Annotated Bibliography

Open Educational Resources: An Annotated Bibliography for Librarians

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Introduction

Open educational resources (OER), now in their 15th year of existence, consists of, in principle, fully open educational content, available for free to all and are adaptable to serve the needs of the user. They were created as a response to the high cost of textbooks and as a means of leveling the playing field in terms of ensuring equal access to education for disadvantaged populations. The selected resources below attest to the fact that a concerted effort is well underway to address and overcome these challenges. Institutions are increasingly investing in OER as research has demonstrated that they have a positive role to play in student learning. Libraries, already champions of copyright and open access initiatives, have the expertise to advocate for and collaborate on efforts to further the growth and impact of open educational resources both within their institutions and beyond.

OER and The Role of Libraries

Allen, N., Bell, S.J., & Billings, M.S. (2016, November). Momentum building: Progress towards a national OER movement. *Against the Grain, 28*(5), 14-16. Retrieved from http://scholarworks.umass.edu/librarian_pubs/66/

The authors build on the arguments that they first posed in an earlier (November 2014) issue in which the case was made for academic libraries to adopt the use of open educational resources as a means of fighting the high cost of commercially published textbooks. They document the inroads that academic libraries have made in the intervening years and proclaim that recent successes in growing the OER movement are attributable to academic libraries' abilities to create key partnerships in academia, starting with faculty and extending to instructional designers, administrators, and even the campus bookstore. The authors also share their formula for librarians to develop a leadership role in the advancement of OER as there is "still much to accomplish in establishing a true culture of openness in education."

Borchard, L., & Magnuson, L. (2017). Library leadership in open educational resource adoption and affordable learning initiatives. *Urban Library Journal, 23*(1), 1-13. Retrieved from http://academicworks.cuny.edu/ulj/vol23/iss1/1

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This article reports on the findings from a May 2016 survey conducted at California State University Northridge to gauge the impact of textbook costs on student purchasing behavior. In common with similar surveys "students noted frustration with both the high cost of materials and the tendency for faculty not to use all of the content from the required course materials in class." The authors also developed a faculty outreach strategy, informing them of the key issues related to textbook affordability and that courses could be made more cost effective for their students. Subject liaison librarians are called upon to strengthen their existing engagement with faculty by working collaboratively with them to "embed OER or library-licensed material in the curriculum" but it is also acknowledged that this can difficult task as it requires enormous time commitments as well as buy-in from faculty departments, library administration, and the university administration.

Corrall, S. (2015). The open movement: What libraries can do. *Proceedings of the Charleston Library Conference.* http://dx.doi.org/10.5703/1288284316319

Corrall presents an overview of the evolving open movement where the current focus is on three basic types of open: open content, open infrastructure and open processes, all of which are operating separately in discipline-specific domains of activity and at different stages of development and maturity. There is a perceived lack of adequate collaboration and coordination amongst the creators of open initiatives, without which the open movement cannot reach its full potential. Libraries are well-suited to overcoming these barriers and they have an important role to play in advancing open initiatives. Nine potential roles for libraries are offered, assisting in cooperative and collaborative efforts "beyond atomistic policies and strategies toward the design and delivery of holistic integrated institution-wide endeavors to advance the open agenda."

Jensen, K., & West, Q. (2015, April). Open educational resources and the higher education environment: A leadership opportunity for libraries. *College & Research Libraries News, 76*(4), 215-218. Retrieved from http://crln.acrl.org/index.php/crlnews/article/view/9298/10383

Jensen and West share their respective views on opportunities for open educational resources development from the perspective of community college libraries and large research university libraries. West sees a parallel between community college institutional missions based on equal access and the open educational movement's commitment to sharing resources for the betterment of society. West also provides practical advice on how libraries can become leaders within OER. Jensen believes that academic libraries should build upon their recent successes championing open access initiatives and apply the same energies to promote the adoption of OER by targeting university faculty and administration. Jensen presents a number of recent OER projects that have been launched by libraries on American campuses.

Petrides, L., Goger, L, and Jimes, C. (2016). The role of "open" in strategic library planning. *Education Policy Analysis Archives, 24*(36), 1-13. http://dx.doi.org/10.14507/epaa.24.2478

The authors perceive a sizeable gap between the evolving availability of open access and open educational resources and the library's inability to disseminate this digital content to faculty and

other researchers, who consequently underutilize it. This missed opportunity should be considered a priority for key stakeholders in academic libraries, including administrators, collection development librarians, and instructional and scholarly communications librarians. Together, they should work at instituting "policies and practices that mainstream the curation and organization of open resources into core library collection development workflows." This would include integrating open collections into the library catalog, raising faculty awareness of their existence by easing retrievability.

