

OPEN EDUCATION RESOURCES

This resource provides a framework to help you evaluate the efficacy, quality, and usefulness of OER content from a variety of sources. Follow the established pathway to consider the various criteria, allowing you to arrive at a decision about the OER content in question.

To evaluate OER content consider the variables of content, learning activity, engagement, feedback, usability, and functionality in a step by step way to arrive at a decision about including or rejecting the OER in your teaching.

Content: Does the OER material relate to the topic, course, or module? Does it have a clear, articulated focus?

YES

No

Learning activity: Does the OER support student learning through information, interactivity, critical thinking, problem solving, or reflection?

YES

No

Engagement: Will it be accessible for your students, or is it too technical? Or is it robust and challenging enough for your students?

YES

No

Feedback: Does the OER offer integrated opportunity for students to check their learning or does it cover abstract concepts and must be supplemented by other class activities?

YES

No

Reuse: Does the license allow changes/derivative works? Is that required in this instance?

YES

No

Functionality: Does the OER act/ behave as a learner would expect? Does the functionality promote or inhibit learning?

YES

No

DISCARD

RECONSIDER
If this component is vital to your instructional needs, discard. If not, then continue to next component.

CONGRATULATIONS
After reviewing the OER under consideration, you have made a decision that it meets your educational objectives and learner needs.
After this selection, you are ready for integration with your other teaching materials.

SCIENCE OER RESOURCES

Broad-Scope Resource

OER Commons:

With a browseable collection, this is an excellent search tool for those newer to OERs. Results may be filtered by object type, subject, education level, and Copyright license.

Website URL: oercommons.org

Oasis:

An OER search tool that covers open content from 98 sources and holds over 350,000 records. Results may be filtered by object type, subject, source, and Copyright license.

Website URL: oasis.geneseo.edu

MIT Open CourseWare: Massachusetts Institute of Technology:

Web-based publication of virtually all MIT course content, including lecture notes, online textbooks, assignment problems, and video lectures.

Available subtopics for Science include Biology, Chemistry, Cognitive Science, Earth Science, Pharmacology and Toxicology, and Physics.

Website URL: <https://ocw.mit.edu/courses/>

Speciality OER Databases: Science

NCBI Bookshelf (National Center for Biotechnology Information):

The Bookshelf offers free online access to books and documents on life science and healthcare.

Website URL: <https://www.ncbi.nlm.nih.gov/books/>

PhET - Interactive Simulations

Resource offers gamified and interactive math and science simulations to engage students. All simulations are open source and select sims work with assistive technology.

Website URL: <https://phet.colorado.edu/>

ComPADRE

ComPADRE is a digital library with peer-reviewed resource collections for physics instruction. Resources include simulations, tutorials, labs, and physics education conference sites.

Website URL: <https://www.compadre.org/portal/Collections.cfm>

