Introduction to Open Educational Resources

By:
Judy Baker

Introduction to Open Educational Resources

By:
Judy Baker

Online:
< http://cnx.org/content/col10413/1.3/ >

C O N N E X I O N S

Rice University, Houston, Texas

This selection and arrangement of content as a collection is copyrighted by Judy Baker. It is licensed under the Creative Commons Attribution 2.0 license (http://creativecommons.org/licenses/by/2.0/).
Collection structure revised: April 17, 2009
PDF generated: October 26, 2012
For copyright and attribution information for the modules contained in this collection, see p. 52.

Table of Contents

1 OER Introduction 1
2 OER Open Courseware 7
3 OER Fair Use, Copyright, and TEACH Act 11
4 OER Identifying Sources 17
5 OER Discipline-Specific Sources 23
6 OER Public Domain Textbook Sources 31
7 OER Use of Primary Sources 37
8 OER Development 41
9 OER Delivery, Storage, and Organization 47
Index 51
Attributions 52

Chapter 1

OER Introduction[1]

1.1 Lesson: Introduction

1.1.1 Lesson Components

- Fast Fact
- Skills/Objectives
- Success Indicators
- Introduction
- Activity
- Review questions
- Resources

1.1.2 Fast Fact

According to Wikipedia[2] , OER is a term that was first adopted at UNESCO's 2002 Forum on the Impact of Open Courseware for Higher Education in Developing Countries funded by the Hewlett Foundation. The definition OER is:

"digitized materials offered freely and openly for educators, students and self-learners to use and re-use for teaching, learning and research"

1.1.3 Skills/Objectives

Learners will be able to:

1. Define and describe OER.
2. List the advantages and disadvantages of OER use.

1.1.4 Success Indicators

1. Learner memberships in OER community websites.
2. Learner-generated posting to open forum about OER issues.

[1] This content is available online at <http://cnx.org/content/m14466/1.10/>.
[2] http://en.wikipedia.org/wiki/Open_educational_resources

1.2 Introduction

Definition

Open Educational Resources (OER) are learning materials freely available in the public domain. A definition of OER[3] from the The William and Flora Hewlett Foundation is:

"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 term OER has been used to refer to learning materials such as:

- Learning objects[4] (quizzes, crossword puzzles, flashcards, animations, etc.)
- Audio lectures[5]
- Audiovideo lectures
- Images[6]
- Sounds and music
- Entire course content and open courseware[7]
- Collections of journal articles[8] and institutional repositories
- Textbooks[9]

Background

Hewlett Foundation[10] has taken a pioneering role in the development and use of OER with its support of many initiatives: "The Open Educational Resources movement began in 2001 when the Hewlett and the Andrew W. Mellon foundations jointly funded MIT OpenCourseWare (OCW), the first institution committed to making all of its course materials freely available. Since then, more than 60 additional institutions have launched OpenCourseWare Web sites." Just some of the many OER initatives supported by the Hewlett Foundation include:

- MIT Open Courseware[11]
- Foothill-De Anza Community College District, Sharing Of Free Intellectual Assets (Sofia)[12]
- Johns Hopkins Bloomberg School of Public Health OpenCourseWare[13]
- Tufts University OpenCourseWare[14]
- Utah State University OpenCourseWare[15]
- eduCommons[16]
- Carnegie Mellon University, Open Learning Initiative[17]
- Monterey Institute for Technology, Online Advanced Placement courses[18]
- Connexions[19]
- Internet Archive, Education[20]

[3] http://www.hewlett.org/Programs/Education/OER
[4] http://taste.merlot.org/repository.html
[5] http://webcast.berkeley.edu/courses.php
[6] http://commons.wikimedia.org/wiki/Category:Public_domain
[7] http://opencontent.org/ocwfinder/
[8] http://www.doaj.org/
[9] http://www.gutenberg.org/
[10] http://www.hewlett.org/Programs/Education/OER/Publications/oeroverview.htm
[11] http://ocw.mit.edu/
[12] http://sofia.fhda.edu/
[13] http://ocw.jhsph.edu/
[14] http://ocw.tufts.edu/
[15] http://ocw.usu.edu/
[16] http://cosl.usu.edu/projects/educommons
[17] http://www.cmu.edu/oli/
[18] http://www.archive.org/details/ap_courses
[19] http://cnx.org/
[20] http://www.archive.org/details/education

The Open Educational Resources movement is part of a global effort to make knowledge available to all. The UNESCO's Virtual University Forum[21] provides an overview about definitions, initiatives, and community-building. Many repositories of open learning materials are listed at the Open Educational Resources (OER) Index[22] .

Some benefits of OER include:

- Fosters pedagogical innovation and relevance that avoids teaching from the textbook
- Broadens use of alternatives to textbooks while maintaining instructional quality
- Lowers costs of course materials for students

Some disadvantages of OER include:

- Quality of available OER materials inconsistent
- Materials may not meet Section 508 ADA accessibility or SCORM requirements and must be modify to bring into compliance
- No common standard for review of OER accuracy and quality
- Need to check accuracy of content
- Customization necessary to match departmental and/or college curriculum requirements
- Technical requirements to access vary
- Technological determinism created by the delivery tool

Case Study

In his May 2006 article "Bye the Book My year of teaching environmental science without a textbook"[23] Eric Pallant describes how he and co-professor Terry Bensel experimented with teaching their Introduction to Environmental Science course at Allegheny College with no textbook. Instead they used a variety of open educational resources. Based on self-report, 41 of 46 students in their first-semester class read the same or more than they would have in a textbook. The experiment proved successful enough that the entire academic department has embraced the concept of OER. Faculty have distributed the work of collecting and banking websites for common use.

Sustainability

Recently, several websites have become available that provide tools to support the identification, development, use, re-use, collaboration, and delivery of open learning content including searching and organization of content. Some websites, such as: OER Commons[24] , Open Learn[25] , Open Content[26] , WikiEducator[27] , Connexions[28] , OWL Institute[29] , and OERderves[30] , are devoted to nurturing online learning communities, wikis, and blogs on various aspects of OER. Also, a new journal has gone online with a focus on OER: Eduforge: The International Journal of Open Education Resources[31] .

1.2.1 Support for OER Use on Campus

In order to promote use of OER across campus, the challenges must be identified and addressed. Results of a two-year study are presented in the article "Why Study Users: An Environmental Scan of Use and Users of Digital Resources in the Humanities and Social Sciences Undergraduate Education[32] ." Based on this

[21] http://www.unesco.org/iiep/virtualuniversity/forumsfiche.php?queryforumspages_id=13
[22] http://cwr.unitar.edu.my/file.php/1/Index.htm
[23] http://www.grist.org/comments/soapbox/2006/05/02/pallant/index.html?source=mtv
[24] http://www.oercommons.org/
[25] http://www.open.ac.uk/openlearn/home.php
[26] http://opencontent.org/blog/
[27] http://www.wikieducator.org/Main_Page
[28] http://cnx.org/
[29] http://owli.org/home/
[30] http://www.oerderves.org/
[31] http://journal.eduforge.org/index.php/eduforge
[32] http://www.firstmonday.org/issues/issue12_1/harley/index.html

study, barriers to use of digital resources including the lack of direct relevance to their preferred pedagogical approaches, and insufficient time and classroom resources. Challenges

- Resources for faculty support
- Quality assurance of learning materials
- Limited availability of fully vetted and comprehensive learning materials in some disciplines
- Articulation and transfer issues
- Printing and computer lab demands on campus by students
- Identification of collaborative tools for development, use, and delivery of OER learning materials
- Fostering use of the tools by faculty
- Compliance with federal and state accessibility requirements

Resources Needed to Support Faculty Use and Development of OER

- Training
- Technical assistance
- Software
- Hardware
- Release time

1.3 Activity

Experience

1. Get connected and become a part of the OER movement community:

- Go to OER Commons[33] . Join[34] and sign up to receive e-news.
- Go to Open Learn[35] . Browse topics[36] , register[37] to become a part of the OER community, sign up for the newsletter, and tell one friend about Open Learn[38] .
- Go to Rice University's Connexions[39] to read the feedback[40] from users and then register.

2. Read at least one of the following about the OER movement:

- Models for Sustainable Open Educational Resources[41] by Stephen Downes[42] , January 30, 2006
- The Current State of Open Educational Resources[43] by David Wiley, February 3, 2006
- Open Educational Resources: Toward a New Educational Paradigm[44] by Petrides & Jimes, October 2006

Reflect

1. Once you have joined OER Commons[45] , make your own posting to the OER Matters Discussions[46] area. Click on OER Matters Teaching and Learning Forum to answer the following question:

[33] http://www.oercommons.org/
[34] http://www.oercommons.org/createMember
[35] http://openlearn.open.ac.uk/index.php
[36] http://openlearn.open.ac.uk/index.php
[37] https://openlearn.open.ac.uk/login/signup.php
[38] http://www.open.ac.uk/openlearn/tell-your-friends.php
[39] http://cnx.org/
[40] http://cnx.org/feedback
[41] http://www.downes.ca/cgi-bin/page.cgi?post=33401
[42] http://www.downes.ca/cgi-bin/page.cgi?author=1
[43] http://opencontent.org/blog/archives/247
[44] http://www.ijournal.us/issue_14/ij_14_04_articleframe_Petrides_Jimes.html
[45] http://www.oercommons.org/join_form
[46] http://www.oercommons.org/matters/oer-matters-discussions

"Opening up new avenues for teachers and learners to select and augment learning resources that meet one's unique teaching and learning needs is the basic mission behind OER. But how do OER impact teaching and learning and what are the issues that we need to take into consideration?""

Apply

Now that you have a general idea of what OER is all about, you should be ready to make a couple of decisions:

1. Do you want to learn more about OER?

- Decide which lessons you want to complete in this tutorial.
- Decide the order in which you want to complete the lessons that makes the most sense for your learning needs.

2. Do you want to get the most out of this learning experience?

- Invite a colleague to join you in this tutorial.
- Complete all the exercises listed in the Activity component of each Lesson.

