Open Educational Resources (OER): Overview

What does "OER" mean?

Definition
Open educational resources are free and openly licensed (public domain, Creative Commons) educational materials that can be used for teaching, learning, research, and other purposes.

The 5 attributes of OERs allow you to:

- Retain - the right to own, archive, and make copies of the content
- Reuse - content can be reused in its unaltered form
- Revise - content can be adapted, adjusted, modified, and altered
- Remix - original or revised content can be combined with other content to create something new
- Redistribute - copies of the content can be shared with others in its original, revised or remixed form

Why use OERs?

Why Open Educational Resources Matter from Brendan Walsh on Vimeo.
Want to learn more?

- Open Education Fact Sheet by the Scholarly Publishing and Academic Resources Coalition (SPARC)
- A Faculty Perspective on Open Textbooks by Prof. Rajiv Jhangiani

Impacts

- OER Stories from faculty at Washington State Community and Technical Colleges
- Open educational resources and college textbook choices: a review of research on efficacy and perceptions by John Hilton
- The Review Project by the Open Education Group collects studies published about OER implementation and evaluations

Textbook costs

- U.S. Student PIRG Reports by Ethan Senack et al.
- Triaging Textbook Costs from Inside Higher Ed

Let us know about OERs you've developed or adopted in your course!

Email Prof. Cailean Cooney, Chair of the Library's OER Committee at ccooney@citytech.cuny.edu

Or contact your library liaison.

Browse OER projects

- Analog and Digital Telephony by Prof. Zory Marantz
- Anatomy and Physiology by Prof. Debbie Priftakis
- Biology I Lab Manual by Prof. Jeremy Seto
- Business and Professional Communication by Prof. David Lee
- Chemistry I Lab Manual by Prof. Suresh Tewani
- Construction Management II by Prof. Anne Marie Bowder
- Critical Health Psychology by Prof. Amanda Almond
- ENG1101 City Tech Digital Reader by Prof. Johannah Rodgers
- Health and Safety in Production by Prof. Sue Brandt
- Introduction to Mechanics by Prof. Ari Maller
- Marketing Management for Hospitality Services by Prof. Haejin (Ellen) Kim
- Precalculus Textbook by Prof. Thomas Tradler and Holly Carley
- Programming Fundamentals by Prof. Raffi Khatchadourian
- Art History Teaching Resources by Michelle Millar Fisher, Graduate Center, and Karen Shelby, Baruch College
- Calculus I Textbook: Calculus for Everyone by Prof. Sandra Kingan, Brooklyn College
- Critical Thinking: Primary Concepts by Prof. James DiGiovanna, John Jay College
- Philosophy Textbooks by Prof. Phil Pecorino, QCC
- Visionlearning: Your Insight into Science founded by Prof. Anthony Carpi, John Jay College
- Browse Academic Works, CUNY's new institutional repository for more CUNY made OER!
Open Educational Resources (OER): Understand Licensing & Attribution

Copyright basics

Your work is automatically protected under copyright law as soon as your pen hits the paper.

Copyright law provides authors of creative and scholarly work the exclusive rights to 1) reproduce, 2) make derivatives, 3) distribute copies, 4) perform, and 5) display a work publicly. Creators do not have to register their work or attach a copyright notice in order for copyright protection to apply to the work; the protection exists automatically from the time the work is created. Even if your work is never published, it is still protected by copyright for 70 years after your death (this is U.S. law). After 70 years, the copyright term of the work expires, and it becomes public domain. By contrast, a work "for hire"—meaning you transferred your copyright to a publisher—has an initial copyright term of 120 years.

How does copyright law impact information dissemination & production?

Creators retain five rights as the copyright holder of their work and this impacts how the work can be used or distributed, and can make it challenging to integrate intellectual materials into educational settings. For instance, this is why students need to purchase individual copies of textbooks since it's a violation of law to obtain copies without permission from the copyright holder.

Read more: Copyright FAQs for the Instructor

What about Fair Use?

Fair Use guidelines limit the exclusive rights of the copyright holder in certain scenarios, and can make it possible for you to use a work without permission from the copyright holder. Consult this tool (or this pdf version) to help ascertain if a proposed use meets the fair use criteria. There are also limitations to fair use. For example, the TEACH Act (Section 110(2) of the U.S. Copyright Act), does not permit the display of content on course sites. Rather, it permits display or performance of a copyrighted work for a class sanctioned activity only. Read more: Fair Use and Copyright for instructors

Introducing Creative Commons licenses

What are Creative Commons licenses?

