

Utah State University

DigitalCommons@USU

Library Faculty & Staff Publications

Libraries

Spring 3-22-2016

Enhancing Teaching & Learning: Libraries and Open Educational Resources in the Classroom

Erin L. Davis
Utah State University

Britt Fagerheim
Utah State University

Becky L. Thoms
Utah State University

Dory Cochran
Utah State University

Follow this and additional works at: https://digitalcommons.usu.edu/lib_pubs



Part of the [Library and Information Science Commons](#)

Recommended Citation

Davis, Erin L.; Fagerheim, Britt; Thoms, Becky L.; and Cochran, Dory, "Enhancing Teaching & Learning: Libraries and Open Educational Resources in the Classroom" (2016). *Library Faculty & Staff Publications*. Paper 266.

https://digitalcommons.usu.edu/lib_pubs/266

This Article is brought to you for free and open access by the Libraries at DigitalCommons@USU. It has been accepted for inclusion in Library Faculty & Staff Publications by an authorized administrator of DigitalCommons@USU. For more information, please contact digitalcommons@usu.edu.



“Enhancing Teaching & Learning: Libraries and Open Educational Resources in the Classroom,” *Public Services Quarterly*, Volume 12, 2016 – Issue 1

By Erin Davis, Dory Cochran, Britt Fagerheim, & Becky Thoms

Abstract

Academic libraries continually adjust services to adapt to the ever-changing landscape in higher education. In response to the broken textbook market, libraries are becoming actively involved in the open educational resources (OER) movement. Although there is not a formal program in place, librarians at Utah State University explored a collaborative approach to integrate OER in faculty members' courses. One goal of the effort was to work closely with faculty to consider course objectives and learning outcomes when evaluating and incorporating OER. This article identifies a streamlined process for targeting courses most suited for OER adoption and outlines a process of collaborating with teaching faculty to integrate relevant OER. The paper includes a detailed workflow that other libraries can easily adapt to make OER part of their faculty outreach toolkit.

KEYWORDS: Open educational resources, academic library, open source materials

The role of the academic librarian is continually evolving, but one constant is championing initiatives in support of library users. One such initiative, the open educational resources (OER) movement, falls somewhat uniquely into the library's mission to their campuses by serving the needs of both students and faculty. OER are educational materials openly available to instructors and students without licensing or use fees (Butcher, 2011). Some characteristics of OER include availability in the public domain and open licenses that allow using, repurposing, or redistributing the material (“Guidelines for Open Educational Resources (OER) in Higher Education,” 2015). As textbook prices continue to soar, the OER movement is gaining ground in higher education (Okamoto, 2013). Over the past decade, textbook prices have risen much faster than prices in the overall economy (“College Textbooks: Students Have Greater Access to Textbook Information GAO-13-368,” 2013). OER have the potential to not only help address the cost of textbooks, but also transform teaching and learning as OER enable faculty to create a curriculum all their own, as opposed to working from commercial textbook curriculums. While more research is needed, early evidence suggests that instructors believe such creativity can also be enhanced by the more lively nature of OER and connections to student engagement (Thoms, 2014). Despite remaining questions, it is clear that OER are situated to play an impactful role in the classroom, and academic librarians have potential to be a valuable contributor to this future.

Both the OER definition and movement are settling into identities, which make each more approachable for the many possible stakeholders—faculty, students, administrators, and librarians. A Babson Survey Research Group 2014 report found that between two-thirds and three-quarters of faculty remain unaware of OER, but when presented with more information about the concept, the majority seemed willing to try implementing it in their classes. Interestingly, 77.5 percent of faculty said they will or might use OER within the next few years (Allen & Seaman, 2014). This is further proof that librarians and administrators at college campuses need to continue advocating for alternate textbook projects.

Academic libraries typically have close ties to teaching faculty through subject liaisons and library instruction programs. With a history of collecting high quality materials for both teaching and research, librarians are well positioned to work with faculty seeking to incorporate OER into their courses. This paper outlines a pilot project at Utah State University's Merrill-Cazier Library in which four librarians worked closely with seven faculty members representing a range of disciplines to locate and evaluate relevant OER to meet the varied needs of the faculty members. The goal was not only to locate quality OER but also to influence faculty views of OER as viable and beneficial for course development and pedagogy.