1.3.1 Review Questions

1. What are Open Educational Resources?
2. What are the advantages and disadvantages to using OER for teaching?

1.3.2 Resources

- Models for Sustainable Open Educational Resources[47]
- The Current State of Open Educational Resources[48]
- A Review of the Open Educational Resources (OER) Movement[49]
- Open Educational Resources: Toward a New Educational Paradigm[50]
- Open Educational Resources: Opportunities and Challenges[51]
- Open Educational Resources Serve the World[52]
- Giving Knowledge for Free: The Emergence of Open Educational Resources[53]
- The Future of Free Information[54]

[47] http://www.downes.ca/cgi-bin/page.cgi?post=33401
[48] http://opencontent.org/blog/archives/247#more-247
[49] http://oerderves.org/
[50] http://www.ijournal.us/issue_14/ij_14_04_articleframe_Petrides_Jimes.html
[51] http://www.oecd.org/dataoecd/5/47/37351085.pdf
[52] http://www.educause.edu/apps/eq/eqm05/eqm0533.asp
[53] http://www.oecd.org/dataoecd/35/7/38654317.pdf
[54] http://www.dufoundation.org/downloads/Article_2006_01.pdf

Chapter 2

OER Open Courseware[1]

2.1 OER Open Courseware

2.1.1 Lesson Components

- Fast Fact
- Skill/Objective
- Success Indicators
- Introduction
- Activity
- Review questions
- Resources

2.1.2 Fast Fact

MIT[2] first announced its Open Courseware program in 2001. The OCW provides open access to course materials for up to 1,550 MIT courses, representing 34 departments and all five MIT schools. The goal is to include materials from all MIT courses by 2008.

2.1.3 Skills/Objectives

Learners will be able to:

1. Identify sources of open courseware for use in their own teaching disciplines.
2. Locate at lesson in an open course to modify for use in their own teaching.

2.1.4 Success Indicators

1. Posted lesson plan that repurposes learning content from OCW for learner's own teaching.

2.2 Introduction

The OpenCourseWare movement began at the Massachusetts Institute of Technology (MIT) in 2002 and has now spread to some 120 other universities worldwide. According to UC Irvine[3] : "OpenCourseWare (OCW)

[1] This content is available online at <http://cnx.org/content/m14467/1.3/>.
[2] http://ocw.mit.edu/
[3] http://ocw.uci.edu/

is a free and open digital publication of high quality university-level educational materials, often including syllabi, lecture notes, assignments and exams. Open educational resources are based on the notion that knowledge and education are common goods that must be supported by a defined community."

While OCW initiatives typically do not provide a degree, credit, certification, or access to instructors, the materials are made available, for free, under open licenses for use and adaption by educators and learners anywhere.

Definition

According to the Open Courseware Consortium[4] :

"An OpenCourseWare site is a free and open digital publication of high quality educational materials, organized as courses...is available for use and adaptation under an open license...does not typically provide certification or access to instructors."

The OpenCourseWare Finder Finder[5] currently shows search results from:

- MIT OCW[6]
- Utah State University OCW[7]
- Johns Hopkins School of Public Health OCW[8]
- Tufts University OCW[9]
- Foothill De-Anza SOFIA[10]
- Carnegie Mellon Open Learning Initiative[11]

Other universities with open courseware include:

- University of California, Irvine[12]
- University of Notre Dame[13]
- University of Washington Computer Science & Engineering[14]
- Stanford on iTune[15]
- Penn State[16]

Wikiversity[17] is a online group of educators engaged in a collaborative learning effort using wiki software, which makes collaboration easy. Take the guided tour[18] to discover more.

HippoCampus[19] , a project of the Monterey Institute for Technology and Education (MITE), provides high-quality, multimedia content on general education subjects to high school and college students free of charge.

2.3 Activity

Experience

1. Use the OpenCourseWare Finder Finder[20] to search for Open Courseware in your teaching discipline.

[4] http://www.ocwconsortium.org/support/index.html
[5] http://opencontent.org/ocwfinder/
[6] http://ocw.mit.edu/
[7] http://ocw.usu.edu/
[8] http://ocw.jhsph.edu/
[9] http://ocw.tufts.edu/
[10] http://sofia.fhda.edu/
[11] http://www.cmu.edu/oli/
[12] http://ocw.uci.edu/
[13] http://ocw.nd.edu/
[14] http://www.cs.washington.edu/education/course-webs.htm
[15] http://itunes.stanford.edu/
[16] https://www.e-education.psu.edu/oer
[17] http://en.wikiversity.org/wiki/Wikiversity:Introduction
[18] http://en.wikiversity.org/wiki/Wikiversity:Guided_tour/Main_Page
[19] http://www.hippocampus.org/
[20] http://opencontent.org/ocwfinder/

2. Listen to a lecture podcast at Stanford on iTunes[21] or Berkeley.

Reflect

1. Participate in the Wikiversity Motto contest[22] by posting your choice and why on the wiki or at the [23] Wikiversity Colloquium[24] .

Apply

1. Develop a lesson plan that repurposes learning content from OCW for your own teaching.
2. Consider adding your own course to Wikiuniversity[25] . Use the tutorial[26] provided.

[21] http://itunes.stanford.edu/
[22] http://en.wikiversity.org/wiki/Wikiversity:Motto_contest
[23] http://en.wikiversity.org/wiki/Wikiversity:Colloquium#Motto_and_slogan_contests:_selecting_amongst_tied_finalists
[24] http://en.wikiversity.org/wiki/Wikiversity:Colloquium#Motto_and_slogan_contests:_selecting_amongst_tied_finalists
[25] http://en.wikiversity.org/wiki/Wikiversity:Adding_content
[26] http://en.wikiversity.org/wiki/Wikiversity:Introduction

2.3.1 Review Questions

1. What are some of the sources of open courseware?
2. Which sources of open courseware provide learning materials that can be modified for use in the learner's own teaching?

2.3.2 Resources

- How the Open Source Movement Has Changed Education: 10 Success Stories[27]
- The Promise of Open Educational Resources[28]

[27] http://oedb.org/library/features/how-the-open-source-movement-has-changed-education-10-success-stories
[28] http://www.hewlett.org/NR/rdonlyres/4DEF17E2-4578-4453-BA9C-

Chapter 3

OER Fair Use, Copyright, and TEACH Act[1]

3.1 Lesson: Fair Use and Copyright

3.1.1 Lesson Components

- Fast Fact
- Skill/Objective
- Success Indicators
- Introduction
- Activity
- Review questions
- Resources

3.1.2 Fast Fact

The copyright notice ©is no longer required for works published after March 1989. Absence of notice does not necessarily mean the work is within the public domain.

3.1.3 Skills/Objectives

Learners will be able to:

1. Define copyright, fair use, the TEACH Act, and intellectual property.

Success Indicators
Determine the appropriateness of their own use learning materials for OER in terms of fair use. Creative Commons license selected for learner's OER.

3.2 Introduction

A basic understanding of copyright, fair use, the TEACH Act, and intellectual property is necessary before using and developing OER in order to minimize the risk of violating the law. You are encouraged to visit one or more of the many online tutorials exist which address these topics.
Copyright

[1] This content is available online at <http://cnx.org/content/m14465/1.3/>.

- Copyright and Distance Education[2]
- ©Primer[3] , University of Maryland
- Digital[4] focuses specifically on issues relating to copyright in digital works and the problems encountered by educational institutions in their use of digital materials for teaching, research and service
- The Case of Dr. No[5] is a video clip that addresses the challenges faced by faculty when distributing copyrighted material from various sources.
- The Copyright Crash Course[6] from the University of Texas at Austin
- Copyright Term and the Public Domain in the United States[7]
- Copyright Management Center at IUPUI[8]
- VA Tech Copyright Info[9]
- Copyright Tutorial[10]

Fair Use

The fair use doctrine, as codified in §17 U.S.C. 107, sets forth four general factors to be considered when evaluating whether a proposed use of a copyrighted work is a fair use and thus, does not require permission from the copyright holder.

The four factors are:

1. What is the purpose of the proposed use?
2. What is the nature of the copyright work to be used?
3. How much of the copyrighted work will be used?
4. What is the effect on the market or potential market for the copyrighted work?

- Fair Use[11]
- Common Scenarios of Fair Use Issues: Posting Materials on Course Management Systems[12]
- Library of Congress Questions and Answers: Copyright and Fair Use[13]
- Copyright & Fair Use at Stanford[14]
- Rules of Thumb for Displaying and Performing Others' Works in Distance Learning[15]
- A Teacher's Guide to Fair Use and Copyright[16]
- Copyright and Fair Use in the Classroom, on the Internet, and the World Wide Web[17]
- Stanford Copyright Law and Fair Use[18]

TEACH Act

The TEACH Act is updates copyright law for digital online education as a compromise effort to address the copyright restriction disparities between digital classroom and the traditional classroom in terms of performances and displays. TEACH Toolkit[19] provides checklists and a "best practices" as well as basic information. Under the Teach Act, faculty can use copyrighted material in their online courses without seeking the author's permission under the following circumstances:

[2] http://www.copyright.iupui.edu/dist_learning.htm
[3] http://www-apps.umuc.edu/primer/
[4] http://www-apps.umuc.edu/dcprimer/enter.php
[5] http://marconi.umuc.edu/ramgen/cip/educause_dr_no/case_of_no.rm
[6] http://www.lib.utsystem.edu/copyright
[7] http://www.copyright.cornell.edu/training/Hirtle_Public_Domain.htm
[8] http://www.copyright.iupui.edu/
[9] http://scholar.lib.vt.edu/copyright/
[10] http://www.lib.ncsu.edu/scc/tutorial/copyuse/index.html
[11] http://www.copyright.iupui.edu/fairuse.htm
[12] http://www.copyright.iupui.edu/fuscenarios.htm
[13] http://memory.loc.gov/learn/start/cpyrt/
[14] http://fairuse.stanford.edu/
[15] http://www.utsystem.edu/ogc/intellectualproperty/copypol2.htm#distance
[16] http://home.earthlink.net/∼cnew/research.htm
[17] http://www.umuc.edu/library/copy.html
[18] http://www-sul.stanford.edu/cpyright.html
[19] http://www.lib.ncsu.edu/scc/legislative/teachkit/

- The college must be accredited and nonprofit.
- The college must have an internal policy on use of copyrighted material and on copyright law.
- The college must provide printed or online resources for faculty members that describe their rights and responsibilities under copyright law.
- The material must not have been originally intended for educational use.
- The material must have been lawfully acquired
- The material must be an integral part of the class session.
- Reasonable precautions must be made to restrict access to the copyrighted content to students enrolled in the course.
- Other reasonable controls must be used to prevent students from disseminating the material after viewing it.
- If a digital version of the material is readily available for use at the institution, then the instructor cannot convert an analog version to digital form for use in an online course.
- The college must inform students that the material may be protected by copyright law.

