowledge and pedagogical practice. Openness is increased as educators provide resources that can be reused, redistributed, revised, and remixed. Openness also increases when resources are placed in a file format that is easy to open and edit. There are several motivations and obstacles for creating OERs. One frequently cited obstacle concerns copyright issues. Through the use of Creative Commons licenses educators can protect the rights they wish to keep while giving some of those rights to others. Although OERs are not appropriate in all situations, they can be an important part of improving pedagogy and increasing access to education.

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