Open Educational Resources: Creative Alternatives to Commercial Textbooks

Gerald Jay Schafer
Open Educational Resources: 
*Creative Alternatives to Commercial Textbooks*

Jay Schafer
UMass Amherst Director of Libraries
My Favorite Quote

In “A Letter to His Kids,” Wired's Founding Editor Recalls the Dawn of the Digital Revolution:

In the very first issue (March 1993) I wrote, "The Digital Revolution is whipping through our lives like a Bengali typhoon." Got a lot of grief for that typhoon reference — as if it were a pretentious exaggeration instead of the understatement it turned out to be. Should have said the Digital Revolution was ripping through our lives like the meteor that extinguished the dinosaurs. Practically every institution that our society is based on, from the local to the supranational, is being rendered obsolete. This is the world you are inheriting.

Louis Rossetto
"What we got right – and wrong."
Wired. June 2008
HOW DID WE GET TO “OPEN EDUCATIONAL RESOURCES?”
View Source

- 1994 – Tim Berners-Lee
- HyperText Transfer Protocol (HTTP)
- HyperText Markup Language (HTML)
- First web browsers Mosaic, Netscape, Internet Explorer
- “View source code”
- Growth in websites 1994 to 2000
- Open access to source code
Theory of Goods

- Private goods
- Toll (Club) goods
- Public goods
The Creative Commons copyright licenses forge a balance inside the traditional “all rights reserved” setting that copyright law creates.

- Gives everyone a simple, standardized way to grant copyright permissions to their creative work.
- Creates a pool of content that can be copied, distributed, edited, remixed, and built upon, all within the boundaries of copyright law.
Creative Commons
Licensing your work

- Attribution
- Attribution - ShareAlike
- Attribution - No Derivatives
- Attribution - Non-Commercial
- Attribution - Non-Commercial - Share Alike
- Attribution - Non-Commercial - No Derivatives
COST OF TEXTBOOKS
Books and Supplies Cost

Source: The College Board, Annual Survey of Colleges.
Textbook Trends, 30 years
UMASS STUDENTS

Textbook Decisions

- 53% not purchased - too expensive
- 35% not taken a class - textbook too expensive
- 24% taken a different class - textbook too expensive
- 23% made different decisions about my education because of student debt

2014 survey of 264 students in OEI classes
WHAT ARE OPEN EDUCATIONAL RESOURCES?
OERs Include

**Curriculum**
- Syllabi
- Content modules

**Course materials**
- Textbooks
- Assignments
- Simulations
- Learning objects
- Labs

**Collections**
- Journal articles
- E-books
- Art galleries
- Video libraries

**Tools**
- Software
- Calculators
- Analytics
OER’s

- Are **not free** – real costs of creation, distribution, preservation

- Are available to the user at **no or low cost**
At UMass Amherst OERs Include:

- True open access textbooks

- Hybrid open educational resources that utilize the learning management system to provide access to resources already licensed by the library

- Reducing the number of “required textbooks” by supplementing one core commercial textbook with other open or licensed resources
Sample OER

Access. The Future of Education.

FREE, OPEN-SOURCE, PEER-REVIEWED.
HIGH-QUALITY TEXTBOOKS FOR YOUR COLLEGE COURSE.

- Principles of Microeconomics
- College Physics 2e
- Sociology
- Biology
- Concepts
- Anatomy
- College Algebra
- Algebra Trigonometry
Sample OER

Discover. Share. Create.

OER Commons is a dynamic digital library and network. Explore open education resources and join our network of educators dedicated to curriculum improvement.

Extensive Library, Powerful Findability
About Us

The Open Textbook Network (OTN) helps higher education institutions and systems advance the use of open textbooks and practices on their campuses.

We maintain the Open Textbook Library, the premiere resource for peer-reviewed academic textbooks. All of our textbooks are free, openly licensed, and complete; their adoption creates a measurable, positive impact on student success.

With our members, we move the open education conversation forward on local and national levels.
Welcome to Affordable Learning Solutions

CSU's Affordable Learning Solutions enables faculty to choose and provide more affordable, quality educational content for their students.

