WTCS OER Playbook



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WTCS OER Playbook

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Wisconsin Technical College System 4622 University Avenue Madison, WI 53705



Contents

What is OER?	1
Openly licensing your work	
Creating an OER award program	3
Community for Open Wisconsin (COW)	4
WISELearn: Wisconsin's portal for OER	5
WISC-Online (FVTC): Open videos, tutorials, and virtual reality for TechEd	7
Skills Commons: Free and open content for occupational courses	9
Libretexts: Comprehensive open library with easy remix capabilities	10
OpenStax: General Education textbooks & partnership programs	11
Pressbooks: An open platform for creating, hosting and remixing OER	13
SPARC*: Advocacy, policy information, and resources for open movements	14
Textbook publishers, student privacy, and eLearning	15
Other resources to share with your stakeholders	17

If you have questions regarding the information in this playbook, contact $\underline{hilary.barker@wtcsystem.edu}$

What is OER?

Open Educational Resources (OER) are materials and content that are **free** and **openly licensed** so that they can be shared, revised, and used without restrictions.

Examples of OER content:

- Reports
- Slide decks
- Homework assignments
- Quizzes
- Pictures
- Videos
- Tutorials
- Virtual Reality Scenarios
- Textbooks
- Games
- This Playbook and much more!

The Five R's of Open Content

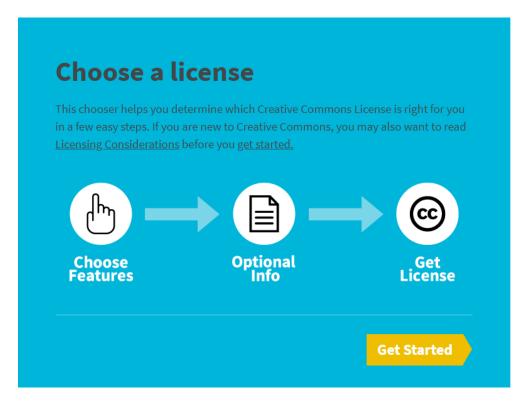
- REUSE
- REVISE
- REMIX
- RETAIN
- REDISTRIBUTE

Openly licensing your work

Whenever you create original content (photograph, slide deck, report, video, website, handouts, etc.), your work is automatically licensed under copyright by default. Thus, if you want your work to be openly licensed so that others can use, remix, and share this information, then you need to license this material with a **Creative Commons** license. Luckily, acquiring a Creative Commons license is easier than ever! Here are the steps:

Step 1: Visit https://creativecommons.org/share-your-work/

Step 2: Click 'Get Started'



Step 3: Select the features that you want for your license. For instance, do you want to allow others to use your work for commercial purposes? Do you want to allow others to make changes to your work?

Step 4 (optional): Add metadata to your license via the 'Help others attribute you!' section. You can add the title of the work and other attributes.

Step 5: Copy and paste your license to your work (see example on the page following the cover of this playbook). If you are adding this license to a website, use the java script to embed the license icon and link.

Creating an OER award program

Results from the WTCS OER surveys indicate that only 9% of faculty who adopt OER in their course received an incentive for this work (e.g., stipend, grant, release time). Thus, to help provide incentives at the system-level, WTCS Education Directors could develop OER award programs for excellence in faculty and staff work in open education. This award program can be tailored to best fit an instructional area. For instance, some instructional areas may primarily use no- or low-cost materials that are not open (e.g., industry-developed courseware), and thus instead of an OER award, perhaps an award for course affordability would be a better fit.

To view examples of OER award programs, visit:

- Texas A&M University Open Educational Materials Awards
 - o https://library.tamu.edu/services/scholarly communication/open ed awards.html
 - Award program at the college-level that is administered via the student government body and university library.
- Open Education Consortium Awards for Excellence
 - o https://www.oeconsortium.org/projects/open-education-awards-for-excellence/
 - o Provides leadership, practitioner, and student awards for excellence in open education.
- Open Oregon's Open Education Champion Award
 - o https://openoregon.org/2019-champions/
 - State-wide award program for OER champions for Oregon's community colleges and universities.

