THE CHRISTIAN LIBRARIAN®
JOURNAL OF THE ASSOCIATION OF CHRISTIAN LIBRARIANS

Volume 60 | Issue 1 Article 7

4-2017

Open Educational Resources: Expanding the Conversation Regarding Adoption and Use on a College Campus

Erin McCoy
Massasoit Community College, mccoynazlibrarian@gmail.com

The Christian Librarian is the official publication of the Association of Christian Librarians (ACL). To learn more about ACL and its products and services please visit http://www.acl.org/

Open Educational Resources: Expanding the Conversation Regarding Adoption and Use on a College Campus

Erin H. McCoy, Reference and Instruction Librarian
Massasoit Community College

ABSTRACT
As more institutions explore Open Educational Resource (OER) initiatives, librarians should be involved in the campus-wide conversation. Also, OER means more than free online textbooks; a broader conversation needs to be prioritized as institutions step into the OER movement. This article is an adaptation of the author's presentation at the 2016 Annual Conference of the Association of Christian Librarians, titled "Out of Bounds: Exploring Open Educational Resources."

Introduction

A lot of data surrounds the adoption and use of Open Educational Resources (OER), especially in a higher education context. There are as many models for OER initiatives as there are institutions, and none of them is perfect; however, areas of study exist which allow us to broaden the conversation around OER. There are ways to explore the OER story that go beyond dollars and data. What are the primary drivers behind adopting them? What are the assumptions we make about education when we advocate for OER and how do those assumptions motivate the way we teach? With the increase in models to study and the many repositories to evaluate, how do faculty interact with those online spaces? How are institutions changing their workflow and infrastructure to accommodate a sustainable OER plan? Even if the library is not the entity that pushes OER forward in your context, these questions need to be addressed and understood as this movement continues.

Open Educational Resources: An Historical Approach

Many definitions and catchphrases describe OER, but there is also a framework available for moving the conversation away from the reductionist concept that OER only means free textbooks online. This framework for understanding OER comes from Jensen and West (2015), who propose a three-pronged approach: "Open education is a philosophy, a pedagogical shift, and a movement that works to improve

educational experiences through adopting learning materials that aren't locked down by restrictive copyright laws" (p. 215). Looking at OER this way pulls the lens away from OER as free textbooks and can help teachers and administrators reorient their understanding of what an OER initiative can encompass. The underlying philosophy of OER is that access to the world's knowledge is a public good and that current technology gives anyone the ability to access that information. This idea puts an immediate ethical stamp on what OER represents and becomes a powerful motivator for adoption.

Labeling OER as a movement gives it historic heft, and upon digging into the numbers it is clear that OER has existed in some form for over ten years. For example, "One of the longest-running and highest-profile OER initiatives is the OpenCourseWare project from MIT, which began in 2002 and today features all of the course materials from roughly 2,000 MIT courses" (Educause, 2010). The OER movement has continued to gain traction in recent years because of social sharing as a growing platform, coupled with the rising cost of education highlighting the need for affordable educational materials. While the sharing of lesson plans, curriculum, and ideas has happened informally among teachers and librarians for years, technology has created the opportunity for sharing to take place on an open, digital platform, where the knowledge is accessible to anyone. We can now create deep databases of resources, with complete metadata for searching and finding, for reviewing and publishing. It takes time to investigate, review, adopt and assess these resources and for teachers at all levels. Time is the premium commodity. Incentives are necessary in order to create a successful transition from one workflow to another. There are many reasons for creating or adopting an OER. Walz (2015) shows that: "author rationale for open licensing varies from altruism to competitive advantage by being the first to shape the future market, to potential rewards for promotion and tenure, to expediting a project more quickly and benefiting society" (para. 10). Whatever the motivations are, an institutional commitment to OER as a movement, as opposed to a fad, is essential for its adoption and success.

Identifying OER as a pedagogical shift orients the movement back into the classroom with the realization that the texts chosen for a class affect how concepts are taught. OER requires technological comfort for access, as well as an understanding of how to read and interact with digital texts. This skill set is for the student as well as the teacher; thus, the majority of instructors need incentives and support to adopt OER in their classrooms. It is not enough to say, "Do this," and send faculty a link to a resource such as MERLOT (https://www.merlot.org) , a curated collection of free and open online teaching, learning, and faculty development services contributed and used by an international education community. OER should be understood in this context, with the idea or assumption that OER changes how teachers teach, and an acknowledgement of how students learn. It is also not enough to simply tell students their resources are OER and expect them to know what to do with it and when.

