

## Integrating Free Educational Multimedia Resources to Your Course

Open educational resources (OER) are any resources available at little or no cost that can be used for teaching, learning, or research. The resources can include:

- textbooks
- course readings
- simulations
- games
- syllabi
- quizzes, and other assessment tools

and virtually any other material that be used for educational purposes. Each resource is issued under a license that spells out how it can be used. Some materials may only be used in their original form; in other cases, learning resources can be modified, remixed, and redistributed.

One of the longest-running OER initiatives is the OpenCourseWare (<a href="http://ocw.mit.edu">http://ocw.mit.edu</a>) project from MIT, which began in 2002 and today features all of the course materials from over 2,000 MIT courses. The OpenCourseWare model has been replicated by dozens of colleges and universities around the world, which are putting full course materials online for anyone to use.

## Open Digital Libraries

**Library of Congress Collections (**<a href="http://www.loc.gov">http://www.loc.gov</a>): Library of Congress digital collections are available for use by the public. The Library provides one of the largest bodies of noncommercial high-quality content on the Internet. By providing these materials online, those who may never come to Washington can gain access to the treasures of the nation's library.

## National Science Digital Libraries (NSDL: http://nsdl.org/) for STEM courses:

- NSDL is the National Science Foundation's online library of resources and collections for science, technology, engineering, and mathematics education and research.
- Resources available through NSDL include images, video, audio, animations, software, datasets, and text documents such as lesson plans and journal articles.
- Use of the NSDL.org website and related search and reference services is completely
  free, as are the majority of the resources discoverable through NSDL. However, some of
  the resource providers who make their materials accessible through NSDL do require a
  login, or a fee-based membership or that users purchase the complete version of a
  resource.

National Libraries of Virtual Manipulative (NLVM: http://nlvm.usu.edu) for Math courses: NLVM is an NSF supported project that developed a library of uniquely interactive, web-based virtual



manipulatives or concept tutorials, mostly in the form of Java applets, for mathematics instruction (K-12 emphasis).

Open Multimedia Resources or Resources under Creative Commons

AcademicEarth: http://academicearth.org/. The site hosts educational videos and allows anyone to freely access instructions from the scholars and guest lecturers at the leading academic universities. It offers 60 full courses and 2,395 total lectures (almost 1300 hours of video) from Yale, MIT, Harvard, Stanford, UC Berkeley, and Princeton that can be browsed by subject, university, or instructor through a user-friendly interface. For example: the famous lecture series from Dr. Michael Sandel, Harvard University – Justice.

College Open Textbooks (COT): public domain or under a Creative Commons license http://www.collegeopentextbooks.org/. The COT is a project on the mission of driving awareness, adoptions, and affordabilities of open textbooks. The focus is on community colleges and lower division of 4-year institutions. An open textbook is an integrated course-associated learning tool that is in the public domain or has been open-licensed by the copyright holder to permit re-use without the necessity of asking permission of the copyright holder.

FlatworldKNOWLEDGE: under a Creative Commons license (CC BY-NC-SA) http://www.flatworldknowledge.com. Every Flat World textbook is free to read online – all students have access to the textbook that you assign.

Flickr: http://www.flickr.com/ Flickr is the online photo management and sharing application in the world. Most images could be used under the Creative Commons licenses.

Khan Academy: http://www.khanacademy.org offers over 3000 free education video resources for anyone, they cover math, science topics such as biology, chemistry, and physics, and finance and history. Each video is a digestible chunk, approximately 10 minutes long.

**MERLOT:** http://www.merlot.org offers over 30000 open multimedia resources designed for faculty and students of higher education for learning and online teaching.

MIT OpenCourseWare (http://ocw.mit.edu): 2000 MIT courses are open to public.

MIT World http://mitworld.mit.edu/: free and open site that provides on demand video of significant public events at MIT.

**TED:** http://ted.com brings the inspiring talks available to the world, for free. More than 900 TEDTalks are now available, with more added each week. All of the talks are subtitled in English, and many are subtitled in various languages. These videos are released under a Creative Commons BY-NC-ND license, so they can be freely shared and reposted.



WGBH Forum Network: http://forum-network.org is a public media service of WGBH. The online library contains thousands of video and audio lectures from the world's foremost scholars, authors, artists, scientists, policymakers, and community leaders, available to the public for free.

YouTube, YouTubeEDU: http://www.youtube.com/edu was launched in May 2009. It is an educational hub and is aggregating videos from dozens of colleges and universities (such as MIT and Stanford), ranging from lectures to student films to athletic events.

**Creative Commons:** http://creativecommons.org/ enables the sharing and use of creativity and knowledge through free legal tools, and maximizes digital creativity, sharing, and innovation.