OER Development*

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Abstract

Basics of developing open educational resources and available tools.

1 Lesson Components

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

2 Fast Fact

"Universal design[1] 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[2]

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.

4 Success Indicators

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

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†http://creativecommons.org/licenses/by/2.0/
[1]http://en.wikipedia.org/wiki/Universal_design
[2]http://www.design.ncsu.edu:8120/cud/about_ud/about_ud.htm

5 Background

As noted by Todd Richmond[3] at a DIY Media seminar at the Annenberg Center in 2006, the commons-based peer production[4] or do-it-yourself shared media production aspect of OER may well be a catalyst for innovation once OER goes viral[5] . 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[6] , 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)[7] and the Americans with Disabilities Act (ADA)[8] . A-Prompt[9] 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)[10] 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[11] 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.

5.1 Rice Connexions

Take a tour of Connexions[12] . 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[13]
- 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[14] to facilitate collaboration and sharing. At Connexions, instructors can easily collaborate[15] 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[16] 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.

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

Digital Universe
The Digital Universe[17] seeks stewards and voluntary consultants to assist[18] in their efforts "to organize the sum total of human knowledge and make it available to everyone."
Le Mill
Tour Le Mill[19] to find a variety of open learning materials. Join the Learning Mill community to contribute and share your own learning materials. FAQs[20] describe how to use the site.
More Tools
OLCOS, the UK's Open Learning Content Observatory Services[21] project contains a 30 minute tutorial about how to produce OER[22] . 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[23] promotes collaborative authoring and use of OER by providing tools using wiki technologies such as eXe[24] . The Wikideducator Content Development Project[25] is an opportunity for educators to contribute and share their OER. Wikibooks Wikibooks[26] is a Wikimedia[27] 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[28] . Take a tour[29] of the Instructional Architect[30] , 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[31] is a community music site provide opportunities to collaborate with others to re-purpose and mix existing learning materials licensed under Creative Commons. Send2Wiki[32] is a new tool that lets users easily send a copy of a webpage to a wiki for remixing. Wikia[33] 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.

6 Activity

Experience
Creative Commons

Use Creative Commons[34] 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[35] . Register for your account.
OER Commons

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

1. Join OER Commons. Go to the OER Commons[36] website, then click on Join Now.
2. Click on Start My OER Portfolio.
3. Visit Shared Portfolios[37] 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[38]
2. Go to the MERLOT website.
3. View a few Personal Collections posted by others.
4. Become a member of MERLOT[39] .
5. Create your own MERLOT Personal Collection[40] .

Wikibooks

1. Create an account at Wikibooks[41] .
2. Go to Wikibooks Sandbox[42] to create a wiki.

Connexions

Create a module[43] to share at Connexions[44] .

- After registering, review the New Author Guide[45] .
- You can import a Word document or use the Connexions Edit-in-Place tool to create your module.

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?

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

6.2 Resources

- Collaborative Development of Open Content[46]
- WikiEducator: Memoirs, Myths, Misrepresentations and the Magic[47]
- OER Development and Publishing Initiatives[48]
- Open Educational Resources – Anonymity vs. Specificity[49]
- Advancing Sustainability of Open Educational Resources[50]

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