

# OER: The Future of Education Is Open

Last March, activists in the Open Educational Resources (OER) movement and representatives of the publishing industry debated with each other at the 2017 SXSW EDU Conference and Festival. When the dust settled, the two sides agreed on two things: (1) the textbook publishing market is “broken,” and (2) the future of courseware will be increasingly digital.

OER are “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 and repurposing by others. OER include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge.”<sup>1</sup> The OER movement is rooted in MIT’s OpenCourseWare project. There are now dozens of repositories that share textbooks, digital resources, and teaching materials. The movement continues to strengthen and gain acceptance. Despite the glut of information supply, textbook publishers continue to increase prices at unsustainable rates.

## Need

According to a study published by the General Accountability Office in 2013, textbook costs rose 82 percent between 2002 and 2012—despite the fact that the overall rate of inflation, represented by the Consumer Price Index, rose only approximately 28 percent during the same time period.<sup>2</sup> The rapid increase in textbook costs has resulted in students increasingly pirating course content, selecting classes and majors based on textbook costs, and sharing their textbooks with friends and classmates.<sup>3</sup>

Over 22,000 students attending Florida public colleges and universities were surveyed on how the cost of textbooks is impacting access to required materials and achievement. Over 66 percent of students reported not purchasing a required textbook due to the high cost, with 38 percent receiving a poor grade and 20 percent failing a course without the required text.<sup>4</sup> Even when students purchase the text, they may not use

the text to its full extent, choosing not to take notes or highlight in the book so that they can recoup a percentage of their money by selling it back to the bookstore.

## Awareness and Motivation

Awareness of OER as an alternative to expensive textbooks has grown significantly in recent years. In mid-July 2016, the Babson Survey Research Group reported that faculty awareness was 25 percent, a 20 percent increase from the previous year’s survey.<sup>5</sup>

Cost savings for students are often cited as the major motivator for faculty to adopt open textbooks in the classroom and are what students tell faculty they most appreciate about open textbooks, according to a recent study of 51 higher education faculty in California. The quality of the content, the ability to repurpose or adapt it, and accessibility for students both financially and through availability of multiple formats (e.g., print, PDF, web) were also mentioned as key motivators.<sup>6</sup> In an international study, faculty and librarians from K-12 schools, community colleges, and colleges/universities reported using OER to get new ideas and inspiration for their teaching nearly twice as often as they used OER in their classrooms. Half of the respondents indicated that staying up-to-date in their subject area and broadening the resources available to students were other significant motivators for using OER.<sup>7</sup>

Academic freedom or choice has also been identified as a motivator. Sue Tashjian, instructional designer at Northern Essex Community College and co-chair of the Massachusetts Community Colleges Go Open Statewide Initiative, states: “One of the most exciting things I’ve experienced in supporting faculty with OER adoption is freedom! Faculty are no longer designing courses based on a commercial textbook, by which the publisher dictates how the course is delivered. OER gives faculty the flexibility to bring in current and relevant course materials—enabling them to create and/or adapt the content to match learners’ needs and their teaching style.”<sup>8</sup>



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## Research/Impact

While there is not a great deal of research in regard to student success as new textbooks are adopted, there has been a focus on student success when OER are adopted. Studies have demonstrated that no harm has occurred as a result of the use of OER and that students are performing at least as well as they did with the traditional materials. They have also shown increased student retention and student success using OER.<sup>9</sup> However, one would think if over 50 percent of students who never purchase the text now have access to materials, wouldn't the success rates with early and continued access to materials be higher? John Gibson, a Glendale Community College faculty member who uses OER, has shared that through the use of course analytics, he has found that students are not accessing the materials as he would like in the electronic format.<sup>10</sup> This could lead one to question how students are using electronic course materials and to work toward the development of best practices to share with students for the use of these materials.