By reducing CSU student course material expenses, more students acquire the course materials they need to succeed and benefit from their CSU learning experience.

Now, CSU faculty and students have greater access to quality free and low-cost learning materials through a variety of ALS programs and partnerships.

What's New?

Addressing AB 798 Legislation: CA College Textbook Affordability Act

- Funding for up to $50K to support faculty development programs for adopting free and open educational materials
Sample OER

Ohio Digital Bookshelf

The Ohio Digital Bookshelf Project is a pilot project of Ohio Textbook HQ that aims to provide quality textbook options for faculty and better learning outcomes, while also saving students money.

News

For more info on affordable textbooks and alternative learning materials for Ohio college students, visit:

Collections in this community

- Construction Methods and Materials
- Educational Psychology Materials
- Educational Technology Primer
- Statics for Engineering Technology
Welcome to Textbook Revolution!

Textbook Revolution is a student-run site dedicated to increasing the use of free educational materials by teachers and professors. We want to get these materials into classrooms. On this site you'll find links and reviews of textbooks and select educational resources. Some of the books are PDF files, others are viewable online as e-books, or some are simply web sites containing course or multimedia content.

If you have any questions or need help, please email Josh, our site administrator.

Search for Free Books and Textbooks

Search for Books and Textbooks

We wish all books were free! Until they are we want to help you get them for a cheap as possible.

Textbooks priced by Campusbooks.com
Teach and learn psychology for free.

“Traditional textbooks are history. The Noba approach is the way of the future.”

James Pennebaker

Learn More About Noba

Print Versions Now Available

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Faculty awareness

**Opening the Curriculum**
Open Educational Resources in U.S. Higher Education, 2014

How aware are you of open educational resources (OER)?

*Source:* I. Elaine Allen & Jeff Seaman, Babson Survey Research Group
Based on survey responses from over 2,100 national higher education teaching faculty
Infographics by Pearson
Seeking Solutions

Open Education Initiative (OEI)

- Spring 2011
- UMass Amherst Provost’s Office
- University Libraries
- Faculty Grants $1000 - $2500
- 6 Grant Cycles
OEI provides faculty incentives (small grants) that encourage:

1. the creation of new teaching materials and models
2. the use of existing open (free) information resources to support student learning
3. the use of library subscription materials
4. development of open technologies
Assessment

Methods

• Surveys
• Qualitative interviews
• Enrollment numbers

Objectives

• Was there a cost savings?
• Did students learn effectively?
• Did faculty implement the parameters of the grant?
Outcomes

• Investment of $70K
• 50 faculty + over 85 classes taught
• Over $1.3 million saved for students
• Course evaluations show same quality of student satisfaction, or better
• Service points on campus are partnering for student success
## Total Savings Over Time By College

<table>
<thead>
<tr>
<th>COLLEGE</th>
<th># OF STUDENTS PER COLLEGE</th>
<th>SAVINGS PER COLLEGE OVER TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Natural Sciences</td>
<td>4,471</td>
<td>$762,643.00</td>
</tr>
<tr>
<td>College of Social and Behavioral Sciences</td>
<td>1,248</td>
<td>$163,307.00</td>
</tr>
<tr>
<td>College of Humanities &amp; Fine Arts</td>
<td>870</td>
<td>$119,473.00</td>
</tr>
<tr>
<td>College of Engineering</td>
<td>724</td>
<td>$132,677.00</td>
</tr>
<tr>
<td>College of Education</td>
<td>703</td>
<td>$74,283.00</td>
</tr>
<tr>
<td>College of Nursing</td>
<td>38</td>
<td>$2,470.00</td>
</tr>
<tr>
<td>Honors College</td>
<td>187</td>
<td>$7,835.00</td>
</tr>
<tr>
<td>Stockbridge School of Agriculture</td>
<td>275</td>
<td>$37,058.00</td>
</tr>
<tr>
<td>Isenbg School of Management</td>
<td>103</td>
<td>$20,600.00</td>
</tr>
<tr>
<td>School of Public Health and Health Sciences</td>
<td>175</td>
<td>$38,699.00</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>8,794</strong></td>
<td><strong>$1,359,045.00</strong></td>
</tr>
</tbody>
</table>
Unexpected Outcomes