Literature Review

Current State of Open Educational Resources

For the purposes of this study, we limited the literature review to OER use in the United States' higher education system. The OER movement began in concert with the Open Courseware movement and the prospect of expanding access to college courses and lifelong education to anyone with a computer and internet connection (Brown & Adler, 2008). Seminal early papers addressing open educational resources and open courseware noted the potential for OER as a pathway to universal education (Caswell, Henson, Jensen, & Wiley, 2008; Yuan, MacNiell, & Krann, n.d.). The evolution of OER has shifted and now focuses on the potential for incorporating openly available textbooks and other resources into both K-12 and higher education. Due to the rising cost of textbooks, the movement has been gaining ground in higher education and has benefited by other movements and organizations such as Open Access and Creative Commons. The open textbook project at Oregon State University (OSU) is an excellent example of a successful, tangible outcome that can result from the joining of forces (Sutton & Chadwell 2014).

Whereas now many open education materials are being created with the express purpose of being open and available in multiple class formats, initial open courseware projects pushed to provide access to already existing materials. A pioneer in the open content movement, MIT sought to freely share course materials that had been developed for face-to-face learning in order to help educators develop stronger curricula and learning experiences while providing additional resources to students (Carson, 2009). Now, more than a decade later, MIT's approach to

providing open material is only one of several that continue to evolve and change. Open courses are still offered throughout academia, with online, blended, and hybrid courses nearly ubiquitous (Toven-Lindsey, Rhoads, & Lozano, 2015).

Open courseware still holds an important role, and as Steven Bell (2015) notes, OER has emerged as a significant player in what he calls the “textbook revolution” (Bell, 2015). The Florida Distance Learning Consortium’s 2012 follow up study to their 2010 report captures many of the grounding concerns of this revolution. Over half of students surveyed reported not purchasing a textbook due to high costs, and students are generally unaware of potential cost benefits found through open textbooks and open courseware (Florida Virtual Campus, 2012). The study also documents the rising prices of new textbooks. A more recent study of college students found that 65% of the responding students noted at some point they declined to buy a textbook based on the high cost and almost 50% of the responding students stated textbook cost was a factor in their decisions about which classes and how many they enrolled in (Senack, 2014).

Responses to these concerns are many. In addition to publishing initiatives like OpenStax, alternate textbook programs are increasingly present on US campuses (Bell, 2015). Many universities, such as the State University of New York are exploring textbook publishing initiatives and campus libraries are continually at the forefront of these new programs (Pitcher, 2014).

Library Involvement with OER:

Libraries are responding to the high costs of textbooks by becoming actively involved in the OER movement. As strong advocates for providing patrons with free or low-cost access to information, libraries are quickly seizing the OER opportunity. Programs such as Temple University’s Alternate Textbook Project provides funding to faculty who opt to replace costly textbooks with library-licensed or open content and has saved students over \$300,000 since 2011 (Bell, 2015). Spearheaded from Temple’s project, University of Massachusetts Amherst’s Open Education Initiative, another faculty incentive program, has saved students over \$1,000,000 in potential textbook costs (Billings et al., 2012; Lederman, 2014). These libraries are extending their roles on campus by piloting textbook projects, often with administrative units such as the Provost’s Office, to reduce textbooks costs for students.

Another major role libraries play in the OER movement is finding high-quality open course materials along with library licensed content for both students and faculty members (Bell, 2015). Rebecca A. Martin (2010) argues that more libraries need to provide this “value-added” service for their faculty and students, saving both time and money. Finding quality OER can prove time-intensive and challenging, and, as many in the literature assert, more training for librarians may be needed (Martin, 2010; Mitchell & Chu, 2014; Okamoto, 2013). As Mitchell & Chu (2014) point out, librarians are well positioned to take on the role of mediating between faculty, as the creators of OER and course material, and students, as the users of course material.