Walz, A. (2017). A library viewpoint: Exploring open educational practices. In: R.S. Jhangiani & R. Biswas-Diener (Eds.), *Open: The philosophy and practices that are revolutionizing education and science* (pp. 147–162). https://dx.doi.org/10.5334/bbc.l

Walz serves as the Open Education, Copyright and Scholarly Communications librarian at Virginia Polytechnic Institute and State University. In this chapter, Walz shares her personal experiences, successes and failures, as she encounters the realities and reasons behind faculty indifference and resistance towards the adoption of open educational teaching resources at her institution. In spite of the many challenges in making college courses less costly and more open, there are ample opportunities for librarians to increase awareness and take a leadership role in "building collaborative relationships with faculty, instructional designers, academic support personnel, concerned students, and administrators." Walz reports on a student survey conducted to better understand how much impact the cost of learning materials in higher education had on their buying behaviors and discovered that they were highly price sensitive. The author also sees promise in her faculty's embrace of open pedagogical practices, improving the quality of teaching and learning in the process.

Walz, A., Jensen, K., & Salem, J. A. Jr. (2016, July). *SPEC kit 351: Affordable course content and open educational resources*. Retrieved from Association of Research Libraries website: http://publications.arl.org/Affordable-Course-Content-Open-Educational-Resources-SPEC-Kit-351/

The authors report on March 2016 survey of Association of Research Libraries (ARL) member institutions to determine their respective degrees of engagement with affordable course content (ACC) and open educational resources (OER). Their study collected information on existing and proposed institutional ACC/OER initiatives and the role of the library in these initiatives. Of the 65 responding institutions, fifty-eight (89%) had either established services and support for ACC/OER or were in the early to late planning stages of offering services and support. Libraries' involvement in implementing initiatives was also revealed to be gaining momentum, and they have a vital role to play and are "uniquely poised to act as leaders, connectors, and content experts on their campuses to further a significant culture change related to course content selection and use." Included in the Spec Kit are links to library and institutional ACC/OER webpages, incentive programs, and resources.

K-12 and Higher Education Studies on OER

Hilton, J. (2016). Open educational resources and college textbook choices: A review of research on efficacy and perceptions. *Educational Technology Research and Development 64*(4), 573-590. https://dx.doi.org/10.1007/s11423-016-9434-9

Hilton examines, critiques and synthesizes the results of 16 studies of OER use in higher education that were published prior to October 2015. Nine of the studies measured student-learning outcomes when open educational resources were used in place of commercial textbooks. Hilton's analysis of these studies revealed that the use of OER does not indicate a decrease in student learning and similar outcomes can be expected, regardless of the provenance of the content. A significant benefit of using OER is the financial savings for students, when the high cost of commercially produced textbooks is factored in. Seven other studies analyzed teacher and student perceptions of OER. The author's synthesis of these studies indicates that both student and faculty perceptions of OER are positive. Hilton cautions that these conclusions were drawn from studies whose research methodologies were not consistently rigorous and provides useful strategies for future studies to consider and overcome these limitations. (Note: This is an ongoing critical review of the literature. Recently added studies are reviewed at the following website: http://openedgroup.org/review)

de los Arcos, B., Farrow, R.., Pitt, R., Weller, M., & McAndrew, P. (2016). Adapting the curriculum: How k-12 teachers perceive the role of open educational resources. *Journal of Online Learning Research, 2*(1), 23–40. Retrieved from http://www.learntechlib.org/p/151664

This quantitative study attempts to fill in a gap in the literature by investigating how K-12 educators perceive open educational resources and use them in their teaching practices, whether these be face-to-face, online or blended environments. In a survey of over 600 teachers, data was analyzed from their responses to a series of attitudinal and behavioral questions "in relation to how they use OER, what types of OER they use and what influences their selection of content, in addition to the purpose, challenges and perceived impact of OER in the K-12 classroom." One of msuit their particular classroom environments, rather than adopting it as is. Teachers who adapted OER were able to effectively reach out to diverse learners, contributing to a more personalised learning environment.

