Open Educational Resources (OER): A Faculty Quick Guide to Key Resources

Seminal and Influential Academic Articles on Open Educational Resources (OER) in Higher Education

Bliss, T. J., Hilton, J., Wiley, D., & Thanos, K. (2013). The cost and quality of open textbooks: Perceptions of community college faculty and students. *First Monday*, 18(1). https://firstmonday.org/ojs/index.php/fm/article/view/3972

Annotation/Abstract: One of the earliest studies evaluating perceptions of open textbooks among faculty and students who have adopted and used open textbooks, emphasizing the balance between cost savings and educational quality.

 Bol, L., Esqueda, M. C., Ryan, D., & Kimmel, S. C. (2021). A comparison of academic outcomes in courses taught with open educational resources and publisher content. *Educational Researcher*, *51*(1), 17-26. https://doi.org/10.3102/0013189X211052563

Annotation/Abstract: A total of 215 community college students enrolled in online, introductory courses were randomly assigned to OER or non-OER sections and compared on retention at the tuition drop date, completion with a C or better, course completion, and mean final exam scores. Students in the OER sections were retained and persisted at a statistically significant higher rate, lending credibility to the findings of former studies regarding retention and persistence rates in courses taught with OER materials. No statistically significant differences were found on completion rates or final exam scores. Concludes that OER course materials should be considered in broader initiatives for student success in community colleges.

 Clinton, V., & Khan, S. (2019). Efficacy of open textbook adoption on learning performance and course withdrawal rates: A meta-analysis. *AERA Open*, 5(3). https://doi.org/10.1177/2332858419872212

Annotation/Abstract: Open textbooks have been developed in response to rising commercial textbook costs and copyright constraints. Numerous studies have been conducted to examine open textbooks with varied findings. The purpose of this study is to meta-analyze the findings of studies of postsecondary students comparing learning performance and course withdrawal rates between open and

commercial textbooks. Based on a systematic search of research findings, there were no differences in learning efficacy between open textbooks and commercial textbooks (k = 22, g = 0.01, p = .87, N = 100,012). However, the withdrawal rate for postsecondary courses with open textbooks was significantly lower than that for commercial textbooks (k = 11, OR (odds ratio) = 0.71, p = .005, N = 78,593). No significant moderators were identified. Limitations and future directions for research, such as a need for more work in K–12 education, outside of North America, and that better examine student characteristics, are discussed.

Colvard, N. B., Watson, C. E., & Park, H. (2018). The impact of open educational resources on various student success metrics. *International Journal of Teaching and Learning in Higher Education*, 30(2), 262–276.
 https://www.isetl.org/ijtlhe/pdf/IJTLHE3386.pdf

Annotation/Abstract: Reports the results of a large-scale study (21,822 students) regarding the impact of course-level faculty adoption of Open Educational Resources (OER). Results indicate that OER adoption does much more than simply save students money and address student debt concerns. OER improve end-of-course grades and decrease DFW (D, F, and Withdrawal letter grades) rates for all students. They also improve course grades at greater rates and decrease DFW rates at greater rates for Pell recipient students, part-time students, and populations historically underserved by higher education. OER address affordability, completion, attainment gap concerns, and learning.

Delimont, N., Turtle, E. C., Bennett, A., Adhikari, K., & Lindshield, B. L. (2016).
 University students and faculty have positive perceptions of open/alternative resources and their utilization in a textbook replacement initiative. *Research in Learning Technology*, 24. https://doi.org/10.3402/rlt.v24.29920

Annotation/Abstract: Research study of students and faculty in 13 courses using open/alternative (OAER) textbooks as replacements to traditional textbooks at Kansas State University. Results revealed positive faculty and student perceptions and experiences with OAER textbooks and desire to continue teaching and learning with OAER in the future.

Hilton, J. (2016). Open educational resources and college textbook choices: A review of research on efficacy and perceptions. *Educational Technology Research and Development*, 64(4), 573–590. https://doi.org/10.1007/s11423-016-9434-9

Annotation/Abstract: A major review of sixteen studies comparing OER to traditional textbooks in relation to student learning outcomes and perceptions of OER among college students and instructors. Results indicate that students

generally achieve the same learning outcomes when OER are utilized and simultaneously save significant amounts of money and that both students and faculty are generally positive regarding OER.

Hilton, J. L., Robinson, T. J., Wiley, D., & Ackerman, J. D. (2014). Cost-savings achieved in two semesters through the adoption of open educational resources. *The International Review of Research in Open and Distributed Learning*, 15(2). https://doi.org/10.19173/irrodl.v15i2.1700

Annotation/Abstract: Reports on a study examining costs savings of students using OER across seven community colleges in California, New York, and Nebraska after an effort by these colleges to replace traditional textbooks with OER across their multiple campuses. Results showed significant cost savings for students.