Community for Open Wisconsin (COW)

Collaborative organization for open content in Wisconsin that partners with and serves public libraries, K-12, WTCS, UWS, WAICU, and tribal colleges. This community will provide OER training, advocacy, outreach, and collaboration opportunities. Several WTCS stakeholders are on COW's steering committee, including Hilary Barker (WTCS) and librarians from CVTC and FVTC, and NATC's bookstore and OER manager.

https://www.wils.org/cow/

MISSION AND VISION

The Community for Open Wisconsin (COW) is dedicated to helping learners accomplish their educational goals while minimizing their cost burdens. We do this by supporting the strategic and cooperative design of open education initiatives across all levels of education in Wisconsin and by advocating for equitable access to high quality open educational resources (OER) or other low-cost alternatives.

The Community for Open Wisconsin envisions a future in which:

- In support of the Wisconsin Idea, learners of all ages have access to quality, cost-effective
 educational resources as well as training and guidance in the use, circulation, advocacy, and
 efficacy of open and affordable content.
- Institutions, instructors, students, and the public can effectively collect, find, and use high-quality openly licensed educational materials via accessible infrastructure, tools, and resources.
- Barriers to equitable access to education and educational resources are reduced or removed.
- All Wisconsin participants in open education can freely share ideas, collaborate on best practices, and build awareness of the availability of Open Educational Resources, including WISELearn.
- The value of open and affordable resources is clear to stakeholders and participants including state government and K-20 educational institutions via education, collaboration, and consistent, cohesive policies.



WISELearn: Wisconsin's portal for OER

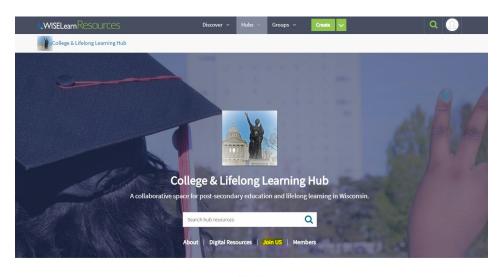
WISELearn (https://wlresources.dpi.wi.gov/) is an OER Commons website that is maintained by the WI Department of Public Instruction and provides a repository of OER content for Wisconsin's secondary and postsecondary education. Within this portal, you can find open textbooks, courses, and resource collections (https://wlresources.dpi.wi.gov/curated-collections). You can also create new open content via the author tool, and you can connect and collaborate with colleagues across the state. Colleges can also incorporate the open content into their Learning Management Systems.

Join the **College & Lifelong Learning** group to find open resources for higher education, connect with colleagues, and share content.

Step 1: within the 'Hubs' tab, click on the College & Lifelong Learning Hub



Step 2: Select 'Join US'



About

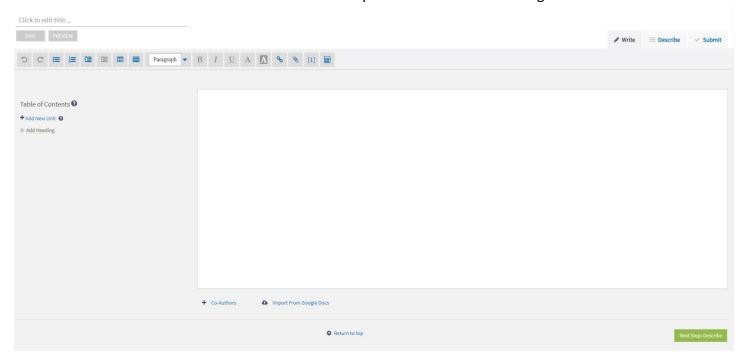
Use College & Lifelong Learning (C&LL) Hub to:

> Discover openly-licensed teaching and learning materials in support of effective formal and informal educational activities.

Step 3: Create an account. This account can connect to your google email if you have one or you can create a username and password.

Step 4: Within the group, you can start a discussion, create new folders to organize OER content (e.g., Nursing), and connect with other members.

Create new OER content by selecting the green 'Create' tab (https://wlresources.dpi.wi.gov/authoring-overview). Within this section, you can create a resource (document, textbook, report, etc.), lesson, or module. Within each of these categories, you can add text with a simple word editor and formatting capabilities, add links, insert media, format reference citations, and add mathematical formulas and symbols. You can add co-authors for collaborative work and import information from Google Docs.



Add meta-data (abstract, grade-level, keywords, subject area, etc.) to your content in the 'describe' section. In the 'Submit' section, choose the appropriate Creative Commons license for your work.

