



Opening Up to Open Educational Resources

“There is the possibility for open practice to allow students to more directly own their own learning in a broader sense. Openness in learning can help students to be more collaborative, more proactive and more independent, skills that will benefit all of us beyond just the walls of school.”
— Karen Fasimpaur, educational consultant for K12 Open Ed

Open Educational Resources (OER) are teaching and learning materials that are freely available online for everyone to use and can be remixed, revised, and redistributed at no cost.

Unlike traditional curricular materials, which are copyrighted and fixed, OER have been authored by an individual or organization that chooses to retain few, if any, ownership rights. OER often have a Creative Commons or GNU license that explains how the material may be used, reused, adapted, and shared.

OER encompass a wide variety of educational materials, including:

- Full university courses
- Interactive mini-lessons and simulations
- Adaptations of existing open work
- Electronic textbooks
- K-12 lesson plans, worksheets, and activities

As more K–12 teachers, administrators and district leaders become aware of OER, the more eager they are to embrace the model. OER provide opportunities to update and adapt materials to meet different student needs, spurs innovation in open learning practices, and reduces content acquisition costs.

Benefits of OER

The most immediate benefit of OER is access to quality teaching and learning materials, often in multimedia formats, at little or no cost. OER provide an alternative to costly textbooks and might lead to significant savings for schools.

OER enable educational leaders to shift costs: Instead of using funds to purchase or lease instructional materials, money can be directed to fulfill other needs, such as building technology capacity. While OER are not synonymous with digital resources — many OER programs are designed to be printed and used in that format — the best potential for cost-shifting lies in digital distribution ([Insights, 2016](#)).

Openly licensed material also gives schools and districts many different technology options for implementation, from 1:1 models to BYOD and even flipped classroom programs. Karen Fasimpaur, an educational consultant with [K12 Open Ed](#), explains: “The great thing about OER as opposed to commercial digital content is that the content can be modified and deployed under all of these scenarios and ones we haven’t even thought of yet.”

In addition to reducing student costs, OER can positively affect retention rates when teachers adapt the resources to best meet the needs of their student population. The collaborative nature of OER can provide a rich, robust, high-quality learning experience that is pedagogically sound and better designed than what can be developed by individual teachers.

The benefits of OER have global implications as well. International organizations and governments see an opportunity in OER to widen access to high-quality teaching and learning resources in poor countries or among disadvantaged communities of learners.

Why OER Matters

“OER brings a huge potential to K–12 for maintaining current content and collaborating within the school district and beyond on continual quality improvement of that content. On top of that, educators who adopt the model become highly invested in seeing it succeed. The collaboration on the creation of up-to-date material designed to meet student needs provides an incredible professional learning opportunity and promotes educator ownership in district instructional materials and their effectiveness.”

— Barbara Soots, open educational resources program manager in the Office of Superintendent of Public Instruction, which oversees K–12 public education in Washington State.

Beyond the immediate benefits, OER have the potential to be a catalyst for innovation in education because they invite educators to continuously improve and update educational resources.

We know that teacher collaboration is important for the development of professional practice, and so a closed system of educational resources only hurts students. Using resources that require a specific piece of technology or can only be used in one particular way only serves to stifle an educator’s ability to innovate in their classroom ([Anderson, 2016](#)).

What’s Happening Now

OER are currently seeing improvements in usability and quality. To date, there are more OER options for middle and high school courses in mathematics and science, but other grades and content areas are increasing in availability. Given that many states have common learning standards in mathematics, science and English language arts, those content areas are especially well-suited for wide-scale sharing of instructional material ([Insights, 2016](#)).

The [Washington OER Project](#) has reviewed 24 openly licensed math curricula, including open source textbooks, for middle and high school students as well as 60 thematic units for English language arts from contributors such as

CK–12, EngageNY, the Mathematics Vision Project, and the Utah Middle School Math Project .

According to [Project Tomorrow’s 2014 Speak Up Survey](#), 65% of school librarians say access to a collection of vetted, grade-level, content specific resources would be most effective in helping teachers better use digital content in their classroom. And, over 70% of teachers consider free content as the most important factor when evaluating the quality of content to use in their classroom. Teachers also want the ability to curate and modify the digital content they use in their classroom.

To address this shift in thinking and teaching, the [US Department of Education](#), Office of Educational Technology has placed heavy emphasis on the creation and use of OER resources in the classroom . The #GoOpen Campaign encourages states, school districts, and educators to use openly licensed educational materials to transform teaching and learning.

Learn how [Williamsfield School District](#) leveraged education technology to #GoOpen and save money while providing unique, targeted learning opportunities for each student:

Finding and Selecting OER

There are several OER sites with searchable databases of teaching and learning resources, including:

- [OER Commons](#)
- [CK-12](#)
- [PBS Learning Media](#)
- [MIT Open Courseware](#)
- [Edutopia](#)
- [USDOE Open Education site](#)

If you need help choosing OER resources, Jill Buban has some good advice. At a recent Cite conference, she explained the 4Cs of choosing the right OER for your institution. She suggested that when choosing an OER, it is necessary to

think about copyright policies, the creative commons, course levels, and creativity. She also said that some questions to consider are whether or not the material is something that you as an educator want to reuse, whether it will work for all levels of your course, and how you can creatively manipulate the materials to provide your students with all different types of perspectives (Buban, 2016).

Fostering the use of OER in K–12 and higher education will take effort and investment, including providing professional learning for educators to help them make these programs successful. But we’ve only begun to realize the potential impact and benefits for our students.