Creative Commons licenses provide an alternative to the default “all rights reserved” nature of copyright. They allow creators to keep their copyright and easily give permission for others to distribute or build upon their work. CC licenses make the "open" in open educational resources possible.

When you create open learning materials you should always readily display:

1. Authorship (your name!)
2. The intellectual property license you’ve chosen and the link to its accompanying terms

This information lets admirers and adopters of your work credit you and discern how they might share and repurpose your work in accordance with the license terms.

Adopting Creative Commons licensed work and other materials

Why do you need to attribute?

Just like you cite and provide references in your scholarship, when you teach with course materials developed by someone else, you should always attribute their work by displaying the name of the author and the type of CC license that accompanies their work.

By properly attributing the author you ensure:

- The intellectual property rights of the author are preserved (all CC BY licenses require you to cite the author to be in compliance with the license...emphasis on the BYI)
- The provenance of the work is documented - this is fundamental to tracing the authority and relevancy of your course materials
- Clear indication of exactly how the resource can be shared or customized based on the provisions of the CC license (for ex., Does the license allow commercial or non-commercial use?)
- Any non-OER materials can be distinguished from CC licensed materials (Non-OERs might be library subscribed material or newspaper articles) so as not to confuse or misrepresent information to potential adopters

Example of how to attribute a photo:

"Creative Commons 10th Birthday Celebration San Francisco" by tvol is licensed under CC BY 2.0.

See more examples from Creative Commons

Tools to help you attribute

- Open Attribution Builder from Open Washington
- Install OpenAttribute, a browser plugin
Choose a Creative Commons license

Select one of six Creative Commons licenses.

- Understand your choice of CC licenses
- Use this Interactive CC license chooser to decide and generate embeddable licenses
- Read about the limitations and freedoms of CC licenses via this 2015 court ruling

The image below shows the 5 icons that represent different components in CC licenses.

Creative Commons
This symbol shows that the document, course, image, music, or art has a creative commons license.

BY
This license lets others distribute, remix, tweak, and build upon your work, even commercially, as long as they credit you for the original creation. This is the most accommodating of licenses offered. Recommended for maximum dissemination and use of licensed materials.

SA
If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original.

ND
This license allows for redistribution, commercial and non-commercial, as long as it is passed along unchanged and in whole, with credit to you.

NC
The work may not be used for commercial purposes

Follow CC license terms

- Learn how you can adopt and/or adapt by CC license type

Click on the image below to enlarge.

What content is OK to post on a course site?

Materials can be posted on the OpenLab or another content management system if:

- The copyright holder of the material grants permission (via a Creative Commons license or written consent) or You are the copyright holder of the material, or
- The material is made available by linking to a version made publicly accessible from the copyright holder, or
- The material is in the public domain

From Columbia’s Copyright Advisory Office

What if a work has no license displayed on it?

- You must assume it is under full copyright and seek permission from the right's holder in order to use. Alternatively, find a CC licensed version.

When in doubt, link out!

- If a material is freely available online (but is not public domain or CC licensed), always provide a link to that material to avoid copyright violation.
- Using library resources? Generate durable links to them!
Open Educational Resources (OER): Find Open Course Materials

### Textbooks
- OpenStax - from Rice University
- Open Textbook Library - from the University of Minnesota
- Open Textbooks from MIT
- Open SUNY Textbooks
- BC Campus OpenEd - open textbooks for the 40 highest enrolled first- and second-year subject areas in British Columbia's public, post-secondary system
- College Open Textbooks Collaborative - focused on driving awareness and adoptions of open and peer-reviewed textbooks to more than 2,000 community colleges
- Global Text Project

### Course materials (variety)
- MERLOT II - initiated by California State University, a curated collection of free and online learning materials, including multimedia resources.
- CUNY Open Educational Resources
- PhET Interactive Simulations - Responsive and accessible STEM simulations
- L4 Learning Library - A virtual resource exchange for assignments and learning activities
- OpenStax CNX - repository of thousands of learning objects
- OER Commons - provides tens of thousands of open educational resources, including college-level open textbooks from higher education institutions around the world.
- Open Oregon State Modules - open modules in the agricultural sciences and STEM fields that have dual-language functionality (Chinese-English and Spanish-English)
- Teaching Commons - OERs from colleges and universities across the country

### Courses
- MIT Open Courseware
- Open Course Library
- Open Learning Initiative - Carnegie Mellon
- Open Yale Courses
- edX
- Lumen Learning (low fee model)

### Photos
- Flickr Advanced Search - Creative Commons
- Google Advanced Image Search - select "usage rights" to filter results
- Pics4Learning
- Public Domain Images
  - Wikimedia Commons

As you search, look for obvious display of the following:
- Authorship and credentials
- Peer review and affiliations
- Intellectual property licensing:
  - Is there a fee model? Is this a company or a non-profit?
  - Are you required to register or pay for any services?
  - Are there terms of use or service?
  - Is the license displayed?