Libraries, too, benefit from and provide expertise on OER, in particular through the libraries’ institutional repositories (Martin, 2010; Mitchell & Chu, 2014; Okamoto, 2013). Since librarians are already skilled at managing and promoting

access to collections, encouraging faculty to submit their publications in the institutional repository is yet another way libraries can help students reduce costs by making supplemental materials freely available while also promoting their faculty's work (Mitchell & Chu, 2014). Mitchell & Chu (2014) highlight California State University San Marcos's practical approach for combatting textbook affordability, writing that the IR's rich array of resources is an overlooked resource for textbook alternatives.

Substantial growth in library-led OER initiatives at institutions across the United States such as at the University of Massachusetts at Amherst Libraries and North Carolina State University Libraries is further evidence that academic libraries are leading the way in the OER movement on their campuses (Bell, 2015). However, while OER have been on the scene in higher education for well over ten years, other parts of the world have been quicker than the U.S. to develop and incorporate OER. Typical roadblocks include worries about the required time investment, skepticism about resource and material quality on the part of faculty and concerns about scalability on the part of librarians (Okamoto, 2013).

Some libraries are also involved in creating OER, working alongside students and professors as facilitators (Okamoto, 2013). At OSU, the open textbook project included partners from across the institution—including the University Press and the Extended Campus—but the Valley Library spearheaded the effort (Sutton & Chadwell, 2014). UCLA's Special Collections department worked with a freshmen course, and, in the span of ten weeks, helped to curate the course's collaboratively authored textbook, mainly comprised of special collections documents and the students' writings (Miller & Montoya, 2013). Academic libraries, with their experience in intellectual property, preservation, teaching, and technology, are particularly well-positioned to fill a central role in the OER movement (Kazakoff-Lane, 2014). Librarians are continuing to explore pivotal ways in which to implement OER on U.S. college campuses and, in turn, provide cost saving and educational benefits for students.

Background

At Utah State University, librarians began working with faculty to incorporate OER into their courses as a result of a collaboration between the Library and USU's Center for Innovative Design & Instruction (CIDI). The Copyright and E-Learning Librarians began attending the CIDI meetings in Spring 2013, and this led to more formal partnerships on teaching and learning initiatives within the university. When CIDI launched an intensive series of workshops for faculty focused on teaching online and blended courses, they recruited several librarians to present a joint session on embedding library resources and using copyright to guide the selection and incorporation of resources. As faculty overhauled their courses or converted from face-to-face to online teaching, course textbooks and accompanying challenges were a frequent topic of conversation. It quickly became apparent that not all faculty were committed to using their current textbooks. Many complained not only about the financial burden for their students, but also expressed frustration over the new editions being published each year. In Spring 2014, after presenting at

three different workshops, the Copyright and E-Learning librarians emailed 49 faculty members who had participated in the online learning workshops inquiring whether faculty were interested in working closely with the library on an OER project to examine their syllabi and identify and evaluate appropriate OER. The librarians suggested a timeline to the faculty that identified summer 2014 for the bulk of the research and meetings, enabling their classes to be ready for the start of the fall semester. Seven faculty agreed to participate in the project, representing the following disciplines: Agricultural Communication; Art; Business; English; Family Consumer and Human Development; Nutrition & Dietetics; and Psychology. Several additional faculty requested more information about the project but ultimately declined to participate.

Project Overview

In February and March 2014, the library OER team began scheduling orientation meetings with the seven target faculty members. At that point, the respective subject librarians were given a synopsis of the project and invited to participate as schedules allowed. The original team of two librarians expanded to four as an Instruction Librarian and the Head of Reference and Instruction became integrally involved in the project. All of the subject librarians responded positively to the project and joined the original team more peripherally. The orientation meetings included at least one member of the project team, the subject librarian if possible, and the faculty member. The primary goals of the meetings were to explain the purpose and timeline of the project, introduce OER, and identify a particular course, or courses, where the faculty member felt there was opportunity for some syllabus revision. At this meeting, faculty members provided the librarians with the appropriate syllabi or sent them at a later date. These orientation meetings were essential to establishing the groundwork for the project—allowing the faculty members to explain the goals and objectives of the course and to build rapport between the library team and the faculty members.

