The Impact of OER on Equity

Jennifer Paris
Area C Regional Lead
This Webinar Will Examine:

- Definition of equity
- Costs of textbook
  - Financial
- Student success
- Impact on disproportionately affected student groups
Defining Equity

- Principle of *fairness* in education
- Inequities occur when biased or unfair policies, programs, practices, or situations contribute to a lack of equality in educational performance, results, and outcomes

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Source: National Alliance for Partnerships for Equity_Education Foundation
The Cost of Textbooks

- Textbook cost has increased at 4x the rate of inflation
- Can cost up to $400!
- Would need to work 28 hours at minimum wage to purchase $200 textbook

Source: Covering the Costs: Why We Can No Longer Afford to Ignore High Textbook Prices by Ethan Senack & Rober Donoghue; The Student Public Interest Research Groups (February 2016)

The Cost of Textbooks

- Five publishers control 80% of the market
- Students have no choice over the textbook
- 50% of CC students use financial aid to buy their books
  - Students using loans pay $34.72 for a $150 book
- $3,150,000,000 of financial aid is spent on textbooks/year
- If every student had just one textbook replaced with OER it was save students over $1,000,000,000/year

Source: Covering the Costs: Why We Can No Longer Afford to Ignore High Textbook Prices by Ethan Senack & Rober Donoghue; The Student Public Interest Research Groups (February 2016)
Saving CCC Students Millions

- 25 colleges
- 34 degrees and certificates
- 23,373 students
- $42,912,828 in savings

Equity, Pathways, and Open EducaConal Resources: Implementing California’s Zero-Textbook-Cost Degree Program by James Glapa-Grossklag, Amanda Taintor, Brian Weston, Una Daly, and Rox Oxford is licensed under CC BY 4.0
The Others Costs of Textbooks – U.S.

- 2,039 students from 150 campuses across the U.S.
- 65% of students don’t buy
  - 94% concerned about grade
- Almost half said it affected how many/which classes they enroll in
- 82% felt they would do better in a course with free book

Source: Fixing the Broken Textbook Market: How Students Respond to High Textbook Costs and Demand Alternatives by Ethan Sendack; U.S. Public Interest Research Groups and The Student Public Interest Research Groups (January 2014)
Reedley & COC Students

- Amanda Taintor surveyed over 700 students at Reedley College about the impact of textbook cost.
- COC’s Early Childhood Education Department surveyed over 200 of our students about the same.
- Here are some results of those surveys.
Q6 Have you ever dropped a course because you could not afford to purchase the textbook(s)?

<table>
<thead>
<tr>
<th>ANSWER CHOICES</th>
<th>RESPONSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>38.42%</td>
</tr>
<tr>
<td>No</td>
<td>61.58%</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
</tr>
</tbody>
</table>

Have you ever had to drop a class because you could not afford a textbook?
Q5 Were you able to afford all of your books needed within the first 3 weeks of class?

<table>
<thead>
<tr>
<th>ANSWER CHOICES</th>
<th>RESPONSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>34.47%</td>
</tr>
<tr>
<td>No</td>
<td>65.53%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>734</td>
</tr>
</tbody>
</table>
How much does the cost of textbooks affect what classes you enroll in?
Reedley Student Voices

“I couldn’t pay all my bills because cost of textbooks”

“I am a single mom who works and goes to school full time. All the money I make go towards bill...I'm going into the 4th week of classes and still cannot afford to buy all my text books.”
“While I did receive financial aid, the majority of it had to go to a good computer and transportation, leaving a small budget for books.”

“My textbooks alone costed $700+ this semester. Seeing the prices of the textbooks made my heart sink because it's something that I couldn't afford. I need the class...”
“...Having free textbooks would allow us to be prepared from the start and not have to worry about how much each book will be.”

“I already pay an arm and a leg for education, having to pay a whole other arm and a leg for the materials is too much! I'm just trying to learn, to get a degree, to get a job and be a productive citizen of the US”

“I’ve only taken two classes at a time because the cost of the textbooks but also feel that it’s taking me longer to succeed to graduate”
“Right now I work two serving jobs and need to pick up two extra shifts in order to afford my books. This makes my sleep suffer and the time I have to focus on my classes suffer.”