Kaufman, J.H., Davis, J.S. II, Wang, E. L. Thompson, L. E. Pane, J. D., Pfrommer, K., & Harris, M. (2017). *Use of open educational resources in an era of common standards: A case study on the use of EngageNY* (Research Report RR-1773-BMGF). http://dx.doi.org/10.7249/RR1773

The authors conducted a case study of the impact and influence of EngageNY, a website that has pioneered the production and dissemination of freely open educational resources for the K-12 sector in the United States. Developed by the New York State Education Department and launched in 2011, EngageNY provides links to full sets of coherent, standards based open educational curriculum materials. The report focuses solely on EngageNY's English language arts and mathematics resources. Various analytical tools employed in the study revealed that

EngageNY was heavily used in New York State and that its use had spread across the United States. Preconditions for future growth of OER come with certain conditions, namely if "online materials are provided in progressions that are well-aligned with state standards progressions, teachers may be more apt to use those materials on an ongoing basis for their instruction, and districts could be more apt to recommend and require use of those materials."

Selected OER Websites

Abeywardena, I. (2016, March 8). *Five tips for using OER like a pro.* Retrieved from
        Commonwealth of Learning website: http://www.col.org/news/col-blog/five-tips-using-
        oer-pro

Abeywardena, an advisor on open educational resources at Commonwealth of Learning, provides thoughtful and practical suggestions for individuals and institutions who are exploring the potential of using OER in teaching and learning contexts.

BCcampus. *BCcampus OpenEd*. (n.d.). Retrieved from https://open.bccampus.ca/

BCcampus OpenEd is charged with supporting and advancing open educational practices. British Columbia was the first province in Canada to implement an open education initiative. In October 2012, BCcampus became responsible for the creation of the B.C. Open Textbook Project, which now includes a repository of open licensed textbooks for use in post-secondary education across the province. In 2016, BCcampus launched the Canada OER Group, fostering the development of creative partnerships on a national level. The website features ongoing and completed OER projects, and links to their workshops for faculty and librarians on open pedagogy practices, including the adoption and adaption of OER materials.

Creative Commons librarian certificate. (n.d.). Retrieved from
        https://certificates.creativecommons.org/lib/

The goal of the Creative Commons librarian certificate is to provide librarians with the skillset needed to support Creative Commons initiatives associated with the open movement at their respective institutions. The training required includes an online component consisting of six modules that are broken down into 25-30 accompanying learning units. After completing this stage, two days of on site face-to-face training are scheduled. The candidate must submit ample evidence that learning objectives have been met. Upon positive assessment of the evidence, the successful candidate is awarded a Creative Commons certificate.

List of North American OER Policies & Projects. (2017). Retrieved from
        https://sparcopen.org/our-work/list-of-oer-policies-projects/

Hosted by the Scholarly Publishing and Academic Resources Coalition, this resource of recent institutional, corporate, organizational, state and provincial governmental open educational resources policies and projects in the United States and Canada includes significant contributions from academic libraries.

OER Commons. (2017). *School librarians advancing STEM learning*. Retrieved from
https://www.oercommons.org/hubs/imls

The aim of this three-year project, launched in November 2014 by the Institute for the Study of
Knowledge Management in Education (ISKME), is to bring together teachers and school
librarians to develop and curate ISKME's OER Commons library of freely available resources
for science, technology, engineering, and math (STEM) teaching and learning. The website
provides guidelines for teaching STEM related content that are aligned with Common Core
Standards, and lists the collections of standards based lesson plans and primary sources that have
been developed for use in K-12 classrooms.

Open textbook library. (n.d.). Retrieved from Center for Open Education, University of
Minnesota website: http://open.umn.edu/opentextbooks/

The Open Textbook Library was launched at the University of Minnesota in April 2012, the
result of a collaboration between the Center for Open Education and the University of Minnesota
Libraries. It was developed as an easy-to-use tool to assist faculty in locating quality open
educational textbooks. The Open Textbook Library now features hundreds of peer reviewed,
introductory level textbooks in all major subject fields that are appropriate for college and
university classrooms. These collections are licensed to be freely used, adapted and distributed.
All titles are either used at multiple higher education institutions or associated with an institution,
scholarly society, or professional organization.

University of Massachusetts Amherst Library. (2017). *UMass library open education initiative*.
Retrieved from https://www.library.umass.edu/services/teaching-and-learning/oer/open-education-initiative/

Inaugurated in April 2011, the UMass Library Open Education Initiative is a faculty incentive
program that provides an early example of academic libraries successfully supporting faculty to
adopt, adapt, or create open educational resources in higher education. Developed in response to
the soaring price of college textbooks, the Open Education Initiative, as of 2017, has resulted in
students' savings of over $1.6 million for students in classes that have used open educational
resources combined with freely available library material.