During the initial meetings, in follow up meetings, or via email, the library team asked questions about the syllabi and required texts, specifically which elements of each text the faculty member found valuable, what kind of new or different material they would like to incorporate, and specific topic areas where faculty felt additional resources would be most beneficial. The library team also used these meetings as an opportunity to clear up any misconceptions about OER. Faculty and librarians worked together to consider the goals and objectives of the course and to decide where particular OER could be incorporated. Additional meetings were held throughout the summer to address faculty questions and concerns and to ensure as comprehensive incorporation of OER as possible.

Syllabi Revision Process

Once the course syllabi were received and members of the library team held an initial meeting with interested faculty, the selected strategy was to divide and conquer. For each syllabus, the following workflow was developed:

1. Divide the subject material into broad topic categories.
2. Invite the subject-liaison librarian specializing in the discipline to participate, if the subject was not within the expertise of the one of the library team members.
3. Assign the course topics among the participating librarians.
4. Search for applicable materials individually beginning with a set list of OER resources (See Appendix I), as well as current library holdings and other resources as needed.
5. Combine the individual lists of resources, and extend the process to include general web searches for gaps in requested topic categories.
6. Share the list of suggested resources with faculty either through email or a face-to-face meeting.

Each course followed a general pattern with specifics changing according to the needs of the faculty member:

Table 1: OER Syllabus Workflow

Course	Library Team	Actions/Outcomes
Art	2 OER team members (Copyright and E-Learning Librarians)	<ul style="list-style-type: none"> • Developed list of OER for faculty member's course
ENGL 2010*	4 OER team members	<ul style="list-style-type: none"> • Added to instructor's Canvas course • Located resources • Faculty member left university but continues to collaborate
ASTE 1710	Library subject specialist and 4 OER team members	<ul style="list-style-type: none"> • Located an extensive list of discrete open resources • Met with faculty member and combined library OER with faculty member's list of open resources
PSY 1010*	4 OER team members	<ul style="list-style-type: none"> • Presented to all of the PSY 1010 lecturers and shared resources. • Added as observers to Canvas course • Created a LibGuide with resources listed by topic
PSY 3500*	4 OER team members	<ul style="list-style-type: none"> • Provided a list of resources, including textbooks

		<ul style="list-style-type: none"> Met with faculty member and combined library OER with faculty member's open resources
MGT 2500*	4 OER team members	<ul style="list-style-type: none"> Located resources on course topics, both discrete resources and potential textbooks
NDFS 4550	Library subject specialist and 4 OER team members	<ul style="list-style-type: none"> Provided a list of resources, including textbooks Met with faculty member and combined library OER with faculty member's open resources
FCHD 3210*	4 OER team members	<ul style="list-style-type: none"> Located relevant OER

*The subject liaison librarian for the department was a member of the OER library team.

A benefit of this approach was that the subject librarians were able to use their familiarity with the courses, as well as their subject area expertise, to further evaluate resources. In the case of the Nutrition course, the subject librarian's familiarity with the field added breadth and depth to the initial list of resources provided to the faculty member. For example, she identified professional organizations and historical databases as resources for content, without her knowledge and background in the discipline these assets may have been missed. The divide and conquer approach also allowed for a greater number of resources to be gathered, evaluated, and presented to the faculty. In addition, the OER team gained greater awareness of how best to organize and present these materials. For example, materials were initially organized by type of content (i.e. open textbook, video, etc.). However, the team discovered that faculty preferred being able to look through the extensive lists when they were organized by topic rather than type or form. It also soon became clear that most of the faculty members were not investigating each resource. To better target team efforts and respect faculty members' time, the team further refined its approach, providing only a select group of resources instead of a comprehensive list. This further refinement relied on the expertise of subject librarians. Whether or not they had been involved in the original searching, they used their discipline knowledge to assist in the evaluation of resources for appropriateness of both content and level. Since the implementation of this refined approach, initial observations show that faculty are reviewing and adopting OER materials more quickly.