“It would allow students to be more involved in the class by using the textbook to follow along with lectures. Also when you get home if you did not fully understand something you can refer back to your text compared to if you didn't have one.”

“...I wasn't able to graduate with my other peers.”
State of Students’ Basic Needs in CCCs

► 56% of students were food insecure
► 35% were housing insecure
► 14% were experiencing homelessness

Additional Benefits to OER

- Not only does OER save students money
- It changes their ability to be successful
- And even more remarkably, it impacts historically disadvantaged student populations the most
- Let’s look at some more data
### University of Georgia

<table>
<thead>
<tr>
<th>OER vs. commercial</th>
<th>Change in Grade</th>
<th>Change in DFW Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Students</td>
<td>+8.65%</td>
<td>-2.68%</td>
</tr>
<tr>
<td>Non-pell eligible</td>
<td>+7.4%</td>
<td>-2%</td>
</tr>
<tr>
<td>Pell eligible</td>
<td>+12.3%</td>
<td>-4.4%</td>
</tr>
<tr>
<td>Non-white</td>
<td>+13%</td>
<td>-5%</td>
</tr>
<tr>
<td>Part-time</td>
<td>+28%</td>
<td>-10%</td>
</tr>
</tbody>
</table>
The Following Slides

- Share some community college data
- Were provided to me by Walter Butler from Pasadena City College
Increases in Course Completion

After implementing an OER textbook within two Life Science classes at Brookdale Comm. College (NJ)

“...a 10% increase in successful completion of the course over the previous semester...”

This slide was shared with by Walter Butler of Pasadena City College
Salt Lake Community College: Developmental and College Math OER Courses, 2013-2014 AY

- 63% percent passed with a "C" or better, compared to 59 percent of students in sections using commercial materials.
- Failing grades fell by 35 percent.
- 27 percent decrease in withdrawals.

This slide was shared with by Walter Butler of Pasadena City College.
Equity Groups

- Foster Youth
- Students with Disabilities
- Low-Income Students
- Veterans
- Ethnic / Racial Categories
- Gender (and each group separated by gender)

This slide was shared with by Walter Butler of Pasadena City College.
Pasadena City College

This slide was shared with by Walter Butler of Pasadena City College
<table>
<thead>
<tr>
<th></th>
<th>FALL 2018</th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OER/ZTC</td>
<td>NON-OER/ZTC</td>
<td>OER/ZTC CORRESPONDING</td>
<td>NON-OER/ZTC CORRESPONDING</td>
</tr>
<tr>
<td>RETENTION</td>
<td>85%</td>
<td>87%</td>
<td>88%</td>
<td>83%</td>
</tr>
<tr>
<td>SUCCESS</td>
<td>76%</td>
<td>70%</td>
<td>76%</td>
<td>60%</td>
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</table>

This slide was shared with by Walter Butler of Pasadena City College
### Low-Income

<table>
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<tr>
<th>Fall 2018</th>
<th>OER/ZTC</th>
<th>Non-OER/ZTC</th>
<th>OER/ZTC Corresponding</th>
<th>Non-OER/ZTC Corresponding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retention</td>
<td>87%</td>
<td>86%</td>
<td>91%</td>
<td>85%</td>
</tr>
<tr>
<td>Success</td>
<td>74%</td>
<td>68%</td>
<td>80%</td>
<td>67%</td>
</tr>
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</table>

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<table>
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<th></th>
<th>FALL 2018</th>
<th>OER/ZTC</th>
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<th>RETENTION</th>
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<tbody>
<tr>
<td>FOSTER YOUTH</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RETENTION</td>
<td></td>
<td>68%</td>
<td>75%</td>
<td></td>
<td>79%</td>
<td>70%</td>
</tr>
<tr>
<td>SUCCESS</td>
<td></td>
<td>50%</td>
<td>55%</td>
<td></td>
<td>57%</td>
<td>43%</td>
</tr>
</tbody>
</table>

This slide was shared with by Walter Butler of Pasadena City College
Just what are the outcomes when using OER?
Adoption Benefits

- Every student has immediate & unlimited access
- Permission to make it your own
- Variety of formats eliminates one size fits all
- Ownership of the content - Forever!
- Moving to a new edition is optional
  - But content can be regularly modified and updated

Photo by Grégoire Jeanneau on Unsplash

Thanks to Amanda Taintor from Reedley College for sharing this information
Research Shows...

