THE LANDSCAPE OF THE FUTURE:
Open Content, Open Knowledge, Open Educational Resources

Brandon Muramatsu and Jean Runyon

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Outline

- What is this “Open” thing I keep hearing about?
- Thinking about Open differently
- What’s the big deal about Open?
- Key Mechanic of Open
- Choose your own presentation…
  - Finding or Creating
- Wrapup
Outcomes

- Understand the scope of the Open landscape, with a focus on Open Content
- Understand the implications and importance of Open
- (Hopefully) Identify something to take with you…

How will you adopt, produce, or encourage the use of Open?
What is this “Open” thing I keep hearing about?
So, what have you heard?

- It’s Free!
- Open Course Library
- iTunesU
- General topic, but limited in specific areas
- Non-credit
- Creative Commons licensing
- Issues with accuracy, completeness, quality, aligning
- It’s scary, when you commit, you’re on your own, to mediate content, to build support
- Good metadata is crucial to find what you want, to find meaningful results
Open... Education

- Source
- Content / Educational Resources
  - CourseWare / Courseware
  - Textbooks
  - Courses
- Educational Practice
- Journals
- Knowledge
- Policy

We're going to focus on this part

Cable Green will talk about this in the closing keynote
What are some benefits and challenges of Open Educational Resources (OERs)?

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Challenges</th>
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<tbody>
<tr>
<td>Free!</td>
<td>Free!</td>
</tr>
<tr>
<td>Cost savings to students</td>
<td>Making sense and using resources</td>
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<tr>
<td></td>
<td>Convincing articulating universities to accept courses that utilize OERs</td>
</tr>
<tr>
<td>Ease of updating</td>
<td>Technical compatibility</td>
</tr>
<tr>
<td></td>
<td>(no publisher support)</td>
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<tr>
<td></td>
<td>Reliability</td>
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<tr>
<td></td>
<td>Need to update</td>
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<tr>
<td></td>
<td>Functionality—bundled systems</td>
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9

Thinking about Open differently

What are OERs?
How do you define “Open Educational Resources”?

- More audience participation...
OER: l’innovation du jour?

- We’re going to talk about OER writ large.
- We’re not going to bore you with definitions! (Well, we’ll try!)
- We’re not going to get all religious about OERs!
Think of OER as a Starting a Conversation

- A conversation about teaching, crafting courses, & sharing course materials
- A conversation about collaborating with peers and even students

This doesn’t sound like it’s specific to OERs does it? And, you’re probably already using OERs!
Poll: Do you (or your faculty)...

☐ Talk about courses with peers?

☐ Borrow course materials, teaching techniques, sources?

☐ Share materials back with your peers?
At its heart, OER is about doing these sorts of things!

And, it’s about encouraging sharing of materials and practices...

And, it’s clearly communicating what others are allowed to do with the materials...
Ok, let’s get a bit more formal
Recall...OER: A Definition

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 or re-purposing by others. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge.

The resource is available for others to use

Open Educational Resources (OER) are an important element of an infrastructure for learning.


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OERs are a part of Open Education

- OERs focus on resources
  - They have been getting a lot of attention at the federal and state levels
  - They are primarily course materials and open textbooks

- Open Education is the bigger concept
  - Sharing, availability and access
## Selected Open Education Timeline

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
<th>Organization/Institution</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>“Open Content”</td>
<td>David Wiley</td>
<td></td>
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<tr>
<td>2001</td>
<td>“Open Educational Resources”</td>
<td>Coined By UNESCO</td>
<td></td>
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<tr>
<td>2002</td>
<td>Open University OpenLearn</td>
<td></td>
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<tr>
<td>2006</td>
<td>OpenCourseWare Consortium FlatWorld Knowledge</td>
<td></td>
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<tr>
<td>2008</td>
<td>Open Course Library MITx</td>
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<tr>
<td>2009</td>
<td>Open High School of Utah</td>
<td>University of the People</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>William and Flora Hewlett Foundation Support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000s</td>
<td>Community College OER Consortium Cape Town Declaration</td>
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</table>

What’s the big deal about Open?

Importance of Open
Importance of Open Education

Potential for...

- Reclaiming control
  - From publishers, from static content
  - Enabling flexibility to mix and match
- Changing the nature of the educational experience
  - Smaller chunks, focused objectives
  - MOOCs, alternate credentialing
- Reigning in costs without sacrificing quality or access
  - Student and institutional

Open is a means to an end: Improved learning and performance
Key mechanic of Open

Adding a license to your resource...
Poll: When borrowing resources...

- Do you look at the license or terms of use?
- Do you provide attribution for those resources?
What are you allowed to do?
What might you allow others?

- Instead of “All Rights Reserved”
  - Can someone else use the materials?
  - Can someone build upon or modify the materials?
  - Can they use those materials commercially?
  - Do they have to share any materials they develop the same way the materials were originally shared?

Do these sound familiar?
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 or re-purposing by others. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge.

The resource is available to others to use

THE POWER OF OPEN

Stories of creators sharing knowledge, art, & data.