Lessons Learned:

After working with the original seven faculty members and reviewing potential OER for their courses, the library team developed an anonymous survey to assess faculty members' responses to and uses of OER. Particularly, they wanted to know whether faculty felt the OER provided by librarians were relevant to their syllabi, whether the faculty members thought the OER led to improvements in their courses, and ways librarians could improve the process.

Five faculty completed the survey. In response to the question "Were you provided with useful OER for your course?," 40% responded *yes* or *strong yes* (n=2), 10% responded *somewhat* (n=1), and 40% responded *no* or *strong no* (n=2). For the negative responses, we attempted to glean some additional feedback from the survey question, "How can we improve the process of working with faculty to identify more relevant OER for specific courses?" In response to this question, two faculty members suggested continuing to build collections or lists of OER, noting the interdisciplinary nature of these resources and their rapid evolution demand frequent updates. Another faculty member suggested providing faculty with resources or pathways for accessing OER. One faculty member discovered an issue the librarians had noticed mid-way through the project, suggesting "Maybe just work on one topic at a time. The feedback was a little overwhelming." As noted earlier in the process, the volume of resources provided to faculty became unwieldy and the team has since modified its method.

In response to the question if they incorporated any OER in their class during the Fall semester, 40% responded with *strong yes* or *yes* (response 1 or 2). Considering this was a pilot project, the team perceived this response as positive. When asked which resources participants found most useful, one faculty member noted a preference for free online textbooks, which helped him/her "gather supplemental readings and important information, and allowed me the freedom to 'edit' or shorten sections as needed."

When asked if the OER materials led to increased student engagement, one faculty member responded that "It's hard to say for sure, but I think having access to these sources online may help students transfer more of their writing knowledge to future courses" and another faculty member responded in the affirmative based on observations. For the open-ended question of whether faculty had received any feedback from students about the OER, one faculty member responded "Not yet. Though I'm pretty sure they're all happy about paying less for books." Another faculty member noted he/she will use OER more during the upcoming semester.

Conclusion

As a result of this project and the impressive work being done on other campuses around the United States, the USU library OER team identified a more streamlined process—timed appropriately to avoid conflicts with legally mandated dates for textbook identification—that targets courses with the most potential in terms of OER and that will improve future work with faculty and courses ("Higher Education Opportunity Act of 2008," 2008). The team will continue to seek collaborations with new professors and target those who teach high enrollment courses or courses that require costly textbooks. However, in considering how to transition this pilot project into a more sustainable, long-term library service,

scalability is a concern with libraries continually being asked to do more with less. As such, one area to explore at USU is partnering with the Provost's Office to offer grants to interested faculty in the hopes that more faculty members will begin to replace their expensive textbooks with low-cost or free alternatives. Conversations surrounding working with the Education or Instructional Technology departments on campus to assess OER quality and effectiveness are also ongoing. Ultimately what is needed is more support for librarians' OER-related efforts, and increased interest and involvement from faculty outside of the library will help make the case for this increased support.

While the library continues to evaluate to what extent a project like this can be replicated with other faculty and courses, incorporating OER into syllabi moves forward on its own momentum. As a result of conversations between faculty members, new faculty are reaching out to the library inquiring about the possibilities of OER for their courses and actively seeking the help and expertise of librarians. A panel discussion sponsored by the Provost's Office held in March 2015 featured four faculty members who work with OER and was moderated by a member of the library team. This raised the profile of the project, the idea of OER, and has resulted in additional interest in collaboration with the library.

The rapidly evolving OER movement is an exciting avenue that libraries should continue to investigate in order to integrate their services more widely across campus and reach both students and faculty. At the same time, managing expectations will also be an important consideration. Libraries will have to strategically balance their roles between being a pivotal player in this rewarding aspect of higher education and not over-promising what they can offer, but the return on investment for both students and teachers makes it a worthwhile effort.

Appendix I: Open Educational Resources

Boundless

<https://www.boundless.com/>

Mostly modular textbooks, created by educators focused on higher ed, with wiki-style editing. Includes individual textbook chapter, with links back to Boundless, and also quizzes and downloadable PPT files. Free registration required for some features, funded by venture capital.