Intellectual Property

Watch the video introduction[20] to Creative Commons (CC)[21] . CC is a nonprofit organization that provides authors with(free tools to manage their intellectual property. A CC license allows others to reproduce a licensed work when they give credit to the license holder. The CC website has a tool that generates licenses[22] (in HTML format) based on chosen criteria. Educause provides good summary of 7 Things Series You Should Know About Creative Commons[23]

3.3 Activity

Experience

1. Watch Dr. No Returns![24] is a video clip in which an instructor would like to use the TEACH Act to provide music from various sources to a "History of Music" course through a password protected web site.
2. Use Checklist for the TEACH Act[25] to determine whether or not your planned use of learning materials are suitable as OER is in compliance with the TEACH Act.
3. Use one of the EduSource Canada Public Domain Wizard[26] to determine if the learning materials you plan to use are in the public domain.
4. Use Checklist for Fair Use[27] to determine whether or not your planned use of learning materials are suitable as OER in terms of fair use.

Reflect

1. Once you have joined OER Commons[28] , make your own posting to the OER Matters Discussions[29] area. Click on OER Matters Intellectual Property Forum to answer the following question:

[20] http://search.creativecommons.org/
[21] http://creativecommons.org/
[22] http://creativecommons.org/
[23] http://www.educause.edu/ir/library/pdf/ELI7023.pdf
[24] http://marconi.umuc.edu/ramgen/cip/educause_dr_no/no_returns.rm
[25] http://www.copyright.iupui.edu/teachlist.htm
[26] http://www.edusource.ca/craw/PD_Wizard.html
[27] http://www.copyright.iupui.edu/checklist.htm
[28] http://www.oercommons.org/join_form
[29] http://www.oercommons.org/matters/oer-matters-discussions

"At the core of OER use and re-use are legal issues surrounding the sharing, use, and re-use of OER as a way to sustain and grow the OER movement. How does the shift from proprietary to participatory impact OER?"

Apply

1. Choose an OER License[30] for learning materials you might develop and share.
2. Read about how intellectual property and fair use[31] impact decisions to publish scholarly works at Connexions[32] . Decide if you want to contribute[33] to Connexions.

[30] http://wikieducator.org/Open_Educational_Content/olcos/CHOOSE_a_license
[31] http://cnx.org/help/ipfaq
[32] http://cnx.org/
[33] http://cnx.org/content/m14346/latest/

3.3.1 Review Questions

1. What is fair use?
2. What is the TEACH Act?
3. How do fair use and the TEACH Act apply to the use of OER in your teaching?

3.3.2 Resources

- The Copyright Crash Course" from the University of Texas at Austin[34]
- New Copyright Law for Distance Education: The Meaning and Importance of the TEACH Act[35]
- Balancing copyright concerns: The TEACH Act of 2001[36]

[34] http://www.lib.utsystem.edu/copyright
[35] http://www.copyright.iupui.edu/teach_summary.htm
[36] http://www.educause.edu/ir/library/pdf/ERM01610.pdf

Chapter 4

OER Identifying Sources[1]

4.1 OER Tools to Identify and Select

4.1.1 Lesson Components

- Fast Fact
- Skill/Objective
- Success Indicators
- Introduction
- Activity
- Review questions
- Resources

4.1.2 Fast Fact

Open Educational Resources (OER) are "digitized materials offered freely and openly for educators, students and self-learners to use and re-use for teaching, learning and research." Term first adopted at UNESCO's 2002 Forum on the Impact of Open Courseware for Higher Education in Developing Countries funded by the Hewlett Foundation. - from Wikipedia[2]

4.1.3 Skills/Objectives

Learners will be able to:

1. Identify resources for use of primary sources as learning materials in their own teaching disciplines.
2. Locate at least one primary source for use in teaching.
3. Develop a lesson plan using primary sources.

4.1.4 Success Indicators

1. OER added to learner's own online collection or portfolio.
2. OER review posted by the learner.
3. Posted lesson plan that uses at least one primary source as an OER for their own teaching.

[1] This content is available online at <http://cnx.org/content/m14475/1.10/>.
[2] http://en.wikipedia.org/wiki/Open_educational_resources

4.2 Introduction

Several resources are available on the Internet that provide teachers with tools to identify and select OER for use in instruction. Some of these are: OER Commons[3] , MERLOT[4] , Connexions[5] , FREE: Federal Resources for Educational Excellence[6] , COL Knowledge Finder[7] , and Creative Commons[8] .

4.2.1 OER Commons

OER Commons is one of several Internet resources where you can identify and select OER. With a free membership, you can add tags, ratings, reviews, comments, and favorites to your own portfolio. You can post to discussion, blog, and wiki areas, and see how others are using OER.

OER Commons is created and produced by ISKME, the Institute for the Study of Knowledge Management in Education. It is generously supported by the William and Flora Hewlett Foundation and represents dozens of collaborations with OER partners and communities across the globe.

4.2.2 MERLOT

MERLOT is a pioneer in the development of searchable and shareable online learning materials for higher education. The site provides collection[9] of peer reviewed[10] learning materials created by registered members. MERLOT provides criteria for peer-review of learning materials submitted.

Take a Tour of the new Merlot[11] . Searches in MERLOT can be sorted by date, reviews ratings, title, author, and material type. A tutorial about how to search for learning materials using MERLOT is available from the SUNY Teaching, Learning, and Technology Program.

Connexions

Connexions[12] has a repository of OER that are searchable by subject, language, popularity, title, keyword, and author. The repository contains 3925 reusable modules woven into 211 collections. The content in Connexions comes in two formats: modules, which are like small "knowledge chunks," and courses, which are collections of modules. The Connexions Creative Commons open license[13] allows for free use and reuse of all its content.

FREE

FREE: Federal Resources for Educational Excellence[14] provides links to hundreds of education resources from or supported by the U.S. government.

OER Repositories

WikiEducator provides several tools for identification and use of OER including the Exemplary Collection of Open eLearning Content Repositories[15] .Lola Exchange[16] provides learning objects and learning activities available for searching by topic, title, discipline, or author. Disciplines listed are Mathematics, Science and Technology, Social Sciences, Business, Arts, Education, and Humanities. All materials are reviewed according to standard criteria by volunteers. Curriki[17] is a global education and learning community dedicated

[3] http://www.oercommons.org/
[4] http://www.merlot.org/
[5] http://www.oercommons.org/matters/oer-matters-discussions
[6] http://www.free.ed.gov/
[7] http://cnx.org/content/m14475/latest/www.colfinder.org/ocw
[8] http://search.creativecommons.org/
[9] http://taste.merlot.org/merlotcollection.html
[10] http://taste.merlot.org/peerreviewprocess.html
[11] http://taste.merlot.org/tour/index.htm
[12] http://cnx.org/
[13] http://creativecommons.org/licenses/by/2.0/
[14] http://www.free.ed.gov/
[15] http://www.wikieducator.org/Exemplary_Collection_of_Open_eLearning_Content_Repositories
[16] http://www.lolaexchange.org/
[17] http://www.curriki.org/xwiki/bin/view/Main/WebHome

to providing quality learning materials worldwide. Learning materials can be searched by the following topics:Arts, Educational Technology, Foreign Languages, Health, Language Arts, Mathematics, Science, Social Studies, and Vocational Education. A re-launch of the site is planned soon to add the following new features:

- Access information, tools, and resources from the new member home page[18] .
- View and comment on other members' learning resources[19] .
- Edit and collaborate on learning materials, and build collections and resources with Currikulum Builder[20] .
- Develop content in the Currikulum Builder with templates[21] .
- Manage your own contributions and collections, as well as your user profile and blog, using your personalized space in MyCurriki[22] .

COL Knowledge Finder

COL Knowledge Finder[23] is a service that searches reliable sources of information in open and distance learning and provides organization tools. Emphasis is on international development goals like poverty alleviation, health and education for all. The COL Knowledge Finder service is provided by The Commonwealth of Learning (COL) which is an intergovernmental organisation created by Commonwealth Heads of Government to encourage the development and sharing of open learning and distance education knowledge, resources and technologies. To use the search tool, click on "Search". Then follow the guidelines on the screen. More details are available from the Orientation[24] . Training videos[25] for effective searching and use of the COL Knowledge Finder tools are available.

Creative Commons

Creative Commons[26] provides a way to find shareable photos, music, text, books, and other educational material utilizing Creative Commons enabled search services at Google, Yahoo!, Flickr, blip.tv, Owlmusic, and SpinXpress. A Content Curators[27] wiki area is available that provides a list of curators of Creative Commons-licensed content. Users are invited to contribute to and edit this list themselves.

Edu2.0

Take a tour[28] of Edu2.0[29] to discover all browsable shared course content organized by topic. Resources include quizzes, webquests, presentations, projects, experiments, courses, classes, curricula, audio, video, powerpoint, excel and other kinds of attachments.

4.3 Activity

Experience

1. Review the criteria[30] available from MERLOT's Peer Review process.
2. Go to OER Commons[31] , MERLOT[32] , Connexions[33] , and FREE[34] to search for content in your teaching discipline.

