



Open Educational Resources (OER)

Field Guide for Reporters

One of a teacher’s best tools is the curriculum that guides their instruction. That’s why high-quality instructional materials are an important part of the education landscape. One increasingly popular type of curricular material is open educational resources, or OER.

Nearly a quarter of higher education faculty who teach introductory courses report that they use OER, and 16% of K-12 school districts have adopted at least one full-course OER curriculum. As OER are used more widely across the education spectrum, educators, leaders, and students around the country are asking questions about OER. This guide for reporters breaks down how OER fit into the landscape of K-12 and higher education curricula, and how they are used for more effective teaching and learning.

This guide includes the following resources to inform reporting about OER:

- Key information on OER
- Questions to consider for educators and students who use OER
- Case studies of OER use
- Links to research
- Quick facts and figures
- Quotes from practitioners who are available for interviews
- A full list of sources who are available for interviews and their contact information



What Are Open Educational Resources (OER)?

Guided by the idea that high-quality educational materials should be available to everyone, OER are openly licensed materials that are free for educators and students to use, customize and share. OER can be anything from a single lesson to an entire textbook, and they are used in both K-12 schools and higher education institutions.

What Makes OER Unique in the Curriculum Marketplace?

Free

One core principle of OER is that educational materials should be free to everyone. Using OER can save K-12 districts and college students significant costs by providing access to educational material without the expense of traditional textbooks or online access codes. Districts and higher education institutions may choose to purchase supporting platforms and teaching resources to support their OER content, but the resources themselves are always available free of charge.

Customizable

OER give educators the ability to adapt materials to meet their students' diverse needs and increase student engagement. This could include, but is not limited to, updating resources based on new research or current events, adding in real-world examples, tailoring materials for students at varying levels, and incorporating diverse perspectives so that all students can see themselves reflected in their coursework.

Voices from the Field

“OER have become the backbone for the total overhaul of how we do curriculum and course design in our district. It’s **allowed us to build course options for students that really work for them**. From online options to blended learning and brick-and-mortar course offerings, our teachers collaborate on course and curriculum design to make sure they are **directly connected to student outcomes**.”

– Anthony Gabriele, Director of Learning and Innovation, Centennial School District, PA
(gabran@centennialsd.org)

Openly Licensed

Educational materials that are openly licensed allow users to share, edit, and reuse content to fit their needs. Open licenses require proper attribution to ensure authors receive credit for their work and provide educators and students the flexibility to adapt content for their learning needs and retain control of the content over time.



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Where Can OER Be Found?

Open educational resources can be readily found and downloaded from a variety of online databases, content libraries and trusted content providers, including (but not limited to):

- [OER Commons](#)
- [OpenStax](#)
- [Open Textbook Library](#)
- [Teaching Commons](#)

What Distinguishes High-Quality OER?

A high-quality open educational resource shares many of the same characteristics of any high-quality instructional material: it is accurate, up-to-date, authored by a content expert, engaging to students, and useful to educators. In addition, a high-quality open educational resource is free and available to anyone, and it carries an open license that allows educators to adapt the resource to their needs.



CASE STUDY: City University of New York

New York leads the way in state OER investment. At the City University of New York (CUNY), OER have already paid dividends. Faculty are reinvigorated about teaching, all students have access to learning materials on day one, and student outcomes show signs of improvement. In the collaborative spirit of OER, CUNY has launched Open-NYS with the State University of New York to create a community of practice around OER in New York.

For more information, contact Ann Fiddler (ann.fiddler@cuny.edu).

How Do OER Fit into the Education Landscape?

OER intersect with many issues that educators and students are facing today—from equity and personalized learning to college affordability and career and technical education. Below are some questions you can consider asking about OER and these issues in your reporting.

Education equity

OER can be used as a tool to create more inclusive and equitable classrooms. Because OER are free for all to use, cost is never a barrier to accessing materials, and because OER can be customized and adapted, educators can incorporate diverse voices and examples to make content relevant and relatable to all students.

Questions to ask educators and district leaders:

- How are you using OER to help students who have traditionally been underserved?
- Some people think that schools with limited resources use OER as a last resort. What's your response to this argument?

College affordability

One factor that contributes to college affordability and the national student debt crisis is the high cost of course materials—from textbooks to digital resources that require a subscription or access code. Because they are cost-free, OER reduce costs for higher education students, and some students report that OER enable them to enroll in more courses. In addition, more institutions are establishing entire degree pathways that use only OER—allowing students to earn a degree without paying for any course materials.

Questions to ask educators and leaders:

- Why focus on OER as a means of making education more affordable for students?
- Are there any unexpected costs associated with switching to OER?

Question to ask students:

- How does having a class that uses free, open educational resources impact you? How has it had an impact on your college experience and your course enrollment decisions?