The stories in The Power of Open demonstrate the breadth and creativity of the individuals and organizations using CC.

Learn more by reading the book!

Read the Book

The Power of Open: Stories of creators sharing knowledge, art, & data using CC. Read it now.

Mission

WHAT IS CREATIVE COMMONS?

Creative Commons helps you share your knowledge and creativity with the world.

Creative Commons develops, supports, and stewards legal and technical infrastructure that maximizes digital creativity, sharing, and innovation.

Learn about CC

License

HOW CAN I LICENSE MY WORK?

There is no registration to use the Creative Commons licenses. Licensing a work is as simple as selecting which of the six licenses best meets your goals, and then marking your work in some way so that others know that you have chosen to release the work under the terms of that license.

Our license-choosing tool can help you select the right license.

Choose a License

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Choose your own presentation...

Where do we go next?

• Finding and identifying OERs
• Creating an OER
Set them freeee

Creating an OER

Demonstration

Photo: Patrick McAndrew, cc-by
Let’s make an OER

Apply License, Citation, Metadata

Share
Applying a license to this presentation

- Ok, so how do I do it?
  - Select a license
  - Add Creative Commons logo to the title slide
  - Add a license statement to the title slide (and notes field)
  - Add an attribution statement
  - Add metadata to Presentation properties
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- No

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- Yes, as long as others share alike
- No

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- Rights other persons may have either in the work itself or in how the work is used, such as publicity or privacy rights.
Brandon Muramatsu

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Project Manager at MIT
Education
www.mura.org

Brandon Muramatsu has been involved in the development of learning technologies from courseware to educational digital libraries since 1993. He is interested in the development of production-level services and tools for educators and learners to develop, use, reuse and share digital learning resources, especially open educational resources. He is currently working at the Office of Educational Innovation and Technology at MIT to transform learning technologies from innovative research to sustainable production services. Brandon Muramatsu earned his B.S. (1993) and M.S. (1995) in mechanical engineering from the University of California, Berkeley.

Open Learning: Bridge to Success

Student readiness for college is of great concern at the local and national levels. Open access to high-quality educational materials will increase the number and diversity of adults who are
An OER walks into a bar...

Finding and Recognizing OERs

Demonstration
Finding OERs

- How do you find out about them?
  - Talking to peers in your department?
  - Through ITC? Other professional organizations?
  - Looking through digital repositories?
  - Google searches?
Recognizing OERs: Examples

- Flickr (www.flickr.com)
- MIT OpenCourseWare (ocw.mit.edu)
- MERLOT (www.merlot.org)
- OER Commons (www.oercommons.org)
- Open Course Library (www.opencourselibrary.org)
- Wikipedia (www.wikipedia.org)
- Crowd choice (what will it be?)
Pattern

Check out the Site  Search for Resources  Look at detailed results  Review the resource itself  Is it an OER?
Have you used Flickr?

Did you know that Flickr allows photo sharers to indicate a license?

And that you can search for Creative Commons licensed photos?
Searching for Openly Licensed Photos

Advanced Search

Search for

Tip: Use these options to look for an exact phrase or to exclude words or tags from your search. For example, search for photos tagged with "apple" but not "pie".

All of these words

math

None of these words:

Only search within Creative Commons-licensed content

Find content to use commercially

Find content to modify, adapt, or build upon

Or, return to the basic search without all the knobs and twiddly bits.
Flickr Search Results

43  Showing Creative Commons-licensed content for adaptation, modification or building upon
math_homework

I gave Katherine a hand with her math homework.

Comments and faves

🌟 whirlwind added this photo to their favorites. (63 months ago)

🌟 mitt_project added this photo to their favorites. (58 months ago)

🌟 Vicki Davis, coolcatteacher added this photo to her favorites. (51 months ago)
Unlocking Knowledge, Empowering Minds.

Free lecture notes, exams, and videos from MIT. No registration required.

"Through OCW, I am part of a movement to help make education free and available to the world."

Clinton Blackburn
MIT student
United States

NEWS FEATURE

MITx Enrollment Begins

In December, MIT announced a new online learning initiative called "MITx". Registration is now open for the pilot course, 6.002x Circuits and Electronics.

Enroll for free now.
View related curriculum on OCW.

OCW is grateful for the support of:

MathWorks
Lockheed Martin
Find Free-to-Use Teaching and Learning Content from Around the World

Learning is Sharing

Recommended Resources

**General Ed and Pre-College Courses**: Use these high enrollment, general education and pre-college courses to lower textbook costs for students, to improve college completion rates, and as frameworks on which to build your own online or blended courses

**Common Core Aligned Resources**: K-12 educators, see how individual resources align to the Common Core State Standards and add your resource quality ratings and comments

**Open Textbooks**: Add your review to these free and open textbooks

**Career and Technical Education**: Explore these vocational open educational resources to build general skills with software programs like MS Word and Excel, plan your career, and develop marketable skills

**Classroom Management**: Try this great selection for setting the tone and rules for your classroom and intentionally designing classroom life connected to student learning, social skills and behaviors

**Science as Inquiry**: Teach and learn science by doing active exploration and problem posing

**Art as Inquiry**: Delve into visualization, creative thinking, and more artistic habits of the mind for arts-integrated learning across disciplines

- Free to Use
- Openly Licensed
- 31749 Resources
- From K-12 to College Courses

[Add OER]

Drag this button to your favorites bar. When you find an OER resource on the web, click that link to submit.