[18] http://www.curriki.org/xwiki/bin/view/mail/Memberhome
[19] http://www.curriki.org/xwiki/bin/view/Main/Learningresources
[20] http://www.curriki.org/xwiki/bin/view/Main/CurrikulumBuilder
[21] http://www.curriki.org/xwiki/bin/view/Main/Templates
[22] http://www.curriki.org/xwiki/bin/view/Main/MyCurriki
[23] http://www.colfinder.org/ocw
[24] http://www1.colfinder.org/colintro/index.jsp
[25] http://www.colfinder.org/training/index.jsp
[26] http://search.creativecommons.org/
[27] http://wiki.creativecommons.org/Content_Curators
[28] http://www.edu20.org/company/tour
[29] http://www.edu20.org/
[30] http://taste.merlot.org/evaluationcriteria.html
[31] http://www.oercommons.org/
[32] http://www.merlot.org/merlot/index.htm
[33] http://cnx.org/
[34] http://www.free.ed.gov/

3. View the CNBC video interview[35] with Scott McNealy about Curriki.
4. Visit the OWL Institute Portal[36] to search for resources, people and communities; browse courses and home pages or create your own.

Reflect

1. Participate in the latest OER Commons Survey[37] and check the results.
2. Visit the OER Matters Discussions[38] to read and post comments about the How and Why of OER:

"Share your thoughts, experiences and expertise on the OER movement, its challenges and potential impact. Why does OER matter, how does it work, and what are the possibilities for the future of use and re-use of open education content?"

Apply

1. Review learning materials at OER Commons[39] . Type keywords in the Search[40] box in the upper right corner of the screen to identify at least one OER to review.

- Click on Save this Search.
- Sort by Rating. Click on the title of the OER you want to review, then click on View Item.
- Click on Rate Item to give it your rating.
- Click on Review Item to submit your review.

2. Submit your review of some learning materials at MERLOT[41] . You will need to become a member[42] before you can submit your review.

3. If you know of a good source of open educational resources, submit the Internet address for inclusion on the COL Knowledge Finder submit-a-site page[43] .

[35] http://www.cnbc.com/id/16184176
[36] http://owli.org/moodle/
[37] http://www.oercommons.org/matters/surveys-results
[38] http://www.oercommons.org/matters/oer-matters-discussions
[39] http://www.oercommons.org/
[40] http://www.oercommons.org/
[41] http://www.merlot.org/
[42] http://www.merlot.org/merlot/join.htm
[43] http://www.colfinder.org/support/request_general.jsp

4.3.1 Review Questions

1. What are some of the repositories where OER can be located and reviewed?
2. What tools and features are available to identify and select OER?

4.3.2 Resources

- Exemplary Collection of Open eLearning Content Repositories[44]
- Searching for Public Domain Materials on the Web[45]
- Open Educational Practices and Resources. OLCOS Roadmap 2012[46]

[44] http://www.wikieducator.org/Exemplary_Collection_of_Open_eLearning_Content_Repositories
[45] http://library.colstate.edu/tutorials/webfind/webfind6.shtml
[46] http://www.olcos.org/english/roadmap/roadmap.html

Chapter 5

OER Discipline-Specific Sources[1]

5.1 OER Discipline-Specific Sources

5.1.1 Lesson Components

- Fast Fact
- Skill/Objective
- Success Indicators
- Introduction
- Activity
- Review questions
- Resources

5.1.2 Fast Fact

Learning objects[2] are:

- Web-based, self-contained, small chunks of learning
- small enough to be embedded in a learning activity, lesson, unit or course
- flexible, portable, and adaptable, and can be used in multiple learning environments and across disciplines

5.1.3 Skills/Objectives

Learners will be able to:

1. Identify resources for locating OER in their own teaching disciplines.
2. Develop a lesson plan using a discipline-specific OER.

5.1.4 Success Indicators

1. Lesson plan developed which uses OER.

[1] This content is available online at <http://cnx.org/content/m14473/1.17/>.
[2] http://www.wisc-online.com/about.asp#defined

5.2 Introduction

In addition to simply searching for Public Domain Materials on the Web[3] , a number of OER and learning object[4] repositories of on the internet provide a means to search for learning materials by topic and academic subject matter. The Center for International Education at UW-Milwaukee provides a thorough list of learning object repositories[5] .

Other repositories include:

- Wisc-Online (Wisconsin Online Resource Center)[6]
- Gateway to Educational Materials[7]
- Co-operative Learning Object Exchange (CLOE)[8]
- Wikipedia List of Graphics in the Public Domain[9]
- Wikimedia Public Domain Images[10]
- Creative Commons[11]
- LibriVox[12]
- ibiblio[13]
- OAIster catalog of digital resources[14]
- Photos at Flickr Licensed under Creative Commons[15]
- Subject Specific Images for Educational Use from University of Michigan[16]
- GCSE Bitesize[17]

Other discipline-specific sources of OER include:

Archeology

- Archeology[18]

Art History

- Art History images from University of Michigan[19]

Computer Science

- XML: Managing Data Exchange[20]
- Programming from the Ground Up[21]
- Learning 2.0[22]

Economics

[3] http://library.colstate.edu/tutorials/webfind/webfind6.shtml
[4] http://en.wikipedia.org/wiki/Learning_Object
[5] http://www.uwm.edu/Dept/CIE/AOP/LO_collections.html
[6] http://www.wisc-online.com/
[7] http://www.thegateway.org/
[8] http://cloe.on.ca/
[9] http://en.wikipedia.org/wiki/Wikipedia:Public_domain_image_resources#General_collections
[10] http://commons.wikimedia.org/wiki/Category:Public_domain
[11] http://creativecommons.org/
[12] http://librivox.org/
[13] http://www.ibiblio.org/
[14] http://www.oaister.org/
[15] http://ccflickr.bluemountains.net
[16] http://images.umdl.umich.edu/cgi/i/image/image-idx?page=groups;g=art-ic
[17] http://www.bbc.co.uk/schools/gcsebitesize/
[18] http://opencontext.org/
[19] http://arthist.cla.umn.edu/aict/html/tech.html
[20] http://en.wikibooks.org/wiki/XML:_Managing_Data_Exchange
[21] http://savannah.nongnu.org/projects/pgubook/
[22] http://blog.missiontolearn.com/2008/02/learning-20-ebook-free/

- EconPort[23]
- Marketing[24]
- Corporate Finance[25]
- Principles of Enterpreneurship[26]
- U.S. Economy in Brief[27]
- Outline of the U.S. Economy[28]
- Political Economy[29]
- New Rules for the New Economy[30]
- Introduction to Economic Analysis[31]

French

- French Learning Object Repository for Education[32]

Health

- Johns Hopkins Center for Public Health Preparedness[33]
- CDC Public Health Image Library[34]
- MedlinePlus Interactive [35]
- The Chemistry of Health[36]
- HIV Medicine 2007[37]
- Free Medical Information[38]

History

- Library of Congress, American Memory[39]
- Digital History: American History[40]
- Harvard University Library Open Collections Program[41]
- History Matters[42]
- Internet Modern History Sourcebook[43]
- University of California, American West Collection[44]
- World History Sources[45]
- American Political History images[46]

[23] http://econport.org/
[24] http://ollie.dcccd.edu/mrkt2370/book/mrktbook.htm
[25] http://welch.econ.brown.edu/book/
[26] http://usinfo.state.gov/products/pubs/entrepreneurship/
[27] http://usinfo.state.gov/products/pubs/economy-in-brief/
[28] http://usinfo.state.gov/products/pubs/oecon/
[29] http://en.wikibooks.org/wiki/Political_Economy/General
[30] http://www.kk.org/newrules/contents.php
[31] http://introecon.com/
[32] http://flore.uvic.ca/welcome.php
[33] http://www.jhsph.edu/preparedness/index.html
[34] http://phil.cdc.gov/phil/home.asp
[35] http://www.nlm.nih.gov/medlineplus/tutorials/
[36] http://publications.nigms.nih.gov/chemhealth/
[37] http://www.hivmedicine.com/
[38] http://www.freemedicalinformation.com/fmi/2ndedit.htm
[39] http://lcweb2.loc.gov/amhome.html
[40] http://www.digitalhistory.uh.edu/
[41] http://ocp.hul.harvard.edu/
[42] http://www.historymatters.gmu.edu/
[43] http://www.fordham.edu/halsall/mod/modsbook.html
[44] http://www.cdlib.org/inside/projects/amwest/
[45] http://chnm.gmu.edu/whm/whmfinding.php
[46] http://teachpol.tcnj.edu/amer_pol_hist/

- EASE History[47]
- Hypertext History: Our Online American History Textbook[48]
- US History.org[49]
- Hippocampus - click on U.S. history, then click on Textbooks tab[50]
- Oral Histories[51]
- America's Story Jump Back in Time[52]
- American Memory Timeline[53]
- Freedom A U.S. History (webisodes)[54]
- Outline of U.S. History[55]
- About America: Women of Influence[56]

Literature

- Electronic Text Public Library Online Texts[57]
- Children's Literature[58]
- U.S. Literature in Brief[59]

Math

- Drexel University, Math Forum[60]
- Eisenhower National Clearinghouse[61]
- AMSER the Applied Math and Science Education Repository[62]
- CauseWeb[63]
- Math[64]
- Linear Algebra[65]
- A First Course in Linear Algebra[66]
- Introduction to Probability[67]
- Elements of Abstract and Linear Algebra[68]
- Linear Methods of Applied Mathematics[69]
- Multivariate Calculus[70]
- Mathematics under the Microscope[71]

