



For this Teaching Tip, Krista Clumpner and I will be describing use of open educational resources. We've provided a brief overview and for faculty who wish to dive deeper, Tom Gillespie has compiled an excellent list of resources. You might want to file this Teaching Tip to explore these resources on a rainy summer day!

OER's – What are they? Open educational resources (OER) are materials available at little or often no cost and can be used for teaching, learning, or research (EDUCAUSE, 2010). These resources may include: textbooks, readings, videos, simulations, games, and course content such as quizzes/exams, assignments, and assessment tools (EDUCAUSE, 2010). OER materials are usually digital and available to faculty under a Creative Commons or similar usage license.

Support: Hilton (2016) in a systematic review of nine studies that examined student learning outcomes found no differences when using OER versus traditional textbooks. However, he acknowledged confounding variables, such as inconsistent measurement metrics, comparing courses taught by different faculty, and changes in course delivery methods as limitations. Hilton also reviewed several additional studies that addressed student and faculty perceptions of OER's and found that generally both groups favored the use of OER's over traditional textbooks with notable cost savings and convenience cited as the primary benefits.

Benefits:

- Low or no costs for students
- Improved accessibility and convenience for students and faculty
- Immediate and equitable access to course learning materials for students
- Resources easily embed into learning management systems
- Access to new and innovative course materials
- Customizable and adaptable resources to better match faculty and learner needs
- Opportunities for collaboration and participation
(EDUCAUSE, 2010; Hilton, 2016; Kelly, 2020)

Concerns/downsides:

- Time commitment to search numerous sites for high quality resources
- Credibility of resources and lack of formal vetting process
- Some materials might not be current or updated on a regular basis
- Many resources lack formal feedback mechanisms
- Some resources may not be able to accommodate accessibility needs/requirements
- Intellectual property rights and copyright concerns especially if the content is modified
- Limited research on student learning outcomes
(EDUCAUSE, 2010; Hilton, 2016)

Implementation Strategies: Hoermann – Elliott (2021) suggests finding advocates such as a librarian or instructional technology staff to assist you to find suitable OER for your discipline or specific course. At NMU, each department has a designated [library liaison](#) who may be able to assist you in locating OER materials.

To organize your digital collections, try to create spreadsheets of different OER- resource links based on categories. Be sure to make backup PDF file copies of each reading in the event the link is taken down. Hoermann – Elliott (2021) also recommends to start small with one unit of learning per week using OER readings or other digital resources and to assess learner preferences and effectiveness.

Faculty, who wish to learn more about OER or search for discipline-related materials, please see the excellent list below compiled by Tom Gillespie, senior instructional technologist in the Center for Teaching and Learning (CTL). Thank-you Tom for sharing your expertise on this topic!

In closing, the CTL staff and I are available to assist with all of your course design and instructional technology needs; please call 227-2483 for an appointment or email ctl@nmu.edu. Visit the [CTL calendar](#) to review upcoming professional development offerings. Please email me your feedback and ideas for future Teaching Tips or suggestions for faculty professional development: ctlscholar@nmu.edu.

References

EDUCAUSE. (2010). *7 things you should know about open educational resources*.

https://libguides.library.cpp.edu/ld.php?content_id=13268163

Hilton, J. (2016). Open educational resources and college textbook choices: A review of research on efficacy and perceptions. *Education Technology Research and Development*, 64, 573–590.

<https://doi.org/10.1007/s11423-016-9434-9>

Hoermann – Elliott, J. (2021, March 17). *Going all in on OER*. Faculty Focus.

https://www.facultyfocus.com/articles/course-design-ideas/going-all-in-on-oer/?st=FFWeekly%3Bsc%3DFFWeekly210317%3Butm_term%3DFFWeekly210317&utm_source=ActiveCampaign&utm_medium=email&utm_content=Going+All+in+on+OER&utm_campaign=F210317+%28backup%29

Kelly, H. (2020, April 9). *Learning everywhere: Open educational resources in the COVID-19 era*.

California State University. <https://www2.calstate.edu/csu-system/news/Pages/OER-Helps-COVID-Era.aspx>

OER Resources

General Information

Opening the Textbook: Educational Resources in Higher Education (2017) –

<https://files.eric.ed.gov/fulltext/ED582411.pdf>

Center for American Progress - Open Educational Resources (2012) - https://cdn.americanprogress.org/wp-content/uploads/issues/2012/02/pdf/oer.pdf?_ga=2.7996913.292728759.1615990451-1858697835.161599045

Local College Resource

For examples of how OERs have been implemented at Bay College (Escanaba, MI) in specific courses visit: <https://library.baycollege.edu/oer>. This site also contains links to numerous OER general information articles, websites, and search tools.

Search Tools for Textbooks and Course Resources

[OASIS](#) - Openly Available Sources Integrated Search (OASIS) is a search tool that aims to make the discovery of open content easier. OASIS currently searches open content from 117 different sources and contains 388,707 records.

[Open Textbook Library](#) - Offered by University of Minnesota with many other partner organizations.

[OER Commons](#) - Postsecondary Textbooks - The OER Commons offers textbooks at all education levels. This link leads to a list filtered to display only offerings at the post-secondary level. Use the facets on the left to further refine the list.

[OpenStax CNX](#) - An OER collection offered by Rice University. Browse by subject, and use the Type filter to the left to browse only books.

[Teaching Commons](#) - A collection of textbooks from faculty at a number of U.S. colleges and universities.

[MERLOT](#) - Browse open textbooks available in MERLOT.

[Saylor Academy Open Textbooks](#) - Browse over 100 textbooks, sorted alphabetically by title.

[InTech](#) - InTech is an open access publisher in Science, Technology, and Medicine.

[Affordable Learning Georgia](#) - Lists the top 100 undergraduate courses in the University System of Georgia and, where applicable, links to open textbooks that have been adopted.

[Open SUNY Textbooks](#) - A collection of open textbooks published by the SUNY system.

[LibreTexts](#) - LibreTexts is a multi-institutional collaborative venture to develop open-access texts for postsecondary education at all levels of higher learning.

[BCampus - Find Open Textbooks](#) - A collection of open textbooks curated for the public post-secondary system of British Columbia.

[Washington 45](#) - Open textbook recommendations for common general education courses at colleges and universities in the state of Washington with links.