> The motto "If you build it, they will come," is not valid for OER. Even free and valuable educational resources must be advertised to the target audience. Although students had been informed of the OER via handouts and email, more than half of them were not aware of it. Building awareness is not a one-shot activity. Non-redundant communication strategies should be utilized, and all possible channels should be used regularly to promote the OER. (Islim & Cagiltay, 2016, p. 566).

The accepted definition of OER can be found in many sources. For this discussion, I draw on the criteria outlined by David Wiley as well as the vision outlined by the Scholarly Publishing and Academic Resources Coalition (SPARC). Wiley states:

> The terms "open content" and "open educational resources" describe any copyrightable work (traditionally excluding software, which is described by other terms like "open source") that is licensed in a manner that provides users with free and perpetual permission to engage in the 5R activities: retain, reuse, revise, remix, redistribute. (Wiley, 2015, para. 1)

SPARC broadens the definition:

> Open Education encompasses resources, tools and practices that are free of legal, financial and technical barriers and can be fully used, shared and adapted in the digital environment. Open Education maximizes the power of the Internet to make education more affordable, accessible and effective. (Scholarly Publishing and Academic Resources Coalition [SPARC], 2017, para. 5)

Either definition works; Wiley's is useful in helping someone determine what digital objects qualify as an open educational resource, while SPARC answers why and how these items are made accessible.

OER has penetrated four areas as a movement: open data, open textbooks, open access and open courseware. Open data is encouraged in the hard sciences and social sciences in particular. This is a different knowledge set than open access to scholarly publishing; the open data movement is the open publishing of the experimental results, or non-textual materials, "including datasets, statistics, transcripts, survey results, and the metadata associated with these objects" in a study so that others can replicate the experiment, or take the data and verify the results (SPARC, 2017, para. 3).

Open textbooks are the front face of OER. The goal of open textbooks or open course materials is to use online books and articles so students do not have to purchase an expensive textbook or coursepack. The open textbook movement acknowledges the traditional publishing stranglehold on education and the unsustainability of rising costs of college tuition plus college textbooks for the majority of the population. This idea dovetails with the open access movement, which libraries have been involved with for a number of years as a result of skyrocketing journal and database prices.

The goal of open access is to make scholarly publishing open for anyone to read and learn from while maintaining the scholarly integrity of the work itself. These works can be published in an institutional repository or in an open access online journal.

Finally, open courseware describes faculty's removal of their lectures, videos, quizzes, and test questions from the locked learning management system and allowing other teachers to adopt or adapt that course for their own. Like open textbooks, this model is extremely popular among courses that are typically seen as general education or core classes. Most students at four-year colleges take art appreciation, or introductory biology or sociology, for example, and these courses cover the same core concepts. Sharing open courses removes the tedium of organizing the course and empowers a teacher with a framework or outline and the opportunity to adapt it or add to it to fit their context.

Open Educational Resources: Challenges in Context

While the challenges to OER in a particular context can be myriad, they generally fall into five categories: student access/comfort, faculty awareness/buy in, sustainability, finding the right learning object (course, textbooks, video, etc.), and assessment of the objects and the students' learning. These challenges are not insurmountable but require honest conversation with all involved: the teaching faculty, the support team, the students, and the administration.

The widespread and lazy assumption is that students of a certain age and demographic will automatically be comfortable with all the technology available to them. The Neilsen Norman Group surveyed millennials to test the common perceptions about them with regard to technology:

> We frequently see Millennial users getting stumped in usability testing when they encounter difficult user interfaces. Their interactions tend to be fast-paced. Because they spend less time on any given page, Millennials are more likely to make errors, and they read even less than the average user (which is already very little) (Meyer, 2016, para. 18).

In addition, there is growing evidence that reading online requires a different set of skills than reading on paper (Niccoli, 2015). Students must be taught to read digitally and faculty must understand this. Tools and methods exist to aid in students' engagement of digital material, and there are best practices for the presentation of online instructional materials. A student's success with an OER is because the OER is available, cheaper, and the functionality of the OER is clarified.