• Jhangiani, R.S., & Biswas-Diener, R. (Eds.). (2017). *Open: The philosophy and practices that are revolutionizing education and science*. Ubiquity Press. https://www.ubiquitypress.com/books/e/10.5334/bbc

Annotation/Abstract: Foundational text sharing stories, motives, insights, and practical tips from global leaders in the open education movement. Includes information about both OER and Open Pedagogy, more broadly.

 Mullens, A.M., Hoffman, B. (2023). The affordability solution: A systematic review of open educational resources. *Educational Psychology Review*, 35, article 72. https://doi.org/10.1007/s10648-023-09793-7.

Annotation/Abstract: A systematic review of 97 peer-reviewed journal articles published between 2002 and 2023 was conducted to answer three research questions: (a) what are student and faculty perceptions of OER, (b) which incentives and barriers impact OER adoption and use, and (c) what is the impact of OER on student achievement? Analysis of findings suggested that students and faculty have positive views of OER and believe they are of similar quality to paid instructional materials. Across culturally diverse studies, faculty and students reported incentives such as cost savings, accessibility, and increased academic engagement when using OER, but also reported technological and institutional barriers to using and adopting these materials. Student academic performance is stable across course grades, exam grades, and retention rates when using OER and especially beneficial for disadvantaged student achievement. Practical implications for instructors, university administrators, and researchers are advanced to mitigate barriers toward OER utilization and to enhance the potential for academic effectiveness.

• OECD (2007). *Giving knowledge for free: The emergence of open educational resources*, OECD Publishing. https://doi.org/10.1787/9789264032125-en.

Annotation/Abstract: A foundational publication addressing the emergence of OER internationally and how OER projects can be sustained in higher education ecosystems. It examines reasons for individuals and institutions to share resources for free, and looks at copyright issues, sustainability and business models as well as policy implications.

Resources for OER Discovery, Use, and Community

- Open Educational Resources via Gregg-Graniteville Library, USCA
 https://library.usca.edu/openscholarship/oer
 Links to resources for finding, using, and creating OER, as well as more information about copyright and open access in general.
- USCA Open Educational Resources Community of Practice (CoP)
 https://blackboard.sc.edu/ultra/organizations/ 1280931 1/outline
 Join the USCA CoP for monthly workshops and gatherings as well as regular updates related to OER resources and opportunities. If you have trouble self-enrolling in the community, reach out to Natalia Bowdoin (nataliab@usca.edu) to be added to receive updates and access the materials.
- SCALE (South Carolina Affordable Learning) from PASCAL (Partnership Among South Carolina Academic Libraries)

https://pascalsc.libguides.com/scale

Find more information about affordable learning and OER adoption within South Carolina along with more tools for creating, adopting, and an opportunity to be recognized for your affordable learning efforts.

• OER Commons

https://www.oercommons.org/

OER Commons helps educators, students, and lifelong learners avoid time-consuming searches and find exactly the right materials. With a single point of access from which they can search, browse, and evaluate resources in OER Commons' growing collection of over 50,000 high-quality OER everyone can more efficiently find what they need.

• Teaching Commons

https://teachingcommons.us/

The Teaching Commons brings together high-quality open educational resources from leading colleges and universities. Curated by librarians and their institutions, the Teaching Commons includes open access textbooks, course materials, lesson plans, multimedia, and more. The Teaching Commons is part of the bepress Digital Commons Network.

• Galileo Open Learning Materials

http://oer.galileo.usg.edu/

Open textbooks, syllabi, and supporting materials created under Affordable Learning Georgia OER grants. Materials are licensed under various Creative Commons licenses.

• MIT Open Courseware

http://ocw.mit.edu/courses/

Massachusetts Institute of Technology is one of the forerunners in open courseware, making "virtually all MIT course content" available online for public access. This site provides access to a wide variety of courseware in diverse disciplines.

• Open Course Library

http://opencourselibrary.org/course/

The Open Course Library (OCL) from Washington State Colleges is a collection of shareable course materials including syllabi, course activities, readings, and assessments designed by teams of college faculty, instructional designers, librarians, and other experts.

• OpenStax College

http://openstaxcollege.org/

Open source textbooks that are written by professional content developers who are experts in their fields and undergo a rigorous peer review process. All textbooks meet standard scope and sequence requirements.