Coursera

<https://www.coursera.org>

Mostly fully online and for the most part open courses, with some textbooks available. Not as many textbooks as other sites. Search or browse by general topic area. Courses affiliated with existing universities (some international).

Curriki

<http://www.curriki.org/>

More focused on K-12 resources than other sites but might provide some ideas for lower-division courses. Searchable resource library.

FlatWorld Knowledge

<http://catalog.flatworldknowledge.com/>

Catalog of digital textbooks, available to search or browse. Textbooks can be modified and adapted by instructors. Many low-cost but not free, varied fee-based models.

Hathi Trust

Collaborative project among large group of universities. Out of copyright books and other non-copyrighted library materials. Member institutions have access to additional resources.

Jorum

<http://www.jorum.ac.uk/>

UK repository of OER. Site provides many websites, presentations and other modular OER versus full textbooks. Some resources more specifically focused on UK curriculum but others apply to more broadly.

Merlot

<http://www.merlot.org/merlot/index.htm>

Large collection of resources, with many advanced search features. From advanced search page, choose level of material, topic, and material type. Amount and currency of materials depends on subject.

OER Commons

<http://www.oercommons.org/>

Wide range of materials for K-12, college, and adult education – grade level can be specified. Courses with discussion materials are available as well as individual textbooks, many from the Saylor Foundation.

OpenCourse Library

<http://opencourselibrary.org/>

OER course materials, with some textbooks at a cost, from Washington state community and technical colleges. Course materials for 80+ high enrollment courses.

Open Education Consortium

<http://www.ocwconsortium.org/>

Focuses on OER course materials for higher education. Links with Merlot (above). More international than some of the other OER sites.

Open Learning Initiative

<http://oli.cmu.edu/>

Materials from Carnegie Mellon University. Full access to most resources requires a free instructor account. More course materials than open textbooks.

OpenStax

<http://cnx.org/>

Collection of textbooks and some additional learning resources. Donations requested but not required. Smaller number of full textbooks but high quality, larger amount of discrete learning materials. K-12 through higher education. Search option not always reliable.

Open Textbook Library

<http://open.umn.edu/opentextbooks/>

High quality textbooks from University of Minnesota, authored by academic institutions through the U.S. Growing number of textbooks, most no cost.

Orange Grove: Florida's Digital Repository

<http://florida.theorange grove.org/og/access/hierarchy.do?topic=ALL&page=1>

Strong with both higher education and K-12 resources, browsable and searchable. Many discrete learning modules including interactive resources, with a selection of full textbooks.

Project Gutenberg

http://www.gutenberg.org/wiki/Main_Page

Freely-available out of copyright e-books (not specifically textbooks).

SPARC OER Project List

<http://sparc.arl.org/resource/list-oer-projects-policies>

State by state list of OER, including open textbook projects. Some duplication with the list above.

References

- Allen, & Seaman. (2014). Opening the curriculum: Open educational resources in U.S. higher education, 2014. *Babson Survey Research Group*. Retrieved from , www.onlinelearningsurvey.com/oer.html
- Bell, Steven. (2015). Start a textbook revolution, continued: Librarians lead the way with open educational resources. *Library Issues, 35*(5). Retrieved from <http://www.libraryissues.com/pub/PDF3505May2015.pdf>
- Billings, M.S., Hutton, S.C., Schafer, J., Schweik, C.M., & Sheridan, M. (2012). Open educational resources as learning materials: Prospects and strategies for university libraries. Retrieved from <http://publications.arl.org/rli280/2>
- Butcher, N. (2011). Basic guide to open educational resources. UNESCO and Commonwealth of Learning. Retrieved from <http://www.col.org/PublicationDocuments/Basic-Guide-To-OER.pdf>
- Carson, S. (2009). The unwallled garden: Growth of the opencourseware consortium, 2001-2008. *Open Learning, 24*(1), 23-29.
- Caswell, T., Henson, S., Jensen, M., & Wiley, D. (2008). Open content and open educational resources: Enabling universal education. *The International Review of Research in Open and Distributed Learning, 9*(1). Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/469>
- College textbooks: Students have greater access to textbook information GAO-13-368. (2013, June). United States Government Accountability Office. Retrieved from <http://www.gao.gov/assets/660/655066.pdf>