WISC-Online (FVTC): Open videos, tutorials, and virtual reality for TechEd

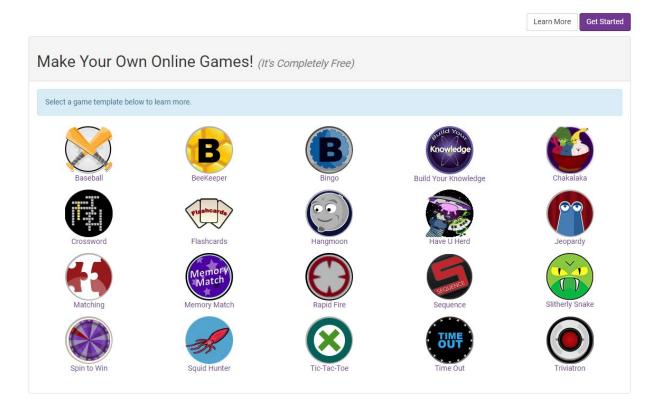
WISC-Online started as a consortium across all WI Tech Colleges in 1999 and has since become a non-profit maintained at Fox Valley Technical College. WISC-Online has been involved in developing educational objects for various National Science Foundation and TAACCCT grants (e.g., Basic Computer Skills, Manufacturing GAMMA+). On their website (https://www.wisc-online.com/) you can access their videos, games, scenarios, and tutorials, all of which are openly licensed and the source code is available on github. You can also create and play educational games via their game templates. This content is mobile-friendly and can be readily added to Learning Management Systems. In 2020, they are also adding openly licensed wirtual reality scenarios and games.

Build an educational game:

Step 1: Select 'Build Games' from the 'Games' tab.



Step 2: Select a game template.

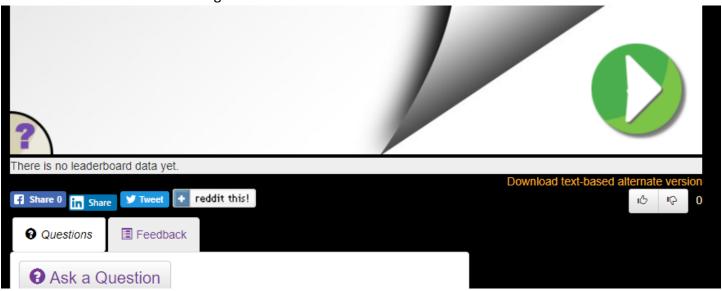


Step 3: Create an account/login (you can log into WISC-Online via social media accounts)

Step 4: Create and customize your game!

Step 5: Share your game via social media, embedding, or sending links. You can also submit the game to WISC-Online so that it will be added to their Arcade (https://www.wisc-online.com/Arcade) upon review so that anyone can play it.

Note: Games can also be downloaded in *text format* for accessibility. Click on the 'Download text-based alternate version' link under the game.



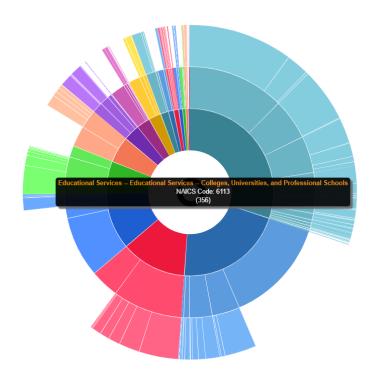
Skills Commons: Free and open content for occupational courses

Skills Commons is a repository for free and open course materials for applied occupational courses and workforce development. Course content that has been developed for TAACCCT grants (e.g., Basic Computer Skills, Manufacturing GAMMA+) are available on this site. Skills Commons also has communities that you can join to collaborate and share resources (http://support.skillscommons.org/connect/). https://www.skillscommons.org/

The advanced search tool allows you to find relevant content by occupation area, industry, credential type, institution, educational level, and more (https://www.skillscommons.org/discover?advanced-search=true). There is also an interactive tool for browsing content by industry (https://www.skillscommons.org/browse?type=industrywheel):

Explore SkillsCommons By Industry

- Click on a section of the wheel to get an expanded presentation of that specific industry.
- Click on the name in the pop-up box to get a list of the materials for that industry.
- · An accessible version is also available.





Libretexts: Comprehensive open library with easy remix capabilities

https://libretexts.org/

Platform out of UC Davis that is collecting open resources to create a comprehensive centralized open library.

