CAT Brown Bag: Open Educational Resources

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# Definition

*"Open Educational Resources (OER) are teaching and learning materials that are freely available online for everyone to use, whether you are an instructor, student or self-learner. Examples of OER include: full courses, course modules, syllabi, lectures, homework assignments, quizzes, lab and classroom activities, pedagogical materials, games, simulations, and many more resources contained in digital media collections from around the world."* [OER Commons](file:///C:\Users\jhb23\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\LATC3VIS\oercommons.org)

# Why OER?

*“The idea of free and open sharing in education is not new. In fact, sharing is probably the most basic characteristic of education: Education is sharing knowledge, insights, and information with others, upon which new knowledge, skills, ideas, and understanding can be built.”* [Open Education Consortium](http://www.oeconsortium.org/about-oec/)

The high cost of textbooks, copyright and reuse restrictions from publishers or in author agreements, the rise of the Internet and the ease of electronic communication and digital publishing, the desire to share knowledge and collaborate on or adapt pedagogical endeavors—all contribute to why OER use matters to faculty, students, libraries, and educational institutions.

As with other “open” movements, open educational resources are not merely available freely online but also can be reused, adapted, translated, mixed together, broken apart, and turned into something new, which then can also be shared and adapted. There are a lot of OER out there, but little uptake in use.

# A short history of OER

ERIC has existed for 50 years (definitely pre-Worldwide Web). While not everything in ERIC is an OER, it does include lesson plans, lab and classroom activities, games, and other pedagogical materials that might be classed as forerunners of the OER.   
More recently, organizations such as the William and Flora Hewlett Foundation have funded OER development. This and other funding agencies have done so in an effort to bring education back to those outside of academia, such as K-12 teachers, scientists and engineers working in industry, and non-fluent English speakers (“[Open Educational Resources](http://libguides.umuc.edu/oer),” 2014).

According to Kleymeer, Kleinman, and Hanss (2010), libraries were among the first producers of OERs, “digitizing and sharing digital content even before the arrival of the public Internet” (“[Reaching the Heart of the University: Libraries and the Future of OER](http://deepblue.lib.umich.edu/bitstream/handle/2027.42/78006/ReachingtheHeartoftheUniversity-KleymeerKleinmanHanss.pdf?sequence=1),” p. 2).

Early pioneers in OER development include the Massachusetts Institute of Technology (which developed the OpenCourseWare platform for sharing OERs), Harvard, Yale, Stanford, the University of California at Berkeley, and many others (“[Open Educational Resources](http://libguides.umuc.edu/oer),” 2014).

In 2007, education leaders produced the [Cape Town Open Education Declaration](http://www.capetowndeclaration.org/), which advocates the continued development and sharing of OERs in support of worldwide education (“[Open Educational Resources](http://libguides.umuc.edu/oer),” 2014).

OER have been the subject of conferences such as [OpenEd](http://openedconference.org/2015/), [OpenCon](http://opencon2014.org/), and the SPARC annual meeting.

# OER at Pitt

OER use at Pitt seems to be localized in departments or programs who often have a shared pool of teaching resources. Some of these are on USB drives, others in filing boxes, and some may be housed on DropBox or in other sharable electronic forms.

Blackboard/CourseWeb and iTunesU allow some sharing of Pitt-created OER but these are not searchable in OER databases. No University-wide initiative currently exists to collect OERs, standardize them, or share them.

# OER elsewhere

SPARC maintains a list of “[OER Projects and Policies](http://www.sparc.arl.org/resource/list-oer-projects-policies)” on its website. Highlights of what other U.S. colleges, libraries, universities, and even states are doing to support OER include:

* UCLA Libraries’ [Affordable Course Materials Initiative](http://www.library.ucla.edu/libraries/affordable-course-materials-initiative-application-procedure) provides support and awards to faculty to identify free and low-cost alternatives including OER.
* Bills passed in the California legislature in 2012 aim to create a library of 50 open textbooks. Minnesota and North Dakota have also passed bills calling for OER usage; North Dakota’s bill specifically aims to facilitate use of OERs in higher education.
* Emory University Libraries’ [Open Education Initiative](http://guides.main.library.emory.edu/open-education-initiative) provides min-grants to faculty to support the use of OER and other low-cost resources.
* MIT’s [OpenCourseWare](http://ocw.mit.edu/index.htm) project provides openly licensed course materials (such as videos, textbooks, and lecture notes) for more than 2,000 courses.
* At the University of Massachusetts Amherst, the provost’s office and the university libraries launched the [Open Education Initiative](http://guides.library.umass.edu/content.php?pid=87648&sid=4778777), an incentive program to encourage faculty to use existing low-cost or free information resources to support student learning.
* University of Michigan’s [Open.Michigan](http://open.umich.edu/education) project enables the university’s faculty to share OER they create, with a particularly large collection of resources in medicine.
* University of Oklahoma Libraries has a full-time librarian dedicated to OER.
* University of Wisconsin Madison Libraries has a program to support faculty use and adaptation of open textbooks.
* The library at the [University of Maryland University College](http://libguides.umuc.edu/oer) has put together an extensive guide on OER resources and use.
* [OpenChem](http://ocw.uci.edu/collections/open_chemistry.html) from the University of California at Irvine UC Irvine – an entirely open college chemistry curriculum.
* Tufts University offers a number of [open education resources](http://sites.tufts.edu/tuftsoer/education-resources/), including Aquapedia (water information), ConStats (experiments for introductory statistics students), OpenGeoportal (geospatial data), Perseus (teaching and learning Greek & Roman classics), among others.
* Yale University provides [Open Yale Courses](http://oyc.yale.edu/), free and open access to a selection of introductory courses taught by Yale teachers and scholars. Video and audio components of courses can be found on YouTube and iTunes. Text transcripts are also made available.