Philosophy

[47] http://www.easehistory.org/index2.html
[48] http://www.digitalhistory.uh.edu/database/hyper_titles.cfm
[49] http://www.ushistory.org/
[50] http://www.hippocampus.org/
[51] http://www.tellingstories.org/
[52] http://www.americaslibrary.gov/cgi-bin/page.cgi/jb
[53] http://memory.loc.gov/ammem/ndlpedu/features/timeline/index.html
[54] http://www.pbs.org/wnet/historyofus/menu.html
[55] http://usinfo.state.gov/products/pubs/histryotln/index.htm
[56] http://usinfo.state.gov/products/pubs/womeninfln/
[57] http://www.ipl.org/div/subject/browse/hum60.60.00/
[58] http://bygosh.com/
[59] http://usinfo.state.gov/products/pubs/literature-in-brief/
[60] http://mathforum.org/
[61] http://web.archive.org/web/20041013043116/www.enc.org/?ls=bc
[62] http://amser.org/
[63] http://www.causeweb.org/resources
[64] http://www.nongnu.org/fhsst/fhsstmaths.pdf
[65] http://textbookrevolution.org/math/a-first-course-in-linear-algebra
[66] http://linear.ups.edu/
[67] http://www.dartmouth.edu/~chance/teaching_aids/books_articles/probability_book/book.html
[68] http://www.math.miami.edu/~ec/book/
[69] http://www.mathphysics.com/pde/
[70] http://www.math.gatech.edu/~cain/notes/calculus.html
[71] http://www.maths.manchester.ac.uk/~avb/micromathematics/downloads

- Stanford University, Encyclopedia of Philosophy[72]
- Formal Logic[73]

Physics

- Open Text Project – Physics[74]
- Physics[75]
- Physics Light and Matter[76]
- Physics[77]

Political Science

- Democracy in Brief[78]
- How the U.S. is Governed[79]
- Outline of the U.S. Legal System[80]
- Introduction to Human Rights[81]
- Outline of American Geography[82]

Psychology

- ePsych[83]

Science

- Illumina[84]
- Access Excellence[85]
- Carnegie Mellon University, Chemistry Collective[86]
- University of Washington, High School Human Genome Program[87]
- National Human Genome Research Institute[88]
- National Science Digital Library[89]
- University of Colorado, Physics Education Technology[90]
- National Science Teachers Association, Science Teachers' GrabBag[91]
- AMSER the Applied Math and Science Education Repository[92]
- Teacher's Domain[93]
- Bacteriology[94]

[72] http://plato.stanford.edu/
[73] http://en.wikibooks.org/wiki/Formal_Logic
[74] http://www3.baylor.edu/Physics/open_text/
[75] http://physics/
[76] http://www.lightandmatter.com/area1.html
[77] http://www.nongnu.org/fhsst/fhsstphy.pdf
[78] http://usinfo.state.gov/products/pubs/democracy-in-brief/
[79] http://usinfo.state.gov/products/pubs/abtamerica/index.htm
[80] http://usinfo.state.gov/products/pubs/legalotln/
[81] http://usinfo.state.gov/products/pubs/hrintro/hrintro.htm
[82] http://usinfo.state.gov/products/pubs/geography/
[83] http://epsych.msstate.edu/index.html
[84] http://www.ilumina-dlib.org/index.asp
[85] http://www.accessexcellence.org/AE/
[86] http://www.chemcollective.org/
[87] http://hshgp.genome.washington.edu/
[88] http://www.chemcollective.org/
[89] http://www.nsdl.org/
[90] http://www.colorado.edu/physics/phet/
[91] http://www.nsta.org/resourcesgrabbag
[92] http://amser.org/
[93] http://www.teachersdomain.org/index.html
[94] http://www.textbookofbacteriology.net/

- Physical Geography[95]
- The Physical Environment Introduction to Physical Geography[96]
- Intro to Physical Oceanography[97]
- Biochemistry[98]
- Biology[99]
- The Structures of Life (biology)[100]
- Chemistry[101]
- Human Physiology[102]
- The New Genetics[103]
- Environmental Science[104]
- Introduction to Physical Oceanography[105]
- Inside the Cell - Biology[106]
- Curiosity Creates Cures The Value and Impact of Basic Research[107]
- Medicines by Design (pharmacology)[108]

Sociology

- Introduction to Sociology[109]

Spanish

- Spanish[110]

5.3 Activity

Experience

1. Find learning materials in your teaching discipline at each of the following repositories. Note whether or not a review or rating of the learning materials is available.

- MERLOT[111]
- Wisc-Online (Wisconsin Online Resource Center)[112]
- Gateway to Educational Materials[113]
- Co-operative Learning Object Exchange (CLOE)[114]

[95] http://www.physicalgeography.net/fundamentals/contents.html
[96] http://www.uwsp.edu/geo/faculty/ritter/geog101/textbook/title_page.html
[97] http://oceanworld.tamu.edu/home/course_book.htm
[98] http://www.web.virginia.edu/Heidi/home.htm
[99] http://www.estrellamountain.edu/faculty/farabee/biobk/biobooktoc.html
[100] http://publications.nigms.nih.gov/structlife/
[101] http://www.nongnu.org/fhsst/fhsstchem.pdf
[102] http://en.wikibooks.org/wiki/Human_Physiology
[103] http://publications.nigms.nih.gov/thenewgenetics/index.html
[104] http://oceanworld.tamu.edu/resources/oceanography-book/contents1.htm
[105] http://oceanworld.tamu.edu/home/course_book.htm
[106] http://publications.nigms.nih.gov/insidethecell/
[107] http://publications.nigms.nih.gov/curiosity/
[108] http://publications.nigms.nih.gov/medbydesign/
[109] http://en.wikibooks.org/wiki/Introduction_to_Sociology
[110] http://studyspanish.com/index.htm
[111] http://www.merlot.org/merlot/communities.htm
[112] http://www.wisc-online.org/
[113] http://www.thegateway.org/
[114] http://cloe.on.ca/

- Wikipedia List of Graphics in the Public Domain[115]
- Wikimedia Public Domain Images[116]
- FREE: Federal Resources for Educational Excellence[117]
- Creative Commons[118]

Reflect

Complete one of the following reflection activities:

1. Join MERLOT[119] , identify[120] learning materials in your teaching discipline, then add an assignment to a learning object or review a learning object.
2. Join OER Commons[121] , then make your own posting to the OER Matters Discussions[122] area. Click on OER Matters Localization Forum to answer the following question:

"Participate in discussions about how open education content is localized and how the creation of OER facilitates or impedes making content be context-specific. How is content localized at the individual, school, cultural, and national level, and what are the benefits?"

Apply

1. Identify the most useful sources of OER for use in your teaching discipline.
2. Develop a lesson plan using these discipline-specific sources. Post your lesson plan to MERLOT[123]

[115] http://en.wikipedia.org/wiki/Wikipedia:Public_domain_image_resources#General_collections
[116] http://commons.wikimedia.org/wiki/Category:Public_domain
[117] http://www.free.ed.gov/
[118] http://creativecommons.org/
[119] http://www.merlot.org/merlot/join.htm
[120] http://www.merlot.org/merlot/communities.htm
[121] http://www.oercommons.org/join_form
[122] http://www.oercommons.org/matters/oer-matters-discussions
[123] http://www.merlot.org/merlot/index.htm

5.3.1 Review Questions

1. What is a learning object?
2. What are the most useful sources of OER in your teaching discipline?
3. What criteria can be used to assess the usefulness of these OERs?

5.3.2 Resources

- The Instructional Use of Learning Objects: Online Version[124]
- A KEEP Toolkit Case Study: Promoting Use of MERLOT Learning Objects [125] [126] by Sharing Authors' and Users' Pedagogical Knowledge and Experience[127]
- All about learning objects[128]
- Learning Objects - EduCause[129]

[124] http://reusability.org/read/
[125] http://jolt.merlot.org/vol1_no1_iiyoshi.htm
[126] http://jolt.merlot.org/vol1_no1_iiyoshi.htm
[127] http://jolt.merlot.org/vol1_no1_iiyoshi.htm
[128] http://www.eduworks.com/LOTT/tutorial/
[129] http://www.educause.edu/645?PARENT_ID=606

Chapter 6

OER Public Domain Textbook Sources[1]

6.1 OER Sources of Public Domain Textbooks

6.1.1 Lesson Components

- Fast Fact
- Skills/Objectives
- Success Indicators
- Introduction
- Activity
- Review questions
- Resources

6.1.2 Fast Fact

6.1.3 Project Gutenberg has 20,000 free books in its Online Book Catalog and is the oldest producer of free ebooks on the Internet.

6.1.4 Skills/Objectives

Learners will be able to:

- Locate sources of public domain textbooks.
- Establish criteria for selection of public domain textbooks.

6.1.5 Success Indicators

- Lesson plan developed that incorporates use of a public domain textbook.

6.2 Introduction

Faculty often find the task of selecting reading materials or textbooks for a course daunting. Instructors can ease the selection process by establishing and following criteria such as quantity, quality, accuracy, currancy,

[1] This content is available online at <http://cnx.org/content/m14471/1.10/>.

reading level, relevance, and reliability. Whether due to passion for the course topic or simply hasty decision-making, some instructors make the mistake of selecting and assigning an overwhelming amount of reading for their students. Try estimating how many minutes students will need to complete each reading assignment and adjust your selection of learning materials accordingly. Another concern is that information provided to students, especially in printed textbooks, can quickly become outdated.

Criteria/Guidelines for Selection of Materials

- Quality of content, literary merit and format
- Timeliness
- Favorable reviews
- Permanence/lasting value
- Authority: author
- Scope
- Physical quality
- Format: print, CD-ROM, online, etc.
- reading level

Two major efforts to promote the development and sharing of public domain textbooks are Connexions[2] and Wikibooks[3] . Free Textbook Search[4] allows users to search for free textbooks in 113 sites in English, German, French, Dutch or Swedish.

Connexions[5] is a project at Rice University supported by the Hewlett Foundation to promote collaborative development, free sharing, and rapid publishing of scholarly content on the Web. Content is organized in small modules that are easily connected into larger courses. All content is free to use and reuse under the Creative Commons "attribution" license.

Wikibooks[6] is a Wikimedia project started in 2003 with the mission to create a free collection of open-content textbooks that anyone can edit.

Collections of books that are freely available include Project Gutenberg[7] , Read Print[8] , Bartleby[9] , Online Books[10] , Electronic Text Service[11] , and the Open Book Project[12] .