On many campuses, the library becomes the de facto professional development center, keeping faculty abreast of technology resources, new materials in their field, and providing space for experimentation. The first step with OER is to ensure that

faculty and administrators know they exist as a viable option for course materials. Obviously, if they do not understand the benefits of OER and the needs OER can meet, this discussion is dead on arrival. Many articles and blog posts suggest ideas about how to educate and involve faculty and administrators, from presentations and brown bag lunches to professional development days and newsletters. It is also clear that faculty need incentives to change. It takes a lot of work, time, and support to shift the pedagogical frame of mind that comes with a paper textbook toward using online options. A thorough study by the Babson Research Group surveys chief academic officers, faculty, and academic technologists regarding the creation, adoption, and sustainability of OER as a movement and at their individual institutions:

> Faculty were specifically asked to rate how important a number of potential barriers would be to their adoption of open education resources. The time and effort to find and evaluate these resources are consistently listed as the most important barriers. A majority of faculty report that difficultly in searching and the lack of a comprehensive catalog on OER materials are "Important" or "Very important" barriers to their use of OER. (Allen & Seaman, 2014, p. 24)

This question addresses the finding and selecting of OER; there is the additional matter of shifting one's teaching as well.

Many OER initiatives are initially funded by grants and one-time monetary incentives but Annand (2015) addresses the need for a comprehensive OER sustainability plan. While his article is primarily a literature review of models and concepts of OER programs, it does show an existing "mismatch" between the financial interests of students and that of higher education. Because OER funding relies heavily on government incentives and philanthropic gifts, institutions have not been "forced" to integrate the unseen costs of OER into their regular operating budgets such as technology infrastructure and teacher training.

Fitness for purpose may not be a concept with which faculty will be familiar, but it is an educator's constant, if not intentional, activity when designing a course. Fitness for purpose is how one decides on an OER; just because it is an OER does not mean it is a good fit for a course. Jung, Sasaki, and Latchem (2016) review multiple evaluation criteria in order to aid selectors in choosing a digital object that fulfills multiple goals. Because of the technical aspect inherent in digital objects, more criteria are needed than simply evaluating the content. A selector must review the ease of use, the legality of the object, the pedagogy implied, and the accessibility of the digital object.

Once an OER is adopted and deemed as fit for the course, it is essential to fold the assessment of the OER into the overall assessment of the class: the content and the technology, the accessibility and the legality. Creating a rubric for OER can aid faculty in their initial selection and fitness for purpose, and also helps them

stay consistent in their choosing of learning objects across different courses. Yuan and Recker (2015) evaluate the various rubrics available (14 in all) some with a rating scale and some without. The rubrics prove useful not just in the selection of an OER, but also in selecting what aspects of the OER to adapt or supplement. The rubrics also provide a "trail" that guide faculty through the development or evolution of an OER and their decision to use it. In addition, because the OERs are digital, instructors can quickly view statistics regarding the object in ways that are not possible with a print textbook. The number of clicks on an OER link will not tell the professor how much a student has engaged with the material, but it gives a baseline number for understanding how many students attempted to access the OER. Scanlon, McAndrew and O'Shea (2015) did a more in-depth review of the effects of technology on the learning that takes place with the OER. In assessing the overall course, OER included, it is necessary to determine how the technology aided or distracted from the learning.

Open Educational Resources: A Broader Approach

Library engagement can be at any or at all levels of an OER movement on campus. A comprehensive survey by Hosburgh and Bulock (2015) revealed many areas where librarians can give input. Primarily, there continues to be a clear need for librarians to engage in the flow of metadata between publishers, aggregators, and OER creators. Because OER encompasses such a variety of digital objects, each with different licenses and digital "homes," it is easy to see how metadata can get lost or mistranslated. Also, difficulty arises for librarians to find consistent ways to promote OER because traditional library systems do not interface easily with online repositories.

For many institutions considering the adoption of OER, the financial data regarding the cost-benefit to students is incentive enough for pursuit. However, many other aspects to the conversation exist where library staff is uniquely skilled to contribute: management issues, training challenges, a need for formalized processes, and a move toward sustainability in the OER initiative. Therefore, no matter where the institution is on the adoption cycle or where the library fits into the conversation, staff can feel bold enough to ask good questions regarding the next steps in the OER process at their institutions. ✞

ABOUT THE AUTHOR

Erin McCoy is a Reference and Instruction Librarian at Massasoit Community College near Boston, Massachusetts. She can be contacted at mccoynazlibrarian@gmail.com.