Books can then be easily remixed using the heavier tool, which allows for reordering pages/sections/chapters and adding and removing information – all with automatically updated numbering (page numbers, figure numbers, table of contents, etc.). The books also have several advanced features (https://libretexts.org/advanced.html), including embedded media, Jupyter notebooks (coding scripts for analysis), easy Learning Management System integration, and dynamic figures. Use of the open resources on

Textbooks, Textmaps, and LibreTexts

their platform is monitored for research purposes (e.g., student study habits).

Courses using LibreTexts

223 million

Students served

\$31 million

Total Amount Saved

OPEN



All Libretexts libraries are accessible to everyone via the internet, completely free. We believe everyone should have access to knowledge.



COMPREHENSIVE

The libraries are part of a huge network that provides not just single textbooks, but an infinitely large library through which new texts can be developed & shared.



TOPICAL

Always up to date, the Libretexts platform ensures consistency, the newest info available, and allows instructors to fine tune a project for their needs.

COMMUNITY



Libretexts grows via the efforts of a fantastic community of active collaborators. You can join!



INTERACTIVE





ACCESSIBLE

Not only is LibreTexts always accessible online, LibreTexts is promoting assistive technologies across the entire platform.



























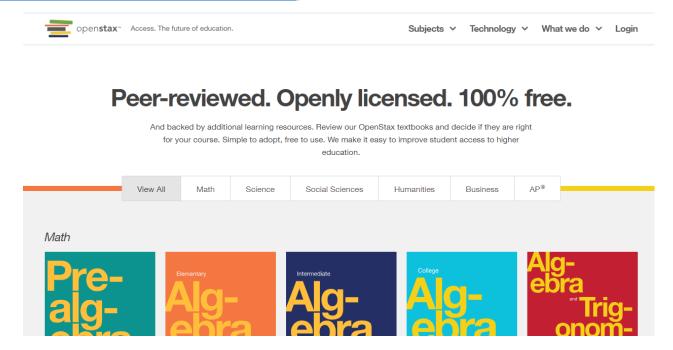




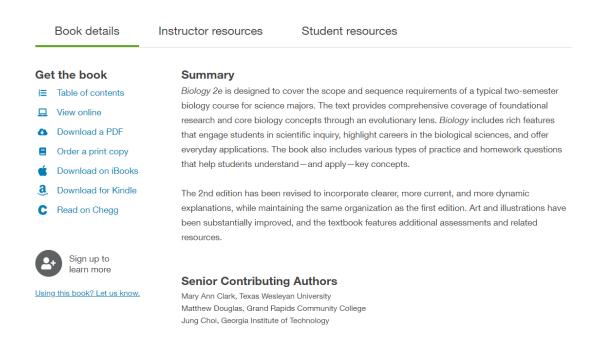


OpenStax: General Education textbooks & partnership programs

OpenStax is an open textbook program at Rice University that provides peer-reviewed and edited General Education textbooks (math, sciences, history, business) with instructor and student resources, and low-cost addon courseware options (e.g., OpenStax Tutor, https://openstax.org/technology). In addition, OpenStax offers an institution partnership program that provides training and resources for open content (https://openstax.org/institutional-partnership).



Each textbook can be accessed online, as a pdf, via Kindle/iBooks/Chegg, and printed in hardcover (\$25-\$55).



Example instructor resources:

- PowerPoint Slides
- Sample syllabus
- Answer sheet to in-text questions

Example student resources:

- Getting Started Guide
- Solution Manual

Institution Partnership Program:

https://openstax.org/institutional-partnership

Program

OpenStax at Rice University is excited to announce the next round of applications for our Open Educational Resource (OER) Institutional Partnership Program. This program is designed to provide you with advice and guidance to greatly increase the use of OER on your campus and create a networking community for support and advice.

This program is for institutions ready to make an impact on campus by dedicating the necessary time and resources in an effort to motivate faculty and utilize OER to drive student success, retention, and completion.

On average, the institutions who join as institutional partners increase the number of students impacted by OER by 158% after completing the first year of the program. To date, the program has resulted in \$19.6 million dollars of additional student savings from OER.

Each year, 9-12 institutions are selected for this program based on a competitive application process.

Cost

This program is **free** thanks to a generous grant funded by the William & Flora Hewlett Foundation. The estimated value of the coaching provided during this program is \$20,000.