• Open Textbook Library

http://open.umn.edu/opentextbooks/

The Open Textbook Library provides a growing catalog of free, peer-reviewed, and openly-licensed textbooks. The Open Textbook Library is supported by the Center for Open Education and the Open Textbook Network.

• Pressbooks Directory

https://pressbooks.directory/

Pressbooks Directory provides an index of 5,058 primarily OER books published across 143 Pressbooks networks. Pressbooks supports educators, writers,

researchers, scholars, artists, and makers with tools to create, adapt, and share content.

Milne Open Textbooks

https://milneopentextbooks.org/about/

Milne Open Textbooks is an open access textbook publishing initiative established by State University of New York libraries and supported by SUNY Innovative Instruction Technology Grants. This pilot initiative publishes high-quality, cost-effective course resources by engaging faculty as authors and peer-reviewers, and libraries as publishing service and infrastructure.

• BC Campus Open Ed

https://collection.bccampus.ca/

The B.C. Open Collection is a curated selection of open educational resources (OER) that can be accessed by educators in B.C. and beyond to use in the classroom, in an institutional learning management system, or on other teaching and learning platforms. All materials are openly licensed.

Tools & Resources for Creating, Editing, or Adapting OER

- BCcampus Open Education Adaptation Guide
 https://opentextbc.ca/adaptopentextbook/
 Step-by-step guide to adapting OER, including licensing and accessibility.
- Open Education Network Authoring Open Textbooks Guide
 https://press.rebus.community/authoropen/

 Comprehensive guide for writing, editing, and publishing OER, with author workflows and planning support.
- Abbey Elder & Stacy Katz OER Starter Kit Workbook
 https://cuny.manifoldapp.org/projects/the-oer-starter-kit-workbook
 Hands-on workbook for exploring, evaluating, and creating OER.
- Rebus Guide to Publishing Open Textbooks
 https://press.rebus.community/the-rebus-guide-to-publishing-open-textbooks/
 Community-driven project management guide for open textbook creation.

Pressbooks

https://pressbooks.com/

User-friendly platform for creating multimedia-rich, web-friendly, accessible open textbooks.

LibreTexts

https://libretexts.org/

Robust platform for remixing and creating STEM, social science, and humanities content.

• OER Commons Open Author

https://www.oercommons.org/authoring-overview

Create and remix OER directly in-browser; includes alignment tools and accessibility features.

Creative Commons License Chooser

https://creativecommons.org/choose/

Tool to select and apply proper licensing for OER projects.

Accessibility Toolkit by BCcampus

https://opentextbc.ca/accessibilitytoolkit/

Practical resource for ensuring your OER meets accessibility standards.

• Open Attribution Builder (Open Washington)

https://www.openwa.org/attrib-builder/

Generates properly formatted attributions for open resources.

• USC Scholar Commons Open Educational Resources

https://scholarcommons.sc.edu/oer/

The University of South Carolina's OER Platform hosted in the Scholar Commons Institutional Repository. If you are a faculty or staff member in the USC system, consider contributing your OER to this platform. Contents may include: Assignments, artistic works, lecture presentations, video recordings, textbooks, syllabi, and other educational content relevant to the collection. Contact your librarian for more information on submitting!

Resources for Learning More about Open Educational Resources and Pedagogy

Open Education from SPARC (The Scholarly Publishing and Academic Resources Coalition)

https://sparcopen.org/open-education/

SPARC works to enable the open sharing of research outputs and educational materials to democratize access to knowledge, accelerate discovery, and increase the return on our investment in research and education. Find on this site more

information about the importance and impact of open education as well as links to further resources.

• SPARC Open Education Forum

https://sparcopen.org/our-work/sparc-oe-forum/

This listserv provides a dynamic space for members to connect, exchange ideas, and collaborate on projects related to open education. It offers a public email discussion list enabling individuals to engage in meaningful conversations and stay up to date on the latest news and trends in the field.

Open Education Network (Center for Open Education – University of Minnesota)

https://open.umn.edu/oen

The OEN is a vibrant and supportive community that advances the use of open educational resources and practices. Members benefit from and contribute to the global open education ecosystem. Find on this site support, resources, and training programs for learning more about OER and OEP

• Open Education Week

https://openeducationweek.org/

Open Education Week's goal is to raise awareness about free and open educational opportunities that exist for everyone, everywhere, right now. We want to highlight how open education can help people meet their goals in education, whether that's to develop skills and knowledge for work, supporting formal studies, learning something new for personal interest, or looking for additional teaching resources.

Open Education Global

https://www.oeglobal.org/

OEG is a member-based, global, non-profit supporting the development and use of open education around the world. Find here links to their special projects, global events, and community building resources.