# OER tools and resources

## Resources:

Open Education Consortium ([oeconsortium.org](file:///C:\Users\jhb23\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\LATC3VIS\oeconsortium.org)): Formerly OpenCourseWare Consortium, a group of universities and other institutions who use and share OER.

Open Content ([opencontent.org](file:///C:\Users\jhb23\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\LATC3VIS\opencontent.org)): Offers a number of open content tools, including a licensing game, textbook savings calculator, publication license, and a search engine to search *all* OpenCourseWare providers (see: [opencontent.org/ocwfinder](file:///C:\Users\jhb23\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\LATC3VIS\opencontent.org\ocwfinder)).

OER Impact Map ([oermap.org](http://oermap.org/)): Tracing the effect and impact of OER worldwide. They have a number of testable hypotheses about the impact of OER and collect evidence for or against those hypotheses. Excellent resource for doing research on OER.

## Repositories:

Merlot ([merlot.org](http://www.merlot.org)): Non-institutional repository for OER, completely open and reusable. Allows peer review of the resources based on star ratings and comments.

OER Commons ([oercommons.org](file:///C:\Users\jhb23\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\LATC3VIS\oercommons.org)): Searchable repository of OER, seems to be mostly aimed at high school level and below but some university-level content.

## Learn more & find inspiration:

The financial benefits of OER (<http://goo.gl/mQ7fvn>):

A recent report by Open Course Library and Student PIRGs estimates that OCL has saved students $5.5 million since its inception with students saving an average of $96 per course compared with using traditional textbooks – some 90% reduction over the previous cost which would equate to $41.6 million at 100% adoption across the state. Washington’s community and technical colleges are experiencing the brunt of these savings although the financial impact on institutions is less certain. As a return on state investment, though, the case is fairly compelling. The Utah Open Textbook Project claims to be able to produce science textbooks for $5 each on a production run of just over 2,500. […] But it remains a fact that most chief academic officers believe that OER can save their institution money, as the Babson Report (2011:25) found.

OER help at-risk and non-traditional students the most (<http://goo.gl/L797mf>):

The Bridge to Success project successfully worked with learners who had previously failed math courses and through the implementation of OER based courses across 1800 participants across 42 pilots, 88% of students went on to study their next semester.

The role of libraries in OER (<http://goo.gl/Su2IHW>):

If the goal of OER production is to change the culture in the academy, to create a community of teaching and learning that is more participatory, more open, and more accessible, to shift the value system towards one that privileges research and teaching materials that are available for use and reuse over content that is restricted and locked away, what better place from which to launch such an ambitious program than the library, the heart of the university?

OER reach learners who you might have never connected with (<http://goo.gl/W9TNUJ>):

"Every week or so I get a message from someone somewhere who's listening to the lectures and wants to get in touch," Mr. Hammer says. There was the man who downloaded his lectures onto a DVD so his father could listen while he jogged on the treadmill, the poet in Iran who said the lectures inspired her own teaching, and the friends who thanked him for making their morning commutes a little less stressful.

Then one day an e-mail arrived with a subject line that read "yak herder in Tibet." […] It was from Skal Bzang Tse Brtan, who grew up herding yaks in a nomadic Tibetan community. […] He stumbled on Yale's open classes after seeing a reference on a Chinese Web site, and before long he was spending his evenings poring over lessons in "Philosophy of Love in the Western World" […] "In my home area, it is very difficult to study English with native speakers, but I am so happy that I can study modern poetry online with Prof Langdon Hammer in English by free through the Yale's open course."

Learn more by reading the open access book by McGreal, Kinuthia, Marshall, & McNamara, *Open Educational Resources: Innovation, Research, and Practice* (2013): <http://goo.gl/Z8a3QI>

# How to get started with OER

As a user:

* Make an account on Merlot and search for materials in your discipline. Try them and leave reviews.
* Instead of a costly course pack or workbook, use the tools above to search for free online resources.
* Evaluate an Open Textbook for use in your class. Leave comments, write a blog post, and use the book (or parts of it) in a class that you are teaching.

As a contributor:

* Apply a [Creative Commons](http://www.creativecommons.org) license to your class materials.
* Make an account on Merlot and post a lesson plan, assignment, or exam you’ve made.
* Create an entire website for your course and post all of your materials.

With a few small steps, you can save your students money, improve your own course, and contribute to the education ecosystem.