

Improving Online Instruction through Collaborative Information Literacy and Open Educational
Resources in Community Colleges

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Abstract

The purpose of this paper is to provide recommendations for increasing the use, revision, and development of open educational resources (OER) through closer collaborative partnerships with community college librarians to increase information literacy instruction. OER are defined as educational materials that are licensed to use freely which include learning objects such as videos, digital textbooks, learning modules, and lessons. Collaborative instruction efforts and the integration of OER can lessen financial burdens, enhance traditional curriculums, and help students' transition to effective online learners.

Keywords: open educational resources, academically underprepared students, online education, distance learning, community college, academic librarian, information literacy

Improving Online Instruction through Collaborative Information Literacy Instruction and Open Educational Resources in Community Colleges

Open educational resources are defined as “teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use or re-purposing by others” (Atkins et al., 2007, p. 4). These include learning objects such as digital textbooks, videos, modules, and complete lessons. These educational materials designed by educators worldwide are designed and licensed to be shared, reused, revised, and integrated into new or existing curriculums to enhance and support student learning.

The use of open educational resources is gaining national attention as the federal government even increases support. According to a blog post from the White House website, “the U.S. government will continue efforts to expand and accelerate the use and availability of openly licensed educational materials worldwide” (Culatta et al., 2015, para. 5). According to the 2014 results from the Instructional Technology Council’s (ITC) distance education survey, 46% of the 136 respondents reported they “anticipate a significant impact” of open educational resources in the next three years at their community colleges which is up from 36% reported in 2012 (Lokken & Mullins, 2015, p. 25). These resources allow faculty, instructional designers, and librarians, to share and continually improve on freely available educational resources to better match their unique curriculums and to serve their individual students’ needs without requiring multiple expensive textbooks.

The integration of open educational resources with close collaboration of community college librarians benefits underprepared students in online courses by addressing and building the necessary information literacy skills for these students to succeed. Without an understanding

of open educational resources and collaborative instruction, practitioners are limited by time and financial constraints in their ability to provide comprehensive information literacy instruction.

This paper begins by providing context that outlines the financial burdens of traditional textbooks on students and the need for information literacy instruction. Next, a review of current literature focuses on collaborative instruction, issues surrounding online learning in community colleges, and current OER efforts of community colleges. This paper concludes with recommendations for future study and resources for instructors who wish to begin utilizing OER in their courses.

Context

Burdens of Traditional Textbooks

The lower costs of utilizing technology and open educational resources allow colleges to significantly decrease the ever-rising costs of textbooks that are traditionally bought from big publishing companies. Henry Farrell (2015) writes that one reason publishers are able to charge such increasingly high rates for traditional textbooks is due to the simple fact that students have no choice in purchasing them with little choice as to where they make their purchases. With new editions constantly being sold and updated, multiple textbooks being required per course, and instructors who may be unwilling to change core textbooks, the financial burden falls heavily to the students. While open educational resources won't necessarily push out these large textbook publishers, as many are more focused on introductory courses (Lerner, 2015, para. 36), they are a growing and viable option for community colleges.

According to a 2014 report from the United States Public Interest Research Group (U.S. PIRG), the unbearable costs of textbooks “deter students from purchasing their assigned materials despite concern for their grades” with 65% of the 2,039 students surveyed reporting

that they didn't buy a required textbook due to the expense (Senack, p. 4). Not only are these students compromising their grades by not purchasing these required materials, but they also put their future academic careers at risk. The inability to purchase needed learning supplies may cause the students to miss key information that automatically puts them at a greater disadvantage moving forward in future courses, if they are even able to continue.

The average estimated costs just for books and supplies at a public two-year institution for an in-district commuter was reported to be \$1,364 for the 2015-2016 academic year (Ma & Baum, 2015, p. 11). The rising tuition costs along with the high costs of needing specific required textbooks for multiple courses can be prohibitive for many students, especially for those from low socioeconomic backgrounds. Freely available open educational resources could then possibly help to improve course completion rates across community college campuses as the financial burden is lessened and students have access to all necessary learning materials.