Project Gutenberg has 20,000 free books in its Online Book Catalog and is the oldest producer of free ebooks on the Internet. The mission of Project Gutenberg[13] is to encourage the creation and distribution of eBooks. In an effort to promote intercultural understanding, the World Digital Library[14] plans to make available significant primary materials from cultures around the world, including manuscripts, maps, rare books, musical scores, recordings, films, prints, photographs, architectural drawings, and other significant cultural materials.

The Assayer[15] displays a list of textbooks that are freely available in many disciplines. For an example, see these introductory physics textbooks[16] and Liberte[17] , a first-year collegel French textbook. The Internet Public Library[18] provides a comprehensive list of books that are available on the internet. A video tour[19]

[2] http://cnx.org/
[3] http://en.wikibooks.org/wiki/Main_Page
[4] http://www.freetextbooks.eu/
[5] http://cnx.org/
[6] http://en.wikibooks.org/wiki/Main_Page
[7] http://www.gutenberg.org/
[8] http://www.readprint.com/
[9] http://www.bartleby.com/
[10] http://onlinebooks.library.upenn.edu/
[11] http://etext.lib.virginia.edu/ebooks/
[12] http://www.ibiblio.org/obp/
[13] http://www.gutenberg.org/
[14] http://www.worlddigitallibrary.org/project/english/index.html
[15] http://www.theassayer.org/
[16] http://www.lightandmatter.com/area1.html
[17] http://www.lightandmatter.com/french/
[18] http://www.ipl.org/
[19] http://www.ipl.org/div/about/tours/IPLTourIntroVideo.mov

of the site is available. Examples of free available eBooks from Bartleby[20] :

- The Harvard Classics Shelf of Fiction[21]
- The Oxford Shakespeare[22]
- Anatomy of the Human Body[23]
- The World Factbook, 2003 [24]
- Online Sapiens[25]

Two sources of audio books in the public domain are LibriVox[26] and Loudlit[27] . LibriVox[28] provides free audiobooks from the public domain with several options for listening. Loudlit[29] provides a text of great literary masterpieces as well as high quality audio to help readers improve their spelling, punctuation and paragraph structure. Loudlit literature includes children's stories, poetry, short stories, and novels.

Other sources of textbook learning materials are digital collections of institutional repositories[30] at universities and self-archiving[31] by authors on the internet. Some of these include:

- Scholarship of the California Digital Library[32]
- MIT textbooks[33]
- Hofstra University Hofprints-Hofstra University E-Print Archive[34]
- Cornell Race, Ethnicity, and Religion Project[35]

6.3 Activity

Experience

1. Identify some learning materials at Project Gutenberg[36] .
2. Go to Wikibooks[37] to identify textbooks in your teaching discipline.
3. Consider using Wikibooks for a class project[38] ; read the guidelines.
4. Take a tour[39] of Connexions to find out if it has resources of use to you in your teaching.

Reflect

1. Create an account[40] at Project Gutenberg then post your own review of a textbook.

Apply

[20] http://www.bartleby.com/
[21] http://www.bartleby.com/ebook/
[22] http://www.bartleby.com/70/
[23] http://www.bartleby.com/107/
[24] http://www.bartleby.com/151/
[25] http://onlinesapiens.com/books.html
[26] http://librivox.org/
[27] http://www.loudlit.org
[28] http://librivox.org/
[29] http://www.loudlit.org
[30] http://en.wikipedia.org/wiki/Institutional_repository
[31] http://www.eprints.org/openaccess/self-faq/
[32] http://repositories.cdlib.org/escholarship/
[33] http://ocw.mit.edu/ans7870/resources/index.htm
[34] http://hofprints.hofstra.edu/
[35] http://racereligion.library.cornell.edu/race/ebooks.php
[36] http://www.gutenberg.org/
[37] http://en.wikibooks.org/wiki/Main_Page
[38] http://en.wikibooks.org/wiki/Wikibooks:Guidelines_for_class_projects
[39] http://cnx.org/aboutus/tour/1.html
[40] http://www.gutenberg.org/wiki/Special:Userlogin

1. Distributed Proofreaders[41] . Help create an eBook.
2. Contribute[42] to Wikibooks by editing pages, creating new pages, publicizing Wikibooks, and many other ways, such as donating.

[41] http://www.pgdp.net/c/
[42] http://en.wikibooks.org/wiki/Wikibooks:Contributing_FAQ

6.3.1 Review Questions

1. What are the advantages and disadvantages to using public domain textbooks for teaching?
2. What are the most useful sources of public domain textbooks in your discipline and why?

6.3.2 Resources

- Project Gutenberg[43]
- The 7 Things You Should Know About E-Books[44]

[43] http://www.gutenberg.org/wiki/Main_Page
[44] http://www.educause.edu/content.asp?page_id=666&ID=ELI7020&bhcp=1

Chapter 7

OER Use of Primary Sources[1]

7.1 OER Use of Primary Sources

Lesson Components

- Fast Fact
- Skill/Objective
- Success Indicators
- Introduction
- Activity
- Review questions
- Resources

Fast Fact

The Library of Congress is the nation's oldest federal cultural institution and serves as the research arm of Congress. It is also the largest library in the world, with nearly 130 million items on approximately 530 miles of bookshelves. The collections include: books and other printed materials, sound and motion picture recordings, photographs, maps, and manuscripts. Reference: Office of the Librarian[2]

7.1.1 Skills/Objectives

Learners will be able to:

1. Identify resources for use of primary sources as learning materials in their own teaching disciplines.
2. Locate at least one primary source for use in their own teaching.
3. Develop a lesson plan using primary sources.

7.1.2 Success Indicators

1. Learner will post a lesson plan that uses at least one primary source as an OER for their own teaching.

7.2 Introduction

According to the National Archives[3] , the use of primary documents as learning materials promotes

[1] This content is available online at <http://cnx.org/content/m14474/1.4/>.
[2] http://www.loc.gov/about/
[3] http://www.archives.gov/education/

1. Student awareness that all written history is subjective in the sense that it reflects an author's interpretation of past events, and
2. Important analytical skills.

Primary sources include:

- personal records (birth certificates, death certificates, passports, driver's licenses)
- federal census figures
- newspapers
- local government files
- letters, personal diaries and memoirs
- drawings and photographs
- oral histories
- artifacts
- court transcripts

Complete the Introductory Lesson[4] about primary sources available from the American Memory project at the Library of Congress.

The Smithsonian Source Teaching with Primary Sources[5] is another useful resource for teaching American History. It includes videos, lesson plans, and searchable collection of primary documents.

American Rhetoric[6] makes audio clips of various speeches available from a Speech Bank via the internet. Website content at American Rhetoric[7] is free for educational uses under the Fair Use exception with attribution.

7.3 Activity

Experience

Complete at least two of the following activities:

1. Review one of the lesson plans posted at the National Archive's Teaching With Documents: Lesson Plans[8] and look at the Analysis Worksheets.
2. Create an account[9] at the Smithsonian Source Teaching with Primary Sources so that you can review lessons and add them to your own collection. Click on Historical Perspectives[10] to find a topic of interest to you and find DBQ to add to your collection.
3. Create an account[11] and login to the Primary Source so that you can set up a Portfolio for storing primary documents that you have identified and selected for use. Contribute[12] a Library of Congress resource link for your subject area. Search the Learning Experiences Collection[13] , select a Learning Experience of interest, and review it.
4. Create an introductory activity for your own students following the instructions posted at Primary Source Learning[14] .

Reflect

Post your responses to the following questions in your course Discussion area:

[4] http://memory.loc.gov/learn/lessons/psources/source.html
[5] http://www.smithsoniansource.org/
[6] http://www.americanrhetoric.com/
[7] http://www.americanrhetoric.com/
[8] http://www.archives.gov/education/lessons/index.html
[9] http://www.smithsoniansource.org/account/newaccount.aspx
[10] http://www.smithsoniansource.org/his/viewdetails.aspx
[11] http://www.primarysourcelearning.org/db/submission/
[12] http://www.surveymonkey.com/s.asp?u=17335722530
[13] http://www.primarysourcelearning.org/db/search/le.php
[14] http://www.primarysourcelearning.org/db/imagesdraw/index.shtml

- How would the learning experience be different for a student completing a lesson that uses primary sources versus the same lesson that uses a textbook?
- What challenges might you encounter as a teacher using primary sources instead of textbooks?

Apply

1. Identify a set of primary sources for use in your teaching.
2. Develop a lesson plan using these primary sources. Post your lesson plan to MERLOT[15] or OER Commons[16] .

[15] http://www.merlot.org/merlot/index.htm
[16] http://www.oercommons.org/

7.3.1 Review Questions

1. What are the advantages and disadvantages to using primary sources for teaching?
2. What are the most useful resources for teaching with primary sources in your discipline and why?

7.3.2 Resources

- Primary Source Learning Handbook[17]
- Use of Primary Sources in Library of Congress[18]
- National Archives Lesson Plans[19]
- Library of Congress[20]
- Primary Source Learning[21]
- Using digitized primary source materials in the classroom[22]

[17] http://www.primarysourcelearning.org/handbook/
[18] http://memory.loc.gov/learn/start/prim_sources.html
[19] http://www.archives.gov/education/lessons/
[20] http://memory.loc.gov/learn/lessons/primary.html
[21] http://www.primarysourcelearning.org/
[22] http://www.firstmonday.org/issues/issue10_6/bloom/index.html

Chapter 8

OER Development[1]

8.1 Lesson Components

- Fast Fact
- Skill/Objective
- Success Indicators
- Introduction
- Activity
- Review questions
- Resources

8.2 Fast Fact

"Universal design[2] is the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. The intent of universal design is to simplify life for everyone by making products, communications, and the built environment more usable by as many people as possible at little or no extra cost. Universal design benefits people of all ages and abilities." - Center for Universal Design[3]

8.3 Skills/Objectives

Learners will be able to:

1. Use tools and resources to develop OER.
2. Identify the requirements for OER in order to comply with ADA Section 508 requirements.