Timeline

- Applications due April 30, 2019
- Selected partners will be notified by May 15, 2019
- Program begins June 13, 2019

Pressbooks: An open platform for creating, hosting and remixing OER

Most platforms for creating and remixing OER are proprietary (using these services can mean that your usage data are being tracked and monetized), except for **Pressbooks**.

https://pressbooks.com/

Pressbook features:

- Easy import (epub, word docs, html, odt) & export (pdf, kindle, nook, apple books, xhtml, etc.)
 - Links to interactive elements (e.g., videos) are automatically included in print versions when exporting
- Easy cloning of existing pressbooks to then edit and remix as needed (includes a 'Show Comparison' tool to see the differences between the versions)
- Make books/sections/chapters public or private for the web and export versions
- Easy integration with Learning Management Systems
- Hypothes.is integration (annotation tool)
- Embed H5P apps https://h5p.org/content-types-and-applications (e.g., quizzes, branching scenarios, webpage iframes, drag and drop, games, youtube videos, etc.)
- Does not track student usage data (currently researching ethical ways of doing this)

1. Non-proprietary:

Is open-source & uses open-source components

2. Lets users come & go freely:

Avoids vendor lock-in by allowing easy import & export of content

3. Can be made personal/local:

Allows content to be quickly cloned, revised, and remixed.

4. Plays well with others:

Uses broadly accepted standards

5. Helps learners achieve their goals:

Includes interactive components (themselves OER content built on open-source platforms)

6. Is broadly inclusive & participatory:

Includes standards-based web annotation tools with varying levels of privacy

7. Is demonstrably efficacious:

Permits ethical, learner-centered analytics

From Steel Wagstaff's "E"ffordability Summit presentation (2019), licensed under a CC BY 4.0 International license. steel@pressbooks.com

See examples of OER Pressbooks, here: https://pressbooks.education/books-made-on-pressbooks/



Create Books, Print & Ebooks,

SPARC*: Advocacy, policy information, and resources for open movements

https://sparcopen.org/

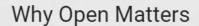
"SPARC (the Scholarly Publishing and Academic Resources Coalition) works to enable the open sharing of research outputs and educational materials in order to democratize access to knowledge, accelerate discovery, and increase the return on our investment in research and education. As a catalyst for action, SPARC focuses on collaborating with other stakeholders—including authors, publishers, libraries, students, funders, policymakers and the public—to build on the opportunities created by the Internet, promoting changes to both infrastructure and culture needed to make open the default for research and education."

Their work centers around three main areas:

- 1. Open Access of research articles
- 2. Open Education
- 3. Open Data

SPARC is involved in tracking policy around these three areas and lobbying for open policies. They also provide helpful resources and fellowship opportunities, such as the Open Education Leadership Program for librarians (https://sparcopen.org/our-work/open-education-leadership-program/), OER State Policy Playbook (https://sparcopen.org/wp-content/uploads/2018/02/SPARC-OER-State-Policy-Playbook-2.pdf), and OER Policy Tracker (https://sparcopen.org/our-work/state-policy-tracking/).

Colleges can become members of SPARC if interested. https://sparcopen.org/become-a-member/#options CVTC and FVTC are both members (as of 4/1/2019).



\$3.2T

Potential increase in global economy due to Open Data

\$267k

Avg student savings/year at SPARC members using OER

905,687

Number of open access articles according to OASPA



Textbook publishers, student privacy, and eLearning

"Inclusive Access": the new subscription-based e-publishing model

In response to the open movement, textbook publishers have shifted to a courseware model. Within this model, publishers have developed online platforms for textbooks – called 'courseware'. Some of the textbooks within these courseware offerings are even well-known open textbooks which they then repackaged with ancillaries and are now selling for a profit. The courseware business model involves two main components: (1) subscriptions to content and (2) harvesting of user data.

Cengage 2018 Report to Shareholders:

"Accelerate penetration of our high quality digital courseware. We continue to invest in the expansion, development, stability and effectiveness of our digital products while also focusing our Go-to-Market team on the sales of these digital solutions and services. This has resulted in approximately 9% growth in our core digital gross sales during the fiscal year ended March 31, 2018. Our digital solutions are based on deep research and understanding of today's students and their workflow, which increases the usefulness and desirability of the solutions by both faculty and end users. The growth in our digital business gives us access to a greater number of students in any given classroom and generates new sources of revenue from our existing adoption customers. In contrast to print publications, our digital products cannot be resold or transferred. We therefore realize revenue from every end user. Digital formats also free us from traditional publishing cycles, increasing our speed-to-market and affording us greater ability to tailor our offerings by course and even by specific faculty and student preferences. We plan to continue to aggressively invest in the growth of our digital products and platforms while increasingly focusing and incentivizing our Go-To-Market team in this area."