Florida Virtual Campus. (2012). 2012 Florida student textbook survey. Retrieved from
http://www.openaccesstextbooks.org/pdf/2012_Florida_Student_Textbook_Survey.pdf

Guidelines for open educational resources (OER) in higher education. (2015).
UNESCO and Commonwealth of Learning. Retrieved from
<http://www.unesco.org/open-access/terms-use-ccbysa-en>

Higher Education Opportunity Act of 2008, Pub. L.110-315, 122 Stat. 3078, codified
as amended at 20 U.S.C. §1001. Retrieved from
<http://www.gpo.gov/fdsys/pkg/PLAW-110publ315/pdf/PLAW-110publ315.pdf>

Kazakoff-Lane, C. Environmental Scan and Assessment of OERs, MOOCs and Libraries. 2014-03-20]. [http://www.ala.org/acrl/sites/ala.org.acrl/files/content/publications/whitepapers/Environmental% 20Scan% 20and% 20Assessment. pdf.](http://www.ala.org/acrl/sites/ala.org.acrl/files/content/publications/whitepapers/Environmental%20Scan%20and%20Assessment.pdf)

Lederman, Diane. (2014, April 17). UMass students, library, others want more faculty to take advantage of open source material to save students costs. Retrieved July 10, 2015, from
http://www.masslive.com/news/index.ssf/2014/04/umass_students_library_others.html

Martin, R. A. (2010). Finding free and open access resources: A value-added service for patrons. *Journal of Interlibrary Loan, Document Delivery & Electronic Reserves*, 20(3), 189–200. <http://doi.org/10.1080/1072303X.2010.491022>

Miller, K. E., & Montoya, R. D. (2013). Teaching and learning Los Angeles through engagement with UCLA library special collections. *Urban Library Journal*,

- 19(1). Retrieved from
<http://ojs.gc.cuny.edu/index.php/urbanlibrary/article/view/1425>
- Mitchell, C., & Chu, M. (2014). Open education resources: The new paradigm in academic libraries. *Journal of Library Innovation*, 5(1), 13–29.
- Okamoto, K. (2013). Making higher education more affordable, one course reading at a time: Academic libraries as key advocates for open access textbooks and educational resources. *Public Services Quarterly*, 9(4), 267–283.
<http://doi.org/10.1080/15228959.2013.842397>
- Pitcher, K. (2014). Library publishing of open textbooks: The open SUNY textbooks program. *Against the Grain*, 26(5), 22–24.
- Thoms, J. J., & Thoms, B. L. (2014). Open educational resources in the United States: Insights from university foreign language directors. *System*, 45, 138-146.
- Senack, E. (2014). Fixing the broken textbook market: How students respond to high textbook costs and demand alternatives. U.S. PIRG Education Fund & The Student PIRGs. Retrieved from
<http://uspirg.org/sites/pirg/files/reports/NATIONAL%20Fixing%20Broken%20Textbooks%20Report1.pdf>
- Sutton, S. C., & Chadwell, F. A. (2014). Open Textbooks at Oregon State University: A Case Study of New Opportunities for Academic Libraries and University Presses. *Journal of Librarianship and Scholarly Communication*, 2(4), 4.
- Toven-Lindsey, B., Rhoads, R. A., & Lozano, J. B. (2015). Virtually unlimited classrooms: Pedagogical practices in massive open online courses. *Internet & Higher Education*, 24, 1–12. <http://doi.org/10.1016/j.iheduc.2014.07.001>

Yuan, L., MacNiell, S., & Krann, W. (n.d.). Open educational resources – Opportunities and challenges for higher education. JISC CETIS. Retrieved from http://muele.mak.ac.ug/file.php/1/Student_Reading_Resource/oer_briefing_paper.pdf