Using a content provider?
If you use a third party content provider like YouTube or Khan Academy, always check the Terms of Use!
Museums, Libraries, & Archives

- Digital Public Library of America Primary Source Sets
- OpenGLAM (Galleries, Libraries, Archives, and Museums) - search collections around the world; view a list of collections here
- NOAA Photo Library
- National Gallery of Art Images
- National Park Service Digital Images Archive
- SIRIS (Smithsonian images)
- Metropolitan Museum of Art - Public domain images marked "OASC"
- LACMA - Search by checking "Show public domain images only"
- The Getty
- Victoria and Albert Museum

Videos

Public domain (unless otherwise noted):
- Library of Congress Webcasts

Creative Commons licensed:
- MIT Video

Free to link to:
- Research Channel (on YouTube) *also embedable
- YouTube EDU * also embedable
- Big Think
- CosmoLearning
- Internet Archive - Video
- U.S. National Archives (on YouTube) *also embedable
- Vimeo
- Khan Academy
- Medical Animation Library
- Medline Plus Anatomy Videos
- VideoLectures.NET (STEM oriented)
- SnagFilms *also embedable
- TED *also downloadable
- Top Documentary Films

Music
Internet Archive - Audio
Free Music Archive (FMA)
ccMixter
Free Sound

Contact
Ursula C. Schwerin Library
New York City College of Technology of the City University of New York
300 Jay Street, Brooklyn, NY 11201
Circulation: 718.260.5470
Reference: 718.260.5485

Ask A Librarian
☎ Call Us
✉ Email Us
 Schedule a Research Appointments

City Tech
CUNY MyInfo
CUNYFirst
Blackboard
Campus Email
Open Educational Resources (OER): Evaluate & Adopt

Overview  Understand Licensing & Attribution  Find Open Course Materials  Evaluate & Adopt  City Tech Initiative

Evaluating OERs

Does the content meet your learning objectives?

- Is the material appropriate for the level of the course?
- Test the reading level of a text with this text readability rating tool
- Is the material culturally relevant and appropriate?
- Are there any factual errors?
- What does this content have that existing teaching materials do not have?

See OER Evaluation Criteria

Customizing and Authoring OERs

Modifying OERs  (modified from BCCampus)

If you want to make edits or append content, make sure the Creative Commons license allows for that (every CC license except the non-derivative license allows for modifications).

Resources for modifying OERs

- OER Adoption guide
- Adapt & revise open textbooks
- Develop print, video, audio, image, and web based materials by choosing the best authoring and file hosting tools
- Author an open textbook

Authoring OERs

- Develop print, video, audio, image, and web based materials by choosing the best authoring and file hosting tools
- Open textbook authoring guide

Usability

Accessibility

- OER Accessibility Toolkit from BC Campus
- OER Accessibility guide from MERLOT
- Computer Accessibility Resources from the Linguistic and Assistive Technologies Laboratory at RIT

Course Design

- Test your course site to see if it's mobile friendly
- Universal Design for Learning in Higher Education course design website
- The Floe Inclusive Learning Design Handbook by the Floe Project

Distribution

Link from your OpenLab site:

- Provide the link to your students so they have the option to select which file type (typically a PDF or EPUB) they would like to download. Do students have the option to purchase a low cost printed version?

Download copies of a book:

- Upload to your institutional content management system
- Share using an online file sharing service like Dropbox or Google Docs. Upload a copy of the book files to Dropbox or Google Docs and send your student the link to that copy.
- Upload to a website and send students to your website to download your copy of the textbook.

Print on demand options  (modified from BCCampus)

- Lulu offers numerous self publishing options; other universities have reported success with their POD services
- Keep in mind that textbooks that have a specific non-commercial clause (CC-BY-NC) cannot be sold with a markup or at a profit. However, charging a modest cost-recovery fee for physical textbooks is considered reasonable.

Contact

Ursula C. Schwerin Library
New York City College of Technology
of the City University of New York
300 Jay Street, Brooklyn, NY 11201
Circulation: 718.260.5470
Reference: 718.260.5485

Ask A Librarian

- Call Us
- Email Us
- Schedule a Research Appointments

City Tech

- CUNY MyInfo
- CUNYFirst
- Blackboard
- Campus Email