Student privacy in a digital age

An important consideration with online content, which can include open educational resources, is student privacy and surveillance concerns. Websites and platforms (e.g., 'inclusive access' textbook platforms) can monitor and collect an enormous amount of data (see clickclickclick.click, on the next page). Thus, it is important that both educators and students are informed and that students are given options in how they would like to engage in their courses (e.g., whether they want to access the book from within the Learning Management System vs. the online version which may be tracking their data).

For more information on student surveillance in eLearning and 'exclusive access' platforms, read:

- Student data harvested by education publishers by Billy Meinke (2018)
 - "If the product is free, then you are the product." Billy Meinke
- Signing up students for surveillance: Textbook publishers terms of use for data by Billy Meinke (2018)
- Just how inclusive are 'inclusive access' e-textbook programs? By Rajiv Jhangiani (2017)

https://clickclickclick.click

This website helps to illustrate the type and volume of data that can be harvested and tracked online.

It took the subject 68 seconds to click the button for the first time. That is faster than most others. Subject has clicked on the button.

Subject has hovered above the button for five seconds.

Subject has hovered above the button.

Subject has clicked on random pixel within window, but not on the button.

Subject has tried to drag the body.

Welcome back. Subject returned to website after one day or more.

Welcome back. Subject returned to website after one hour.

Welcome back. Subject returned to website after ten minutes.

Welcome back. Subject re-entered website.

Subject was away from site shorter than most other subjects until

Subject has left the website.

...

(please turn on your sound)



Other resources to share with your stakeholders

Hypothes.is

Annotation feature that can be added to web browsers and open content. Allows for text highlighting, commenting, and adding media content. Annotations can be private, public, or visible within specific groups (great for learning communities and classrooms!). Free to use, just create an account. https://web.hypothes.is/

An open community project.



We're a mission-driven nonprofit.

Dedicated to enabling layers of conversation over the world's knowledge.



Building an open platform

That works everywhere, based on open-source technology and interoperable standards.



As a part of a global community.

Working with others across the world to advance human understanding for the public good.

LEARN MORE

about Hypothesis.

Select text to annotate.

Add tags and post publicly or save privately.

Reply to or share any annotation.

Link to notes or whole pages.

Annotate together in groups.

Collaborate privately with others.

Search your notes.

Explore all public annotations and profiles.

Community College Consortium for Open Educational Resources

Community of practice for open education. Community and Technical colleges can join this network. Membership dues are \$650/year. https://www.cccoer.org/
FVTC, LTC, and NATC are all members (as of 4/1/19).

Open Pedagogy Notebook

The Open Pedagogy Notebook is a collaborative open resource that provides examples and ideas for engaging students in open activities, assignments, communities, and more. Anyone can submit a new idea to add to the notebook. http://openpedagogy.org/

"David Wiley, the Chief Academic Officer of <u>Lumen Learning</u>,[6] was one of the first OER-focused scholars who articulated how the use of OERs could transform pedagogy. He wrote in 2013 about the tragedy of <u>"disposable assignments"</u>[7] that "actually suck value out of the world," and he postulated not only that OERs offer a free alternative to high-priced commercial textbooks, but also that the open license would allow students (and teaching faculty) to contribute to the knowledge commons, not just consume from it, in meaningful and lasting ways." - Open Pedagogy, a chapter in A Guide to Making Open Textbooks with Students, a resource compiled and published under a <u>Creative Commons Attribution 4.0 International License</u> by the <u>Rebus Community</u>

Examples of open pedagogy:

- Students help create a new open resource; e.g., add annotations, background information, explanations and more to The Open Anthology of Earlier American Literature https://openamlit.pressbooks.com/front-matter/introduction/
- Students write and review questions for open textbooks
- Students create, review, and improve Wikipedia pages
- Students update analyses, figures, and tables with recent data (e.g., Environmental ScienceBites https://ohiostate.pressbooks.pub/sciencebites/)