Exploring & Adopting OER in Online Math Courses

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Introduction

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What are Open Educational Resources (OER)?

Open Educational Resources (OER) are educational materials freely and legally available through open licensing for instructors and students alike to use, adapt, share and reuse.

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The 5 Rs

Creative Commons Licensing permissions for OER are typically defined by the 5 Rs, outlining an individual's right to:

- **Retain:** create, archive, and own copies of the content

- **Reuse:** content can be reused in its unaltered form

- **Revise:** content can be adapted, adjusted, modified, and altered

- **Remix:** original or revised content can be combined with other content to create something new

- **Redistribute:** copies of the content can be shared with others in its original, revised or remixed form.

Four Rights

Icon	Right	Meaning
	Attribution (BY)	Credit must be given to the creator
	Share-alike (SA)	Adaptations must be shared under the same terms.
	Non-commercial (NC)	Only noncommercial uses of the work are permitted.
	No derivative works (ND)	No derivatives or adaptations of the work are permitted.

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License Types

License Name Abbreviation	Icon	Attribution Required?	Allows Remix?	Allows commercial use?
No Rights Reserved CC0		No	Yes	Yes
Attribution BY		Yes	Yes	Yes
Attribution-Share Alike BY-SA		Yes	Yes	Yes
Attribution-Non-Commercial BY-NC		Yes	Yes	No
Attribution-Non-Commercial-Share Alike BY-NC-SA		Yes	Yes	No
Attribution-No Derivatives BY-ND		Yes	No	Yes
Attribution-Non-Commercial-No Derivatives BY-NC-ND		Yes	No	No

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In General

- OER are generally digital in format but can include print works as well.

- They include any type of teaching, learning, or research content, such as:

syllabi, textbooks, lesson plans, study guides, assignments, exams, exercises, videos, etc.

- OER also extend to digital learning tools, such as:

homework management system, software for web design or programming, video creation or word processing programs, etc.

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Choosing a license

Anyone (instructors and students) can make their work openly available for others and give permission under copyright law.

The six licenses and the public domain dedication tool give creators a range of options. Check out the [CC License Chooser Tool](#)

Before licensing your work, some important things to consider:

- The licenses and CC0 can't be revoked.
- You must own or control copyright in the work.

Textbook Costs

Student's Financial Struggle:

- How many students can afford to buy expensive textbooks?
- How many classes does each student take in a semester?
- How long it takes for the students to buy the textbooks?
- What if a student dropped a course and retake again to find that the student need to buy a different textbook?

One Possible Solution:

- Consider Using OER Textbooks

Use of OER

Instructor's Concerns:

- **Quality**

- **Ease of adoption**

- **Articulation**

- **Time needed to revamp the course**

- **Availability for Ancillaries**

- **Reliability on these free resources**

- **Accessibility**

- **Support to troubleshoot**

ASCCC − OERI

- **Join the OERI Community.**
- **Find OERI Discipline Lead**
- **Find OER Discipline Resources**
- **Find [OER by CSU GE](OER by CSU GE)**
- **Find [OER by TMC](OER by TMC)**

ASCCC OER Initiative
OERI

First Step: Explore

Let us take time to explore:

- **Choose a course that you teach often or any course you would like to find OER materials**

- **Use the links provided to search to locate the resources**

- **Jot down things you need to adopt the OER textbook for your class.**

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Math OER

Openstax

- **LMS Integration**
- **Test banks**
- **Answer guides**
- **Powerpoint slides**
- **Lecture Notes**

OpenTextBookStore

- **Textbook doc, pdfs**
- Easy LMS integration
- Schedule, syllabus
- Homework, quizzes
- Videos, textbook links

Create and/or Curate your own Textbook

LibreTexts

- **Build Digital Textbooks using intuitive visual text editor that matches your course outline with seamless LMS/Canvas Integration; Print-on-Demand for physical textbooks**

- **Create personalized and adaptive Assessments that supports formative and summative evaluation**

- **Design interactive media that allows fun and intuitive games and activities**

- **Collaborate and socialize with your peers, evaluate, curate and manage your OER**

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OER Ancillaries

Video lessons:

- **Khan Academy**
- **Mathispower4u**

Search Tool:

- **Canvas Commons**
- **OER Commons**

Homework Tool:

- **MyOpenMath**

Interactive Simulations:

- **3DCalcplot**
- **Desmos**
- **GeoGebra**
- **CK-12**
- **WolframAlpha**

Google Advance Search:

- **to filter by usage rights**

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Second Step: Get Started

Learn if these websites needs registration.

Let us take time to create an account for:

- **Openstax**
- **MyOpenMath**
- **OER Commons**

More OER Collections

- **Merlot**
- **MIT Open Courseware**
- **BCcampus OpenEd**
- **OpenTextbookLibrary**
- **California Open Online Library for Education (COOL4Ed)**
- **Teach OER**
- **Teaching Commons**

Final Step: Make the Commitment!

You can do it and we can help!

Register for the next webinar on

"Online Math OER & ZTC"

- Date: Friday, March 1st , 2024
- Time: 10:00 – 11:30 a.m.

Join and learn on how to use OER textbook, and MyOpenMath(MOM) in your Math course to make your class a Zero Textbook Cost (ZTC) section!

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Questions?

Thank you!

Recorded webinars and a schedule of upcoming events are available at [onlinenetworkofeducators.org/spring-2024-webinars.](onlinenetworkofeducators.org/spring-2024-webinars)

Email support@cvc.edu with any questions!

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