John Hilton III has stated: "Because students and faculty members generally find that OER are comparable in quality to traditional learning resources, and that the use of OER does not appear to negatively influence student learning, one must question the value of traditional textbooks. If the average college student spends approximately \$1000 per year on textbooks and yet performs scholastically no better than the student who utilizes free OER, what exactly is being purchased with that \$1000?"<sup>11</sup>

## Future Directions

Tidewater Community College was the first to develop a degree in which an entire associate's degree pathway, called a Z-Degree, can be achieved by taking courses using OER. The college has shared that students are using their cost savings for a number of things, including taking more courses.<sup>12</sup> OER degrees emerged nationally last year at 38 community colleges in 13 states with the launch of the OER Degree Initiative by Achieving the Dream (ATD), the community college reform network. Contributing to further transformation of teaching and learning at the nation's community colleges, Dr. Karen A. Stout, president and CEO of ATD, added: "Extensive use of OER will enable students to have access to more dynamic learning tools and a richer academic experience at a cost that will help more students complete their studies."<sup>13</sup>

The Community College Consortium for Open Educational Resources (CCCOER), with members in 24 U.S. states and Canadian provinces, was founded ten years ago to expand awareness and adoption of OER to enhance teaching and learning. The consortium's diverse membership cites many factors contributing to the growth of open educational practices and resources. Quill West, open education project manager at Pierce College District (Washington) and CCCOER president, states: "Recognizing that every college is going to approach open education in their own way, we help members to advocate for and grow OER adoption through sharing their experiences, tools, and future plans for spreading OER across their institutions. What we do at

my college might be vastly different than what works at any other member institution, but by sharing what works and discussing challenges, we enrich the overall community. CCCOER also partners with other advocacy and support organizations such as Achieving the Dream and Lumen Learning to grow the wisdom and proven practices for to-scale adoption of open education."<sup>14</sup>

## Conclusion

Though still in its infancy, the OER movement continues to have a significant impact on students, faculty, and the way teaching is occurring. OER can overcome barriers to students' access to course materials while also reducing the cost of higher education and providing opportunities for faculty to customize materials to their curriculum and to students' needs, potentially increasing student success. ■

## Notes

1. "OER Defined," Open Educational Resources, William and Flora Hewlett Foundation website, accessed June 13, 2017.
2. U. S. Government Accountability Office, "College Textbooks: Student Have Greater Access to Textbook Information" (GAO-13-368), June 6, 2013, p. 6.
3. Max Denning, "Students Resort to Illegal Means for Acquiring Expensive Textbooks," *The Ithacan*, October 1, 2014; Allie Bidwell, "Report: High Textbook Prices Have College Students Struggling," *U.S. News & World Report*, January 28, 2014; Leila Meyer, "Report: Students Shun New Textbooks to Reduce Education Expenses," *Campus Technology*, August 24, 2016.
4. Florida Virtual Campus, Office of Distance Learning and Student Services, "2016 Student Textbook and Course Materials Survey: Results and Findings," October 7, 2016, p. 5.
5. I. Elaine Allen and Jeff Seaman, "Opening the Textbook: Educational Resources in U.S. Higher Education, 2015–16," Babson Survey Research Group, July 2016.
6. Ozgur Ozdemir and Christina Hendricks, "Instructor and Student Experiences with Open Textbooks, from the California Open Online Library for Education," *Journal of Computing in Higher Education* 29, no. 1 (April 2017).
7. Martin Weller et al., "What Can OER Do for Me? Evaluating the Claims for OER," in Rajiv S. Jhangiani and Robert Biswas-Diener, eds., *Open: The Philosophy and Practices That Are Revolutionizing Education and Science* (London: Ubiquity Press, 2017).
8. Sue Tashjian, personal communication with Una T. Daly, May 26, 2017.
9. John Hilton III, "The Review Project," Open Education Group, accessed June 13, 2017; Ozdemir and Hendricks, "Instructor and Student Experiences with Open Textbooks."
10. John Gibson, personal communication with Lisa C. Young, April 10, 2017.
11. John Hilton III, "Open Educational Resources and College Textbook Choices: A Review of Research on Efficacy and Perceptions," *Educational Technology Research and Development* 64, no. 4 (August 2016).
12. David Wiley, Linda Williams, Daniel DeMarte, and John Hilton, "The Tidewater Z-Degree and the INTRO Model for Sustaining OER Adoption," *Education Policy Analysis Archives* 23, no. 41 (March 2016).
13. Stout quoted in Achieving the Dream, "Achieving the Dream Launches Major National Initiative," press release, June 14, 2016.
14. Quill West, personal communication with Una T. Daly, June 1, 2017.

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