**OER Commons Tweets**

Faculty @openshoutah will share OER experiences Thursday @nacoc webinar. Share and calendar the date. #oer #hs #edchat

http://t.co/kfXPZnWC

Feb 14, 2012
Welcome!

The Open Course Library is a collection of expertly developed educational materials – including textbooks, syllabi, course activities, readings, and assessments – for 81 high-enrollment college courses. 42 courses have been completed so far, providing faculty with a high-quality, affordable option that will cost students no more than $30 for course materials.

Our goals:

1. Lower textbook costs for students
2. Provide high quality, open resources for faculty
3. Improve course completion rates

Phase 1 Courses

Our 42 phase 1 courses are now available. All course materials are shared under a Creative Commons (CC-BY) license unless otherwise noted. If you have adopted an Open Course Library course please fill out the Adoption Form.

Phase 2 Development

Our phase 2 courses are currently being developed. They will be available Spring 2013.
Open educational resources

From Wikipedia, the free encyclopedia

Open educational resources (OER) are digital materials that can be re-used for teaching, learning, research and more, made available free through open licenses, which allow uses of the materials that would not be easily permitted under copyright alone.\(^1\) As a mode for content creation and sharing, OER alone cannot award degrees nor provide academic or administrative support to students.\(^2\)[3] However, OER materials are beginning to get integrated into open and distance education.\(^4\) Some OER producers have involved themselves in social media to increase their content visibility and reputation.\(^5\)

OER include different kinds of digital assets. Learning content includes courses, course materials, content modules, learning objects, collections, and journals. Tools include software that supports the creation, delivery, use and improvement of open learning content, searching and organization of content, content and learning management systems, content development tools, and on-line learning communities. Implementation resources include intellectual property licenses that govern open publishing of materials, design-principles, and localization of content. They also include materials on best practices such as stories, publication, techniques, methods, processes, incentives, and distribution.

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5. Licensing
6. Institutional support
7. National and US State Programs
8. Criticism
9. See also
10. References
11. External links

### Other Definitions

The following definition of OER has been proposed by the William and Flora Hewlett Foundation:
Audience Choice?
Examples of OERs

- **Flickr** ([www.flickr.com](http://www.flickr.com))
  - Some CC-licensed, find via Advanced Search

- **MIT Open CourseWare** ([ocw.mit.edu](http://ocw.mit.edu))
  - One of the granddaddy’s of OERs, CC-by-nc-sa

- **MERLOT** ([www.merlot.org](http://www.merlot.org))
  - Wide range of resources, complex licensing

- **OER Commons** ([www.oercommons.org](http://www.oercommons.org))
  - Wide range of resources, nearly all CC-licensed

- **Open Course Library** ([www.opencourselibrary.org](http://www.opencourselibrary.org))
  - Open Textbooks, 42 published, more coming, CC-by

- **Wikipedia** ([www.wikipedia.org](http://www.wikipedia.org))
  - Probably the biggest OER, support for attribution
Discussion Questions

- What makes a site an OER?
- Did any of the sites surprise you?
- What features make some sites better than others?
Selected additional resources

- Bridge to Success (shameless plug), b2s.aacc.edu
- CK-12, www_ck12.org
- College Open Textbooks, www.collegeopentextbooks.org
- Community College Consortium for Open Educational Resources, www.oerconsortium.org
- Flat World Knowledge, www.flatworldknowledge.com
- Kaleidoscope Project, www.project-kaleidoscope.org
- Open High School of Utah, ocw.openhighschool.org
- Open University OpenLearn, www.open.edu/openlearn
- P2PU, www.p2pu.org
- Saylor Foundation, www.saylor.org
- WikiEducator, wikieducator.org
OER Smörgåsbord

- OER as a conversation:
  Sharing, access, materials, practice

- OER as a continuum

Individual Images → Standalone Modules → Course Materials → Whole Courses

- Open Course Library
- OpenLearn
- Saylor
- B2S Courses

Flickr
Wrap-Up

Revisiting Outcomes

Discussion
Revisiting Outcomes

- Understand the scope of the Open landscape, with a focus on Open Content
- Understand the implications and importance of Open
- (Hopefully) Identify something to take with you...

How will you adopt, produce, or encourage the use of Open?
Discussion of OERs

- Creative Commons licensing
- Modularizing, and a chunk or chunks, using OERs may make them more accessible
- Tie in with teaching and learning
- Start redesigning course, crowd-source, get students to help—discuss, analyze, integrate
Contact Us

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Slides will be posted to: http://slideshare.net/bmuramatsu