A case study from Houston Community College in Texas reports the adoption of an open psychology textbook (Hilton & Laman, 2012) where the cost of textbooks was reported as a key factor in the decision. Students were not buying textbooks, using outdated editions, or taking reduced course loads, which were all affecting college completion rates (p. 266). A pilot study of seven full-time faculty instructors and 690 students resulted in "better overall outcomes than those who used traditional textbooks in the spring of 2011" (p. 268). Grade point averages and final test scores were reported as improving over 10% with the withdrawal rates lowering by 25% (p. 269). Another study comparing 5,000 post-secondary students who were using an open educational resources treatment to 11,000 students who were using traditional commercial textbooks across ten institutions found that course completion, final course grade of C- or higher, and course grade overall were improved with the OER materials (Fischer et. al, 2015). In

addition, the OER students were enrolled in a greater number of credits in subsequent semesters. This may be due to the increased cost savings of the free textbooks, which could then be put directly towards more tuition costs (p. 169). The immediate access to all course materials from the very beginning of the course was again noted as a significant factor in the improved scores with OER students. Students are able to access their course materials from any computer or mobile device, on- or off-campus. Digital textbooks can't be lost or forgotten. Similar to the open psychology textbook, authors or instructors are able to link videos or other instructional activities directly within an open online textbook for easy student reference. The accessibility and ease of use of open resources, such as the digital textbooks, is crucial to the success of integrating open educational resources.

Information Literacy Instruction

The Association of College and Research Libraries (ACRL), a division of the American Library Association, defines information literacy as “the set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning” (2015, p. 3). This framework published in February 2015 provides core concepts for college students, at both community colleges and four-year universities, which extend learning outside the traditional curriculum to build the skills that students need to be successful in their coursework and as 21st-century learners.

Due to the prevalent and diverse technology formats, students may assume that they have the necessary information literacy or research skills to succeed in an academic environment and instructors may assume that these incoming students have already learned research strategies before enrolling (Jenson, 2004, p. 8). The ACRL Framework gives librarians and instructors a

common language when discussing the information-seeking or learning needs of students. It allows library instructors to create clear objectives and goals with which to measure where students should be and where they are in their abilities.

According to Silverman and Williams (2014), community college libraries present unique challenges and opportunities for collaborative information literacy instruction due to staffing, budget, and workload demands. Embedding a librarian into an online course through the course management system allows librarians to connect with students online and the ability to be “built-in” to research specific assignments (p. 247). Results from these embedded librarian models “are encouraging, showing notable leaps in student learning and faculty satisfaction” (p. 248). Librarians are able to work more closely with instructors to collaborate on various assignments by using these concepts and guidelines, rather than assumptions of students’ incoming skill levels. With the clear objectives, librarians can find or design open educational resources to address specific desired skills, such as evaluating a website, that makes the task more relevant to the coursework and to provide a foundation for academic growth that can continue through to future courses.

According to Perin (2013), community college students who come in underprepared academically benefit from a contextualization approach to instruction, stating “if students know why they are learning a skill, and that the skill will be personally useful to them for a specific purpose, they may be motivated to learn and practice it” (p. 95). Information literacy or library instruction by itself may not stick with students long-term, but framing the research strategies and skills as relevant to their assignments builds on that motivation to continue developing. For community college librarians, certain knowledge practices/dispositions from the Framework are more easily accessible and relevant for students (Leeder Reed, 2015, p. 246). In particular, the

“Searching is Strategic” and “Research as Inquiry” frames can be taught as students learn new ways to search for information, evaluate resources, and develop their research questions throughout various courses. For example, understanding how to locate research articles remains a key skill for a good grade whether the assignment is in an English or History course.

