Open Books, Open Minds

Open educational resources (OER)—freely licensed, remixed learning materials, from single lessons to full textbooks—lower the overall cost of attaining college, improve student retention and success, and result in more equitable outcomes. When educators offer all students in a class free materials on day one, they can help level the academic playing field. Research shows that in certain contexts in which educators provide OER, student performance gaps shrink and withdraw rates decline. More than 3,000 faculty across the United States have signed an open textbook statement of support sponsored by Student Public Interest Research Groups (Student PIRGs), pledging to consider in choosing course materials and to promote the use of high-quality open textbooks. But more faculty can take advantage of OER as they seek to bolster their student success efforts. Effective OER can help students earn their degrees.

OER Can Help Students Earn Their Degrees

Community college students who enrolled in sections of introductory courses that used OER had higher retention rates (by 14 percentage points) than students in non-OER sections, according to a 2021 study published in Educational Researcher. The study defined retention as students who remained in the course past the tuition drop date. Students who took courses with OER were more likely than peers in the previous semester without OER to earn grades of A (5.5% increase), A- (7.7% increase), and B+ (11% increase), according to a 2018 study in the International Journal of Teaching and Learning in Higher Education, for which Nicholas B. Colvard, C. Edward Watson, and Hyacin Park examined six years of data on UGA instructors who switched from paid materials to OpenStax textbooks. The courses also saw decreases in students earning grades of B or lower. The positive effects of OER usage were particularly visible in end-of-course grades when students were in classes at the lower end of their income bracket (using Pell-grant eligibility), part-time enrollment, and race.

48% of students believed they would do “significantly better” on schoolwork if course texts were freely available online. (Student PIRGs)

Textbook Costs Are Soaring, and That Hurts Student Learning

Students Save Money with OER

as of August 2020, amount Rice University estimates its Open- Star (IUN) has invested since 2012. OpenStax has published 42 OER titles in math, business, and the humanities, sciences, and social sciences. 36,000 instructors and 14 million students around the world use these resources.

amount the University System of Georgia (USG)’s textbook affordability programs saved students in textbook costs between 2014 and 2020. About 23% of all course sections across USG have used low-cost or no-cost materials as of August 2020. The positive effects of OER usage were particularly visible in end-of-course grades when students were in classes at the lower end of their income bracket (using Pell-grant eligibility), part-time enrollment, and race.

Final Grades before and after OER Use

<table>
<thead>
<tr>
<th></th>
<th>Average Grade</th>
<th>OER</th>
<th>Non-OER</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
</tr>
<tr>
<td>A</td>
<td>3.75</td>
<td>3.75</td>
<td>3.75</td>
</tr>
<tr>
<td>A-</td>
<td>3.33</td>
<td>3.33</td>
<td>3.33</td>
</tr>
<tr>
<td>B+</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>B</td>
<td>2.75</td>
<td>2.75</td>
<td>2.75</td>
</tr>
<tr>
<td>B-</td>
<td>2.50</td>
<td>2.50</td>
<td>2.50</td>
</tr>
<tr>
<td>C+</td>
<td>2.25</td>
<td>2.25</td>
<td>2.25</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td>C-</td>
<td>1.75</td>
<td>1.75</td>
<td>1.75</td>
</tr>
<tr>
<td>D+</td>
<td>1.50</td>
<td>1.50</td>
<td>1.50</td>
</tr>
<tr>
<td>D</td>
<td>1.25</td>
<td>1.25</td>
<td>1.25</td>
</tr>
<tr>
<td>D-</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

amount students saved thanks to USG’s Affordable Learning Georgia (ALG) initiative, which gives grants to faculty to adopt or create OER, many of them peer reviewed and published by the University of North Georgia Press. As of 2020, ALG grant initiatives had been implemented at all 26 USG institutions.

amount in textbook costs OER saved State University of New York (SUNY) students from 2017 to 2020. At this time, 435,000+ students took 14,581 OER course sections. SUNY aims to offer OER in 56% of all courses by the end of 2023.

How Does OER Work?

→ Can be deployed at many levels, from individual faculty to entire curriculum redesigns.

→ Can be deployed at many levels, from individual faculty to entire curriculum redesigns.

→ Can be deployed at many levels, from individual faculty to entire curriculum redesigns.

→ Can be deployed at many levels, from individual faculty to entire curriculum redesigns.

→ Can be deployed at many levels, from individual faculty to entire curriculum redesigns.

→ Can be deployed at many levels, from individual faculty to entire curriculum redesigns.

Tips to Boost Use of OER on Your Campus

→ Maximize impact by engaging faculty who teach large enrollment courses that also currently use expensive textbooks.

→ Offer grants or stipends that help faculty transition from traditional materials to OER.

→ Provide course redesign support through your center for teaching and learning (CTL) to assist faculty as they transition away from expensive textbooks to OER.

→ Make OER a cornerstone attribute of your general education curriculum.

→ Consider creating a zero textbook cost degree pathway or a pathway through your general education curriculum that solely uses OER.

→ Track savings and student success metrics and share your progress publicly. Make disaggregating your data by key student demographics a hallmark of your reporting.

→ Charge multiple offices with an ownership stake in OER adoption. This might include libraries, online learning, CTLs, student government associations, and others. Each brings unique strengths and audiences.

→ Incorporate OER into professional development, online education, and recognition for tenure and promotion.

Join AAC&U’s OER Institute

In July 2021, AAC&U launched the inaugural Open Educational Resources. Utilizing a new institute model, the Institute on OER provides a yearlong, online engagement for teams from campuses or state systems seeking to actualize an ambitious strategy to broaden campus engagement with and adoption of OER. The application process opens in early March, and the Institute begins in July each year.

“While not a panacea for higher ed, OER is one of the few solutions that contributes to affordability, quality, and equity aspirations. In many contexts, the results have been remarkable. These outcomes led AAC&U to launch the Institute on OER, which helps campuses accelerate their OER plans toward large-scale engagement and adoption.”

—C. Edward Watson, AAC&U associate vice president for curriculum and pedagogical innovation

Learn More

aacc.org/trending-topics/ open-education-resources-oer

openstax.org

ncnet.org

openlearning.org

affordablelearning. org

openstax.org

hwell.org/ straggle/ open-education/ 2bm.org/oer/ apacenopen.org

inclusiveaccess. org

oe.suny.edu

ascc-oer.org

oer-and-ctls/