- Students and faculty find them to be of equal or better quality than traditional textbooks
- Students perform just as well in their classes when using OER as traditional textbooks

### Instructor and Student Experiences

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<table>
<thead>
<tr>
<th>Question</th>
<th>Yes, improved</th>
<th>Stayed the same</th>
<th>Declined</th>
<th>Not assessed/unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student learning improved?</td>
<td>20 (39%)</td>
<td>8 (16%)</td>
<td>0</td>
<td>23 (45%)</td>
</tr>
<tr>
<td>Student retention improved?</td>
<td>8 (16%)</td>
<td>6 (12%)</td>
<td>0</td>
<td>37 (72%)</td>
</tr>
</tbody>
</table>
More Research Shows...

- Students enrolled in more courses in the semester they used OER and the following semester after
  - Fischer et al. (2015); Robinson (2015)
- Lower withdrawal rates
  - Feldstein et al. (2012); Hilton and Laman (2012); Wiley et al. (2016)

Thanks to Amanda Taintor from Reedley College for sharing this information
Results for Faculty

- Faculty now have the freedom to use the content to match their teaching

Thanks to Amanda Taintor from Reedley College for sharing this information
“...For a long time, I have been wanting a quality e-book which would not separate those who could afford the textbook from those who could not. ... For academicians who, like me, teach from a perspective of social justice and environmental sustainability, [OER] textbooks... provide an ethical and conscientious option.”

Source: http://www.oer.arizona.edu/content/about-oer
Another Faculty Quote

“It was the best physics textbook I’d seen, and better than some $300 books, in my opinion. Since adopting [the OER textbook] my class enrollments have increased and my students’ scores on the national physics benchmark exam have improved by 30 percent.”

Source: http://www.oer.arizona.edu/content/about-oer
Student Perspective

Source: OER Student Survey Spring 2016 from College of the Canyons
Student Perspective cont.

Source: OER Student Survey Spring 2016 from College of the Canyons

Figure 2. Academic Value of OER (Percentage)
“The textbook I received for this course is just as useful, needed, and helpful as the textbooks I get in other classes.”

“Very easy to understand, great value out of the book.”

“I like the availability of the OER books, as they can be easily downloaded onto phones/computers as an on-the-go reference guide (digital one)”

Source: OER Student Survey Spring 2016 from College of the Canyons
“The source material selected has been carefully chosen to maximize the benefits of the assigned readings. It's a fully developed syllabus using a select few resources and the impact has been incredibly positive”

“It should be something readily available for students.”

“Open educational resources help students see different perspectives of learning.”

Source: OER Student Survey Spring 2016 from College of the Canyons
One More Thing to Consider

Source: OER Student Survey Spring 2016 from College of the Canyons
Financial Savings

This year OER/ZTC will save COC students $4,000,000!

Photo by Sharon McCutcheon on Unsplash
Beyond Educational Institutions...

▶ Outside organizations are recognizing the impact that OER can have on equity too

▶ Here’s what the NAACP had to say as an introduction to their resolution to promote the use of OER

Source: [Advocacy to Promote Use of Open Education Resources Resolution](https://www.naacp.org/about-our-organization/advocacy/education/) by NAACP (2016)
“The National Association for the Advancement of Colored People strongly supports the goal to promote high quality education among all students throughout the United States. To meet this goal, teachers and schools must have high quality academic resources, which has not been the situation for many African American students. Furthermore, effective implementation of rigorous educational standards for all students requires that quality curricular and other materials are readily available as well as affordable to educational agencies. In order to increase access and reinforce opportunities for exposure to high quality resources for African American and other minorities, the NAACP poses that educational agencies should take advantage of Open Education Resources (OER).”
Closing Thoughts

- Open educational resources has the potential to create equitable learning experiences for all students.
- Open education is deeply rooted in the belief that teachers have the freedom to develop content that meets the needs of their students.

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