REFERENCES

Allen, E. and Seaman, J. (2012). *Growing the curriculum: Open educational resources in U.S. Higher Education*. Retrieved from Babson Survey Research Group website: http://www.onlinelearningsurvey.com/reports/growingthecurriculum.pdf

Annand, D. (2015). Developing a sustainable financial model in higher education for open educational resources. *International Review of Research in Open & Distance Learning, 16*(5), 1-15.

Educause (2010). 7 things you should know about open educational resources. Retrieved from http://net.educause.edu/ir/library/pdf/ELi7061.pdf

Hosburgh, N., & Bulock, C. (2015). *OA in the library collection: The challenges of identifying and maintaining open access resources.* Retrieved from http://scholarship.rollins.edu/as_facpub/136

Islim, O. I., & Cagiltay, K. (2016). The impact of OER on instructional effectiveness: A case study. *Eurasia Journal of Mathematics, Science & Technology Education, 12*(3), 559-567. doi:10.12973/iser.2016.2003a

Jensen, K. K., & West, Q. C. (2015). Open educational resources and the higher education environment. *College & Research Libraries News, 76*(4), 215-218.

Jung, I. I., Sasaki, T. S., & Latchem, C. C. (2016). A framework for assessing fitness for purpose in open educational resources. *International Journal of Educational Technology in Higher Education, 13*(1), 1-11. doi:10.1186/s41239-016-0002-5

Meyer, K. (2016). *Millennials as digital natives: Myths & realities.* Retrieved from https://www.nngroup.com/articles/millennials-digital-natives/

Niccoli, A. (2015). Paper or tablet? Reading recall and comprehension. *EDUCAUSE Review*. Retrieved from http://er.educause.edu/articles/2015/9/paper-or-tablet-reading-recall-and-comprehension

Scanlon, E. E., McAndrew, P. P., & O'Shea, T. P. (2015). Designing for educational technology to enhance the experience of learners in distance education: How open educational resources, learning design and MOOCs are influencing learning. *Journal of Interactive Media in Education, 2015*(1), 1-9. doi:10.5334/jime.al

Scholarly Publishing and Academic Resources Coalition. (2017). *Why open matters.* Retrieved from http://sparcopen.org/why-open-matters/

Walz, A. (2015). Open and editable: Exploring library engagement in open educational resource adoption, adaption and authoring. *Virginia Libraries, 61*(1), 32-31. Retrieved from https://scholar.lib.vt.edu/ejournals/VALib/v61_n1/walz.html

Wiley, D. (2015). *Defining the "open" in open content*. Retrieved from http://opencontent.org/definition

Yuan, M., & Recker, M. (2015). Not all rubrics are equal: A review of rubrics for evaluating the quality of open educational resources. *International Review of Research in Open & Distance Learning, 16*(5), 16-38.

ADDITIONAL RESOURCES

Barclay, D. (2015). No reservations: Why the time has come to kill print textbook reserves. *College & Research Libraries News, 76*(6), 332-335.

Bulock, C., Hosburgh, N., & Mann, S. (2015). OA in the library collection: The challenges of identifying and maintaining open access resources. *Serials Librarian, 68*(1-4), 79-86. doi:10.1080/0361526X.2015.1023690

Cohen, A., Reisman, S., & Sperling, B. B. (2015). Personal spaces in public repositories as a facilitator for open educational resource usage. *International Review of Research in Open & Distance Learning, 16(*4), 156-176.

Farrow, R., de los Arcos, B., Pitt, R., & Weller, M. (2015). Who are the open learners? A comparative study profiling non-formal users of open educational resources. *European Journal of Open, Distance & E-Learning, 18*(2), 49-73. doi:10.1515/eurodl-2015-0013

Harwell, J. J., & Arthur, M. M. (2015). Being earnest with collections: Investing in open access at a small academic library. *Against the Grain, 27*(6), 75-77.

Molnar, M. (2016). Wave of open content a challenge. *Education Week, 35*(17), S8.

Scholarly Publishing & Academic Resources Coalition. (2016). *SPARC Open Education Fact Sheet*. Retrieved from http://sparcopen.org/wp-content/uploads/2016/01/SPARC-Open-Education-Fact-Sheet.pdf

U.S. PIRG Education Fund and the Student PIRGs. (2014). *Fixing the Broken Textbook Market*. Retrieved from http://www.studentpirgs.org/reports/sp/#xing-broken-textbook-market