Open Education
low cost and inclusive by design

AHG conference - November 2018
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Main Ideas

1. Open ed is about more than lowering book costs.
2. Open materials can be adapted and shared.
3. Open ed can disrupt structural barriers, challenge dominant perspectives, and interrupt bias.
How we’ll spend our time together

• Open Ed Movement
• The intersection of OER with Accessibility
• Perspectives: faculty, mentor, and advocate
• Top tips for getting involved & tour of selected resources
The Problem:
Increase in Textbook Prices

The graph shows the percentage increase in textbook prices compared to the Consumer Price Index (CPI) from 1980 to 2012. The textbook prices have consistently increased at a much higher rate than the CPI, with the difference becoming more pronounced over time.

Data source: Bureau of Labor Statistics

"Increase in textbook prices" by David Ernst, Open Textbook Network is licensed under CC BY 4.0.
In your academic career, has the cost of required textbooks caused you to:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>63.6%</td>
<td>Not purchase the required textbook</td>
</tr>
<tr>
<td>49.2%</td>
<td>Take fewer courses</td>
</tr>
<tr>
<td>45.1%</td>
<td>Not register for a specific course</td>
</tr>
<tr>
<td>33.9%</td>
<td>Earn a poor grade</td>
</tr>
<tr>
<td>26.7%</td>
<td>Drop a course</td>
</tr>
<tr>
<td>17.0%</td>
<td>Fail a course</td>
</tr>
</tbody>
</table>

What Students Have to Say
The 5rs - Revise, Remix, Reuse, Redistribute, Retain

“Hand” by Golan Levin  CC-BY 2.0
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Why OER has particular importance for accessibility...

Hint: There are multiple arguments
Alt Format Pain Points...
How and Why OER can Help - Access

BORN DIGITAL

Born Accessible
Case Study - Accessible Math

WeBWorK and PreTexT

- Subject Area Study tipped balance and established WeBWorK server
- Integration of WeBWorK with PreTexT - no direct savings but increased capacity to produce accessible OER at scale
Producing OER: PCC math projects

Home-grown math OER, freely available online and printable :)

- Open Resources for Community College Algebra (ORCCA)
  - PCC Strategic Planning funding

- Calculus lab manual
  - Grant funding from both PCC and Oregon
Accessibility Note: To All

Accessibility. The HTML version is intended to meet or exceed all web accessibility standards. If you encounter an accessibility issue, please report it to the editor.

- All graphs and images should have meaningful alt text that communicates what a sighted person would see, without necessarily giving away anything that is intended to be deduced from the image.
- All math content is rendered using MathJax. MathJax has a contextual menu that can be accessed in several ways, depending on what operating system and browser you are using. The most common way is to right-click or control-click on some piece of math content.
- In the MathJax contextual menu, you may set options for triggering a zoom effect on math content, and also by what factor the zoom will be.
- If you change the MathJax renderer to MathML, then a screen reader will generally have success verbalizing the math content.

Tablets and Smartphones. MathBook XML documents like this lab manual are “mobile-friendly”. The display adapts to whatever screen size or window size.
College Algebra: Problem 12

(1 point)
The expression \(\frac{6}{35} \div \frac{3}{7}\) is a fraction \(\frac{a}{b}\) where \(b\) is positive.
Enter \(a=\) and \(b=\)

Note: You can earn partial credit on this problem.

You have attempted this problem 0 times. You have unlimited attempts remaining.
MATH 20 - CHAPTER 2

ADDING INTEGERS WITH CONTEXT

For many students it is easier to remember sign rules when they put the problems into context. The two most useful contexts for adding integers, or signed whole numbers, are money and the number line. Try both and see which one you prefer.

MONEY

1. $6 + $7
   (you have $6, then get $7 more)
3D printed fraction kits
How and Why OER can Help - Relevance

Crafted Locally

Crafted Relevant
Case Study - ESOL News

ESOL News with H5P examples

Instructor wrote blog post - taking steps to change curriculum and ensure students can learn and enhance communication skills by engaging with relevant real-life content in the form of news stories.

Collected and tagged by level.
Case Study- Disability History Exhibit

Accessible html and multimedia versions of museum quality print display - many connections to academic disciplines!

see disability history exhibit
OER and Universal Design

Accessible open materials/activities provide:
• Equitable use
• Flexibility in use
• Perceptible information
• Community of learners

See blog posts for context and supporting information
Open Ed and Agency in Learning

Open Education > Open Resources

- Faculty who cultivate
- Students who co-create
- Institutions that serve the community
The Journey from Publisher to OER
Mentoring Faculty

Photo by Kobu Agency
Advocating for Accessibility
Where are the opportunities?

Collaboration across units/institutions – where is the expertise and how can it be shared?

OER Funding - is accessibility being advanced in efforts to promote lower costs?
OER Infrastructure

Is there a steering committee? If so, who is at the table?

Are there funding opportunities – if so, is accessibility one of the requirements?

If accessibility is a requirement - how is it verified or enforced?

Are accessibility features recorded in metadata?
OER legislation

Does your state have legislation planned in this area? If so - is your AHEAD affiliate aware?

Stay up to date on OER policy in your state
Questions?

handout with additional resources