Voices from the Field

“OER create educational equity in **empowering teachers** to provide each student with the most current, standards aligned resources to meet their individual needs.”

– Pete Leida, Assistant Superintendent, Colonial School District, DE
(Peter.Leida@colonial.k12.de.us)

Voices from the Field

“With OER, we aren't spending \$200K a year anymore on textbooks. **It's allowed us to invest in paid high-level professional learning for our teachers and paying them more for their work.** We now offer our teachers two PD sessions a year on OER curriculum and course development, along with instructional coaching throughout the year.”

– Anthony Gabriele, Director of Learning and Innovation, Centennial School District, PA
(gabran@centennialsd.org)

School funding and teacher pay

Districts invest significant resources in textbooks that can quickly become outdated. Districts that use OER can invest those resources elsewhere. OER also cut costs for teachers who often invest their own resources in classroom materials to help their students succeed.

Questions to ask educators and district leaders:

- How have you used OER to address a lack of funding in your school?
- Many teachers pay for their own classroom materials. Did this have an impact on your choice to use OER?

Personalized learning

Because they are editable, OER are a tool that teachers can use to adjust lessons to meet students' specific needs. For example, educators can customize OER to work for students with different learning abilities, learning styles, and languages.

Question to ask educators:

- Do open educational resources help you tailor the learning experience to your students' individual needs? If so, how? If not, why?

Question to ask students:

- How do the customized materials differ from other materials you've used? How do they affect your experience in the classroom?

Culturally responsive teaching/curriculum

OER's customizability also allows educators to tailor resources to reflect the cultures and life experiences of their specific students.

Question to ask educators:

- Do you customize materials to reflect your students' cultures and experiences? If so, are OER any easier to customize than traditional materials?

Question to ask students:

- How do the customized materials differ from other materials you've used? How do they affect your experience in the classroom?

Career and technical education

OER are available for a wide range of subjects and courses, including career and technical education classes.

Questions to ask educators:

- What do you look for in curriculum for your career and technical education course?
- Are OER well suited to career and technical education courses? How do they compare with traditional materials you have used?

Voices from the Field

“Students feel **empowered**, they feel **in charge** of their learning.”

– Denise Gallemore, 5th Grade Social Studies Teacher, Marysville Public Schools, MI

(dgallemore31@gmail.com)

Question to ask students:

- Do the open materials you're using in this class help prepare you for your future career?

Teachers' professional learning

Many open educational resources are created by K-12 and post-secondary content experts and educators, and once materials are developed, the ability to share and adapt them can foster a collaborative environment for educators.

Question to ask system leaders:

- Do educators in your system collaborate to select, customize, or create OER? If so, how does the system support that work?

Question to ask educators:

- Have you developed professional skills or knowledge while creating or adapting OER?

The business of education technology

The ecosystem for developing and maintaining OER is diverse, with multiple funding models and options for sustained investment. These include public investments at the state and federal levels, companies curating resources and providing platforms for educators to use, and philanthropic investments.

Questions to ask funders and advocates:

- How can OER be financially sustainable?
- How are traditional publishers taking cues from OER?

Voices from the Field

“We’re seeing a **shift in the market from what we would call individual adoption to institutional-supported adoption and adaption of OER**. The institutions are now helping faculty drive affordability for students. That’s a significant change.”

– David Harris, Editor In Chief, OpenStax, Rice University, TX

(david.harris@openstaxcollege.org)



CASE STUDY: Liberty Public Schools

Liberty Public Schools (MO) is in the process of moving their entire social studies and science programs to open curriculum. Able to convert funds traditionally earmarked for course materials into professional development for teachers, the school district has assembled a cohort of teachers to lead the charge for OER implementation.

Teachers are leaning into OER, with science teachers designing district-wide lessons and world languages teachers reporting greater attention devoted to levelled reading and student growth. For more information, contact Dr. Jeanette Westfall (jeanette.westfall@lps53.org).



Looking for Additional Story Angles Related to OER?

Consider these questions:

- How do OER change teaching and learning in a classroom?
- How are OER being used in different ways than traditionally copyrighted resources?
- How do system leaders prepare and equip educators to use OER?
- How do OER providers help ensure that resources are high-quality?
- What does the journey to adopting OER look like for an educator or a system?
- How are OER being scaled up across a system?
- How do OER save money, and for whom?
- As traditional publishers evolve their resources and look to compete, why are educators and systems choosing OER?
- How do OER compare to lower-cost options like inclusive access?
- How are governments investing in OER?
- Where are OER being used in my community?

