ADDRESSING COMMON CONCERNS ABOUT OER

Question: Are open educational resources high quality?

Answer: A growing body of research reveals that OER are as effective – if not more effective – than traditionally published works.

In both the K-12 and higher education, there is increasing data showing that students using OER perform as well, if not better, than their peers using closed-license resources. Separately, it's worth noting that while traditional textbook publishers often point to higher-resolution pictures and more fluid formatting as measures of quality, their works are not typically assessed by their effectiveness in the classroom. This litmus test *has* been asked of OER, and multiple peer-reviewed studies have revealed equal or improved student success and retention when compared to traditional materials – with the added benefit that there is no financial burden on the student.

Journal-Published Research

- A multi-institutional study of the impact of open textbook adoption on the learning outcomes of post-secondary students | Journal of Computing in Higher Education: http://bit.ly/fischer2015
- Open educational resources and college textbook choices: a review of research on efficacy and perceptions | Educational Technology Research and Development: http://bit.ly/jhilton2016
- The Impact of Open Textbooks on Secondary Science Learning Outcomes | SAGE Journals: http://bit.ly/robinson2014

Question: Does publishing with an open license mean authors aren't compensated for their work?

Answer: There are a number of existing models where authors are compensated for their work creating and developing OER, though many open materials are created by volunteer effort.

Open textbooks and other open learning materials are created in different ways. There are several open textbook publishing companies, who follow the typical process of authoring and editing and pay authors upfront for their contributions. In other cases, authors (or teams of authors) are funded by grants from foundations or the government, or supported by their institution. While more efforts are underway to create sustainable systems for developing OER, it's also worth acknowledging that much of existing OER has been published by authors without compensation – authors who want their work to have the maximum reach and impact possible for learners.

Question: Are open educational resources easy to adopt in the classroom?

Answer: There are plenty of "swap-in" open resources. At the same time, if an educator wants to invest time in developing content, they're easily able to.

> While much of OER exists in fragments – graphs, chapters, quiz questions, etc – there are many more resources designed to be plug-and-play for educations, including entire curricula-aligned textbooks. The Open Textbook Library compiled by the University of Minnesota alone hosts nearly 300 openly licensed textbooks, covering dozens of disciplines and majors. Additionally, authors around the country and in partnership with open publishers like BCcampus and OpenStax are increasingly focused on developing supplementary course materials for open textbooks, ensuring that faculty have all the materials they need for a particular course. Finally, open licensing allows for educators to easily adapt and customize existing OER into the supplementary materials they need.

Question: Are open educational resources digital only?

Answer: OER is typically shared via the Internet, but most OER is also attainable in print form.

> OER is often shared via the Internet, because there are no associated material costs or fees. Unlike the digital materials produced by traditional textbook publishers, it is easily accessible on a variety of platforms, from different locations and different devices. Open textbooks can be printed from a local library or copy shop at a few cents per page. Recently, open textbook producers have taken steps to make hard-copy print versions of their texts available at $20-40, and established infrastructure to stock open textbooks in campus bookstores for ease of student access.

Question: Are OER aligned with state and local standards?

Answer: Studies have shown that OER are often *more* aligned with state standards, are easily adaptable if not.

> Actually, recent research has shown a significant gap from standardized curricula and traditionally published textbooks. In a 2016 review of K-12 math course materials from EdReports, just one of 17 core course materials was found to be standard-aligned, and the only well-aligned resource was an openly licensed one. Unlike closed-license materials, which are fixed and uneditable, openly licensed materials can be easily customized and adapted by teachers and educators to better fit their local standards.