8.4 Success Indicators

1. OER developed by the learner added to learner's own online collection or portfolio.

[1] This content is available online at <http://cnx.org/content/m14469/1.15/>.
[2] http://en.wikipedia.org/wiki/Universal_design
[3] http://www.design.ncsu.edu:8120/cud/about_ud/about_ud.htm

8.5 Background

As noted by Todd Richmond[4] at a DIY Media seminar at the Annenberg Center in 2006, the commons-based peer production[5] or do-it-yourself shared media production aspect of OER may well be a catalyst for innovation once OER goes viral[6] . Several resources are available on the Internet that provide teachers with tools to share and collaborate on the development of OER for use in instruction. Some of these are: Rice Connexions, Open Learning Content Observatory Services (OLCOS), WikiEducator, and WikiBooks.

Accessibility

Certain accessibiilty requirements must be addressed when developing OER for electronic dissemination to students. By law, ADA Section 508[7] , learning materials, including interfaces, images, sounds, multimedia elements, and all other forms of information, must be made available for used by anyone, regardless of disability. Detailed information about accessibility guidelines are available at Web Accessibility Initiative (WAI)[8] and the Americans with Disabilities Act (ADA)[9] . A-Prompt[10] is an accessibility evaluation and repair tool from the University of Toronto in cooperation with the Trace Center and CAST. A demonstration version is available for download. A-Prompt lists what it considers to be errors and offers a chance to correct each one. Utah State University, Web Accessibility in Mind (Webaim)[11] offers various "How To" information and support on creating accessible web sites. Web authors can find a Section checklist, sample HTML markup and various articles and courses on accessible web design. The Accessible Web Publishing Wizard[12] simplifies the task of converting PowerPoint presentations, Word documents, and (in the future) Excel spreadsheets to accessible HTML through an easy-to-use user interface and automation of many of the details of conversion.

8.5.1 Rice Connexions

Take a tour of Connexions[13] . Connexions was started at Rice University in 1999 to promote innovative ways to write, edit, publish, and use textbooks and other learning materials. Connexion participants are encouraged to:

- Create educational materials and contribute them to the repository[14]
- Rip or copy the material and customize it
- Mix the material together into new books and courses
- Burn or create finished products such as e-learning web courses, CDroms, and even printed books

Open-access software tools and free-use materials are available via the Creative Commons Attribution license[15] to facilitate collaboration and sharing. At Connexions, instructors can easily collaborate[16] on OER development in a variety of roles including coauthors, maintainers, workgroup members, suggesters, and users of derived copies. Instructors can update their OER course material and make it available for distribution quickly.

OWL Institute

In addition to providing users with connections to OER resources and communities, the OWL Institute Portal[17] to provides the opportunity for users to develop and share their own OER resources. Contact the Owl Institute to receive "creator" or "teacher" access to courses and pages.

[4] http://weblogs.annenberg.edu/diy/2006/10/todd_richmond_on_open_educatio.html
[5] http://en.wikipedia.org/wiki/Commons-based_peer_production
[6] http://www.nostatic.com/hewlett/
[7] http://www.section508.gov/
[8] http://www.w3.org/WAI/Resources
[9] http://www.usdoj.gov/crt/ada/adahom1.htm
[10] http://aprompt.snow.utoronto.ca/
[11] http://www.webaim.org/
[12] http://cita.rehab.uiuc.edu/software/office/
[13] http://cnx.org/aboutus/tour/
[14] http://cnx.org/sitelicense
[15] http://cnx.org/creativecommons.org/licenses/by/2.0/
[16] http://cnx.org/help/reference/collaboration
[17] http://owli.org/moodle/

Digital Universe
The Digital Universe[18] seeks stewards and voluntary consultants to assist[19] in their efforts "to organize the sum total of human knowledge and make it available to everyone."
Le Mill
Tour Le Mill[20] to find a variety of open learning materials. Join the Learning Mill community to contribute and share your own learning materials. FAQs[21] describe how to use the site.
More Tools
OLCOS, the UK's Open Learning Content Observatory Services[22] project contains a 30 minute tutorial about how to produce OER[23] . This tutorial provides information and practical tasks in creating and modifying open content in open process as well as formats that can be published as open educational resources and tools, that support this process. Wikieducator[24] promotes collaborative authoring and use of OER by providing tools using wiki technologies such as eXe[25] . The Wikideducator Content Development Project[26] is an opportunity for educators to contribute and share their OER. Wikibooks Wikibooks[27] is a Wikimedia[28] project that started in 2003 with the goal to create a free collection of open-content textbooks that anyone can edit. Since its inception, volunteers have written over 25,000 modules in a multitude of textbooks. If you're an instructor planning on using Wikibooks for a class project, read guidelines for class projects[29] . Take a tour[30] of the Instructional Architect[31] , a service of the National Science Digital Library, to find out how you can use it to find discipline-specific OER, organize and modify those resources into activities for your students, and make those new activities available to a variety of audiences. ccMixter[32] is a community music site provide opportunities to collaborate with others to re-purpose and mix existing learning materials licensed under Creative Commons. Send2Wiki[33] is a new tool that lets users easily send a copy of a webpage to a wiki for remixing. Wikia[34] are provides free wiki hosting designed expressly for promoting reuse of open content with the MediaWiki software. All content on Wikia is perpetually licensed under the GNU Free Documentation License.

8.6 Activity

Experience
Creative Commons
Use Creative Commons[35] to search for learning materials that you are free to use, remix, repurpose, etc.
Wikieducator
Watch a short video about how to create an account at Wikieducator[36] . Register for your account.
OER Commons

1. Join OER Commons. Go to the OER Commons[37] website, then click on Join Now.

[18] http://www.dufoundation.org
[19] http://www.dufoundation.org/participation.php
[20] http://lemill.net/content/lemill-tour
[21] http://lemill.net/content/lemill-faq
[22] http://www.olcos.org/english/home/
[23] http://wikieducator.org/Open_Educational_Content/olcos/PRODUCE_&_REMIX
[24] http://www.wikieducator.org/
[25] http://exelearning.org/
[26] http://www.wikieducator.org/How_to_contribute_and_use_content
[27] http://en.wikibooks.org/wiki/Main_Page
[28] http://en.wikipedia.org/wiki/Wikimedia
[29] http://en.wikibooks.org/wiki/Wikibooks:Guidelines_for_class_projects
[30] http://ia.usu.edu/takethetour.html
[31] http://ia.usu.edu/index.php
[32] http://ccmixter.org/
[33] http://www.send2wiki.com/
[34] http://www.wikia.com/
[35] http://search.creativecommons.org/
[36] http://www.wikieducator.org/Wikieducator_tutorial/Creating_an_Account/Show_me_how
[37] http://www.oercommons.org/

2. Click on Start My OER Portfolio.
3. Visit Shared Portfolios[38] posted to the OER Commons website to see to see how others search, use, and interact with OER.

Reflect

Post to your course Discussion area in response to the following questions:

1. What is the best way to promote development of OER among educators?
2. Who should be responsible for ensuring that OER are developed with ADA Section 508 accessibilty requirements in mind?

Apply
MERLOT

1. View the Gallery of Sample MERLOT From the Author Snapshots[39]
2. Go to the MERLOT website.
3. View a few Personal Collections posted by others.
4. Become a member of MERLOT[40] .
5. Create your own MERLOT Personal Collection[41] .

Wikibooks

1. Create an account at Wikibooks[42] .
2. Go to Wikibooks Sandbox[43] to create a wiki.

Connexions

Create a module[44] to share at Connexions[45] .

- After registering, review the New Author Guide[46] .
- You can import a Word document or use the Connexions Edit-in-Place tool to create your module.

[38] http://www.oercommons.org/matters/share
[39] http://www.cfkeep.org/html/gallery.php?id=96530011199908
[40] http://taste.merlot.org/evaluationcriteria.html
[41] http://taste.merlot.org/personalcollections.html
[42] http://en.wikibooks.org/wiki/Special:Userlogin
[43] http://en.wikibooks.org/wiki/Wikibooks:Sandbox
[44] http://cnx.org/help/ModuleInMinutes
[45] http://cnx.org/
[46] http://cnx.org/help/authorguide

8.6.1 Review Questions

1. What are some of the resources you can use to remix, repurpose OER, and develop your own OER?
2. What is necessary to ensure compliance with ADA Section 508 accessibility laws when developing OER for electronic dissemination to student?

8.6.2 Resources

- Collaborative Development of Open Content[47]
- WikiEducator: Memoirs, Myths, Misrepresentations and the Magic[48]
- OER Development and Publishing Initiatives[49]
- Open Educational Resources – Anonymity vs. Specificity[50]
- Advancing Sustainability of Open Educational Resources[51]

[47] http://firstmonday.dk/issues/issue8_2/keats
[48] http://blog.worldcampus.psu.edu/index.php/2007/04/04/wikieducator/
[49] http://oerwiki.iiep-unesco.org/index.php?title=OER_development_and_publishing_initiatives
[50] http://www.eurodl.org/materials/contrib/2006/Bernd_Remmele.htm
[51] http://proceedings.informingscience.org/InSITE2007/IISITv4p535-544Kooh275.pdf

Chapter 9

OER Delivery, Storage, and Organization[1]

OER Delivery, Storage and Organization

9.1 Lesson Components

- Fast Fact
- Skill/Objective
- Success Indicators
- Introduction
- Activity
- Review questions
- Resources

9.2 Fast Fact

"As of January 2006, there were over 3,200 modules and over 150 courses in Connexions. Volunteers are translating modules and courses into a wide variety of different languages, including Spanish, Japanese,Italian, Chinese, Portuguese, and Thai." - OECD[2]

9.3 Skills/Objectives

Learners will be able to:

1. Course participants will use various tools as well as peer collaboration to build a Public Domain Materials Portfolio of discipline-specific public domain materials suitable for use in their own teaching.
2. Determine cost-effective printing options for students.