OER By the Numbers

K-12

- **118** #GoOpen districts¹
- OER math curriculum by Open Up Resources received the **highest-ever score** on EdReports²
- **30%** of math teachers and over **25%** of ELA teachers in the U.S. use Engage NY's OER database³
- **36,305** K-12 materials across a wide range of subjects are available on OER Commons⁴

Higher Ed

- **48%** of U.S. higher ed institutions are using OpenStax open textbooks⁵
- Adoption of OpenStax textbooks among faculty teaching large-enrollment courses is **16.5%**, rivaling commercial textbooks
- Higher ed students save **\$116.94** on average per course when OER is adopted in place of traditional textbooks⁶
- **70%** of higher ed faculty believe colleges should embrace the use of OER⁷
- **28,752** higher ed materials are available across a wide range of subjects on OER Commons⁸
- **27** states and the District of Columbia have funding initiatives and policy support for OER⁹

Research

To learn more about how educators perceive and use OER, visit the following sources:

K-12

- What We Teach: K-12 School District Adoption Process ([Babson Survey Research Group, 2017](#))
- The Impact of Open Textbooks on Secondary Science Learning Outcomes ([Robinson, Fischer, Wiley, Hilton, 2014](#))
- Use of OER in an Era of Common Standards ([Rand Corporation, 2017](#))

Higher Ed

- Open Education Resources in U.S. Higher Education ([Babson Survey Research Group, 2018](#))
- Student Perceptions of Open Pedagogy: An Exploratory Study ([Hilton, Wiley, Chaffee, Darrow, Guilmett, Harper, Hilton, 2019](#))
- Opening Public Institutions: OER in North Dakota and the Nation ([Babson Survey Research Group, 2015](#))
- Maintaining Momentum Toward Graduation: OER and the Course Throughput Rate ([Brigham Young University, Lumen Learning, and Tidewater Community College, 2016](#))
- Performance Audit Report: North Dakota University System Open Educational Resources ([ND State Audit, 2018](#))
- Participant Experiences and Financial Impacts: Findings from Year 2 of Achieving the Dream's OER Degree Initiative ([Achieving the Dream, 2018](#))

Sources

K-12 Teachers

- Christine Gumpert, High School Social Studies Teacher and Curriculum Coordinator/Department Chair, Garnet Valley High School, PA (gumperc@garnetvalley.org)
- Todd Linke, High School Science Teacher, Mount Miguel High School, CA (tinke@guhsd.net)
- Kelly Verioti, High School Science Teacher, El Cajon Valley High School, CA (kverioti@guhsd.net)
- Denise Gallemore, 5th Grade Social Studies Teacher, Marysville Public Schools, MI (dgallemore31@gmail.com)
- Anthony Gabriele, Director of Learning and Innovation, Centennial School District, PA (gabran@centennialsd.org)

K-12 Administrators

- Jeanette Westfall, Executive Director of Curriculum, Instruction & Staff Development, Liberty Public Schools, MO (jeanette.westfall@lps53.org)
- Pete Leida, Assistant Superintendent, Colonial School District, DE (Peter.Leida@colonial.k12.de.us)
- Erin English, Executive Director of Innovation, San Diego County Office of Education, CA (erin.english@sdcoe.net)
- Anthony Gabriele, Director of Learning and Innovation, Centennial School District, PA (gabran@centennialsd.org)
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- Mark McBride, Library Senior Strategist, SUNY System Administration, NY (mark.mcbride@suny.edu)

Higher Education Students

- Nat Crowley, Ohio State University, OH (crowley164@osu.edu)
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- Tammy Baumann, Chief Academic Officer, Open Up Resources (tammy.baumann@openup.org)
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- Reg Leichty, Founder and Partner, Foresight Law + Policy (reg.leichty@flpadvisors.com)
- Douglas Levin, President, EdTech Strategies, LLC (dlevin@edtechstrategies.com)

Visit the [OER World Map](#) or [New America](#) to find OER users in your area.

Copies of this guide are available at <https://www.ewa.org/story-lab/reporter-guide-open-educational-resources>



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¹ U.S. Department of Education. [#GoOpen Districts](#). Retrieved on August 12, 2019

² Open Up Resources. [Free, Openly Licensed Curriculum Receives Highest-Ever Score on EdReports' Rigorous Review](#). Retrieved on August 12, 2019.

³ RAND Corporation. [Use of Open Educational Resources in an Era of Common Standards: A Case Study on the Use of EngageNY](#). Retrieved on August 12, 2019.

⁴ OER Commons. [Resources](#). Retrieved on August 12, 2019.

⁵ OpenStax. [48 percent of colleges, 2.2 million students using free OpenStax textbooks this year](#). Retrieved on August 12, 2019.

⁶ SPARC. [A New Method for Estimating OER Savings](#). Retrieved on August 12, 2019.

⁷ Inside Higher Ed. [2018 Survey of Faculty Attitudes on Technology](#). Retrieved on August 12, 2019.

⁸ OER Commons. [Resources](#). Retrieved on August 12, 2019.

⁹ SPARC. [List of North American OER Policies & Projects](#). Retrieved on August 11, 2019.