According to Stiwinter (2013) who designed a research skills tutorial in collaboration with English 101 faculty at Spartanburg Community College, interactivity of online resources is central for student engagement and gaining the most benefit of improvement in learning. The author notes that with this online learning module, “librarians were able to reach all English 101 students” which wouldn’t have been possible with a traditional approach and the students all showed improvement in basic research abilities. Building stronger faculty-librarian partnerships across campus and utilizing open educational resources, information literacy instruction can be integrated into online courses where students are able to practice in a relevant setting without an excessive burden on the instructor to cover additional material.

Recommendations

When asked about anticipated roadblocks for adopting open educational resources, ITC respondents replied a lack faculty awareness, the time needed to find and evaluate open educational resources, credibility of sources, lack of ancillary materials, and resistance from administrators (Lokken & Mullins, 2015, p. 25). Many trustworthy repositories exist which help overcome these roadblocks. The following resources are four examples of reputable resources of information. They contain peer-reviewed resources that help maintain the desired level of quality and credibility of individual institutions. Community college educators should refer to them for guidance and support as they explore their own OER initiatives.

1. ACRL Primo (primodb.org): The Peer-Reviewed Instructional Materials Online (PRIMO) Database contains peer-reviewed instructional materials designed by academic librarians. Learning objects include descriptions of content, the original authors, technology used to create the objects, and intended audience. An ACRL committee reviews these high-quality resources before being added into the database. Descriptions often elaborate on why this resource was created and how the author originally used it. This helps other educators gain a better understanding of how to incorporate these objects into their own assignments or curriculum.
2. WISC-Online OER (wisc-online.com): A collaborative digital library created by faculty members and multimedia developers of the Wisconsin Technical System includes games, activities, and other learning objects that cover a wide variety of subject areas.
3. MERLOT (merlot.org): This database contains over 40,000 peer-reviewed learning objects divided into twenty material types (quiz, assessment, tutorial, etc.). Submissions are evaluated on quality of content, effectiveness as a potential teaching tool, and ease of use. Awards are presented to recognize outstanding tools each year.
4. CCCOER (oerconsortium.org): The Community College Consortium for Open Educational Resources is a fantastic resource for community college educators and administrators. CCCOER contains a wealth of marketing resources to raise awareness of open educational resources on campuses to encourage their use in addition to open textbook and other online learning resources available. Webinars, case studies, and professional development tools are available to help educators learn how to effectively find and use these digital tools in their classrooms.

The role of pedagogy in utilizing open educational resources will continue to be an important topic of study as community colleges seek to maintain a quality education for students and a loyalty to their institution's mission and identity. Jeremy Knox (2013) warns against the promotion of open educational resources as an all-encompassing e-learning solution or "the idea of an 'OER ecosystem'" (p. 824). He describes this model as learning which takes place completely independent of an institution where students would rely solely on these digital resources for their curriculum causing a great imbalance between "the range and quality of the guidance and support" and would "diminish the responsibilities of the teacher" (p. 825) when compared to traditional education models.

A strategic approach to the design and integration of OER and collaborative partnerships must be taken. Gathering resources takes time and effort to assess whether or not they match the course objectives or goals. Partnering with librarians can alleviate some of this as the work is shared and librarians are able to make recommendations, especially regarding the integration of information literacy learning tools that also fit well within the course. Staff development and training opportunities should be established as well as policies to promote open accessibility of learning resources in online courses. While most open educational resources are licensed under Creative Commons licenses, an understanding and continued discussions about the proper use and reuse of digital materials are absolutely necessary (Nikoi et al., 2011, p. 200). With policies in place and a greater encouragement for instructors to embrace the use of OER, institutions can move forward and develop truly effective learning materials.

Conclusion

Open educational resources initiatives are worth pursuing. The financial benefits to the students have the potential to increase retention and completion rates. Tracking and assessment

on these rates should be studied in future research, but already case studies are showing strongly positive responses from students. Furthermore, collaborative opportunities with academic librarians can lessen the burden of individual instructors to find and more effectively integrate high-quality digital learning resources while enhancing courses with information literacy instruction that students may continually strengthen throughout their academic careers.

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