9.4 Success Indicators

1. OER added to learner's own online collection or portfolio.
2. OER review posted by the learner.

[1] This content is available online at <http://cnx.org/content/m14472/1.3/>.
[2] http://www.oecd.org/dataoecd/3/6/36781781.pdf

9.5 Introduction

Several resources are available on the Internet that provide teachers with tools to organize, deliver, and share OER for use in instruction. Some of these are: MERLOT, Connexions, and WikiEducator. Instructors can deliver deliver OER to students in either digital or print formats. OLCOS, the UK's Open Learning Content Observatory Services[3] project contains a 30 minute tutorial about how to publish and share OER[4] .

9.5.1 OER Commons

OER Commons[5] allows members to share portfolios. Your personalized portfolio allows you quick access to your previous use of the OER Commons. As you engage with OER content by submitting ratings and reviews, your portfolio is created automatically. If desired, you can share your portfolio with others and allow others to build on what you know. Also, you can view others' portfolios to see how people are finding, using, and interacting with OER.

9.5.2 MERLOT

Read about MERLOT's Personal Collections[6] . Build and display your portfolio, as it evolves for the duration of your students' course participation, using the From the Author Snapshots.

WikiEducator

WikiEducator provides an Content Development Project[7] as an opportunity for insturctors to contribute and share their OER.

Connexions

Funded by the William and Flora Hewlett Foundation, Connexions is part of a broader effort to use the internet for innovative delivery of educational materials. At Connexions, instructors can set up a collection of learning materials. A course/collection contains several Connexions modules that you group together in a specific order. These modules will appear as chapters in a single document to Connexions visitors who view your course/collection.

Rice University's Connexions[8] provides on-demand printing with QOOP Inc. that will allow students and instructors to order high-quality, hardbound textbooks from Connexions via the internet for affordable prices.

In the Connexions Community College Initiative, the top 10 community college courses, including English composition, college algebra, introduction to psychology, general chemistry, are being developed. These courses will be available for free in Connexions and in a low-cost printed form. Under this model, readers can access all books online for free, and they will pay only if they want a printed book, which they'll order online and for home delivery. Connexions also plans to develop a catalog of the 10 most-popular community college textbooks, which also will be free for online viewing and cost less than $30 when purchased as hardbound books. Connexions plans to offer more than 100 titles for online purchase by year's end.

Delivery of Course Materials

OER developers can distribute their learning materials via the internet using the tools and resources provided for free to educators at WordCircle[9] , NiceNet[10] , Digication[11] , or Epsilen[12] .

[3] http://www.olcos.org/english/home/
[4] http://wikieducator.org/Open_Educational_Content/olcos/SHARE
[5] http://www.oercommons.org/
[6] http://taste.merlot.org/personalcollections.html
[7] http://www.wikieducator.org/How_to_contribute_and_use_content
[8] http://cnx.org/
[9] http://www.wordcircle.org/
[10] http://www.nicenet.org/
[11] http://www.digication.com/
[12] http://www.epsilen.com/

Publishing Learning Materials

QOOP[13] 's print-on-demand[14] service will allow Connexions users to order customized course guides and a variety of fully developed Connexions textbooks. Standard paperbacks will take just 3-5 days to produce and ship, and traditional hardbacks will take about a week to produce. QOOP ships directly to customers.

Lulu lets you publish and sell and print on demand books, e-books, online music, images, custom calendars safari Take a tour of Lulu[15] to find out how to publish using their services. Lulu makes 20% of total cost of the textbook you publish using their services. SafariU[16] allows faculty to create, publish and share customized comuter science and information technology course materials. SafariU was developed by O'Reilly Media in conjunction with substantial feedback from educators and trainers. SafariU allows members to select chapters or sections from O'Reilly books and articles to include in custom print books and online learning resources that students can access directly. Other print-on-demand services include Illumina[17] and exlibris[18]

Activity

Experience

OER Commons

1. If you haven't already done so, join OER Commons. Go to the OER Commons[19] website, then click on Join Now.
2. Click on Start My OER Portfolio.
3. Visit Shared Portfolios[20] posted to the OER Commons website to see to see how others search, use, and interact with OER.

MERLOT

1. View the Gallery of Sample MERLOT From the Author Snapshots[21] then find out how to create your own Author Snapshot[22] using the KEEP Toolkit[23] .
2. Go to the MERLOT website.
   - View a few Personal Collections posted by others.
   - Create your own MERLOT Personal Collection[24]

Connexions

1. Create a Course/Collection[25] at the Connexions website.

Reflect

Post your response to the following to your course Discussion area:

1. What is the best way for you to disseminate OER to your students?
2. Do you want to share your OER for public use and repurposing? Why or why not?

Apply

1. Create a module[26] to share at Connexions.
2. Determine the cost to your students to purchase OER for your course using Lulu[27] .

[13] http://www.qoop.com/
[14] http://en.wikipedia.org/wiki/Print_on_demand
[15] http://www.lulu.com/demos/get_started
[16] https://www.safariu.com/index.do
[17] http://www.illumina.com/
[18] http://www2.xlibris.com/
[19] http://www.oercommons.org/
[20] http://www.oercommons.org/matters/share
[21] http://www.cfkeep.org/html/gallery.php?id=96530011199908
[22] http://taste.merlot.org/snapshots.html
[23] http://www.cfkeep.org/static/index.html
[24] http://taste.merlot.org/personalcollections.html
[25] http://cnx.org/help/CreateCollection
[26] http://cnx.org/help/ModuleInMinutes
[27] http://www.lulu.com/

9.5.3 Review Questions

1. What are some of the print-on-demand services for disseminating OER?
2. What tools and features are available to deliver OER?

9.5.4 Resources

- Case Study: Promoting Use of MERLOT Learning Objects by Sharing Authors' and Users' Pedagogical Knowledge[28]
- Open Educational Practices and Resources. OLCOS Roadmap 2012[29]
- What Makes an Open Education Program Sustainable: The Case of Connexions[30]

[28] http://jolt.merlot.org/vol1_no1_iiyoshi.htm
[29] http://www.olcos.org/english/roadmap/roadmap.html
[30] http://www.oecd.org/dataoecd/3/6/36781781.pdf

Index of Keywords and Terms

Keywords are listed by the section with that keyword (page numbers are in parentheses). Keywords do not necessarily appear in the text of the page. They are merely associated with that section. *Ex.* apples, § 1.1 (1) **Terms** are referenced by the page they appear on. *Ex.* apples, 1

D discipline, § 5(23)

F fair use, § 3(11)

O oer, § 1(1), § 2(7), § 4(17), § 5(23), § 7(37), § 9(47)
open courseware, § 2(7)
open educational resources, § 1(1), § 4(17), § 5(23), § 7(37), § 8(41), § 9(47)

P primary sources, § 7(37)

R repositories, § 9(47)

S sources, § 4(17)

T textbook alternatives, § 6(31)

Attributions

Collection: *Introduction to Open Educational Resources*
Edited by: Judy Baker
URL: http://cnx.org/content/col10413/1.3/
License: http://creativecommons.org/licenses/by/2.0/

Module: "OER Introduction"
By: Judy Baker
URL: http://cnx.org/content/m14466/1.10/
Pages: 1-6
Copyright: Judy Baker
License: http://creativecommons.org/licenses/by/2.0/

Module: "OER Open Courseware"
By: Judy Baker
URL: http://cnx.org/content/m14467/1.3/
Pages: 7-10
Copyright: Judy Baker
License: http://creativecommons.org/licenses/by/2.0/

Module: "OER Fair Use, Copyright, and TEACH Act"
By: Judy Baker
URL: http://cnx.org/content/m14465/1.3/
Pages: 11-15
Copyright: Judy Baker
License: http://creativecommons.org/licenses/by/2.0/

Module: "OER Identifying Sources"
By: Judy Baker
URL: http://cnx.org/content/m14475/1.10/
Pages: 17-21
Copyright: Judy Baker
License: http://creativecommons.org/licenses/by/2.0/

Module: "OER Discipline-Specific Sources"
By: Judy Baker
URL: http://cnx.org/content/m14473/1.17/
Pages: 23-30
Copyright: Judy Baker
License: http://creativecommons.org/licenses/by/2.0/

Module: "OER Public Domain Textbook Sources"
By: Judy Baker
URL: http://cnx.org/content/m14471/1.10/
Pages: 31-35
Copyright: Judy Baker
License: http://creativecommons.org/licenses/by/2.0/

Module: "OER Use of Primary Sources"
By: Judy Baker
URL: http://cnx.org/content/m14474/1.4/
Pages: 37-40
Copyright: Judy Baker
License: http://creativecommons.org/licenses/by/2.0/

Module: "OER Development"
By: Judy Baker
URL: http://cnx.org/content/m14469/1.15/
Pages: 41-45
Copyright: Judy Baker
License: http://creativecommons.org/licenses/by/2.0/

Module: "OER Delivery, Storage, and Organization"
By: Judy Baker
URL: http://cnx.org/content/m14472/1.3/
Pages: 47-50
Copyright: Judy Baker
License: http://creativecommons.org/licenses/by/2.0/

Introduction to Open Educational Resources
A self-paced tutorial about open educational resources as alternatives to textbooks for college teachers. Visitors are invited to actively participate by posting Activity Reflection entries to the course Discussion area. This tutorial has 9 Lessons organized into 3 Units: Background, OER Sources, and OER Use.

About Connexions
Since 1999, Connexions has been pioneering a global system where anyone can create course materials and make them fully accessible and easily reusable free of charge. We are a Web-based authoring, teaching and learning environment open to anyone interested in education, including students, teachers, professors and lifelong learners. We connect ideas and facilitate educational communities.

Connexions's modular, interactive courses are in use worldwide by universities, community colleges, K-12 schools, distance learners, and lifelong learners. Connexions materials are in many languages, including English, Spanish, Chinese, Japanese, Italian, Vietnamese, French, Portuguese, and Thai. Connexions is part of an exciting new information distribution system that allows for **Print on Demand Books**. Connexions has partnered with innovative on-demand publisher QOOP to accelerate the delivery of printed course materials and textbooks into classrooms worldwide at lower prices than traditional academic publishers.