- Instructors using new teaching styles and flipping their classrooms
- Increased awareness of and queries from instructors about OERs
- Professors report students better prepared for class and more engaged
- Created resources add to available OERs for everyone
- Student involvement and passion are stimulating change
Faculty Survey Results

On a scale of 1 to 5, 5 being the highest

• My teaching needs were met by the Open Educational Resources implemented in the course. (4.27)

• Student performance improved compared to past semesters when a traditional textbook was used. (4.36)

• Student engagement increased compared to past semesters when a traditional textbook was used. (4.09)
Faculty Success stories

Carlos Gradil
- Animal Sciences 421: Fundamentals of Reproduction
- Cost Savings to date: $7,680
- Uses video to teach 3 different classes, a far superior teaching tool than text/static images

Miliann Kang
- Women's Studies 187: Gender, Sexuality and Culture
- Cost Savings to date: $8,475
- OERs downloaded over 3,600 times, far over initial class of 300 students

Hossein Pishro-Nik
- Electrical and Computer Engineering 314: Introduction to Probability and Random Processes
- Cost Savings to date: $25,833
- Used his book in 6 courses, representing 6 times projected savings ($87,700);
- Other professors are using it as well
Faculty Comments

• The students are much more satisfied with the new materials; they are more engaged and more prepared than I have ever seen them.
• Grades have improved drastically since using [Open Educational Resources] in my course ... the support from the Libraries was outstanding.
• My students are reading more, they are much more organized, and they are happy that they no longer need to spend so much money on materials.
• I was highly satisfied with the resources provided by the Libraries, as are my students.
• I received excellent technical support from the Libraries.
Challenges

- Lack of knowledge by faculty
- Time consuming to find or develop OE content
- Lack of search tool or comprehensive catalog
- May lack prepared quizzes and other content
- Students may prefer print
- Time commitment from partners
- Getting beyond the “pilot” phase
Challenges

- Commercial publishers
- Cheaper eTextbooks – everybody buys
- Learning Platforms – everybody buys
- Open Educational Resources – on a proprietary platform – everybody buys
Student involvement

UMass Amherst

Student involvement

UMass students, librarians want more faculty to use open source textbooks to save students money

UMASS-AMHERST HEADLINES

North Amherst apartment complexes banning guest parking, warning residents in anticipation of Disney Blowing Credit

Medical examiner determines cause of Amherst woman’s death

Amherst Town Manager John Mosante responds to lawsuit filed against town police

14 police agencies to aid Amherst police Saturday, video cameras to monitor 'high liability areas'

UMass basketball, former football coaches are top paid Massachusetts employees in 2014

Popular Photo Galleries

International Burglar in Springfield

Pets available for adoption in Western Mass. shelters

Celtic Scout’s Fork It Over event in Worcester

Active Discussions

1. Those who boycotted Netaporter’s banned should be applauded. Letter to the Editor

2. Animal rights group ‘Every animal deserves to live just as we want to live’

3. A challenge for Hillary Clinton? Email flap just the start. Editorial

4. What’s in Hillary Clinton’s secret emails? Email controversy issues continues to climb

5. Elizabeth Warren’s politics over professionalism. Viewpoint

Most Read

North Amherst apartment complexes banning guest parking, warning residents in anticipation of Disney Blowing Credit

Medical examiner determines cause of Amherst woman’s death

UMass Amherst student and librarian want more faculty to use open source textbooks to save students money

UMass basketball, former football coaches are top paid Massachusetts employees in 2014
Attributed to Charles Darwin:

“It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is the most adaptable to change.”
Thanks to:

Marilyn Billings
Jeremy Smith
Charlotte Roh
Matthew Sheridan
Questions/Discussion

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