Advocating for OER

STEM Liaison self-reflections on curricular support requests

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Problem Statement

STEM Liaison Librarians noticed curriculum support requests were trending towards incorporating open educational resources (OER).

Arizona State University

- **University landscape Fall 2024**
  asu.edu/about/facts-and-figures

Campus Immersion
79,818

Digital Immersion
72,994

Total: 152,812

- **Outline Class Mode**
  - **iCourse:** in-person students taking online courses.
  - **ASU Online:** students enrolled in fully online programs.
  - **Universal Learner and Earned Admission:** non-admitted students taking self-paced courses where credits can be later added to their transcript.
- **Decentralized efforts towards OER use and implementation.**
  - No dedicated OER Librarian.

About Us

- **Early Career**
- **Creative Commons Certificate for Academic Librarians**
  - Graduates of January 2024 cohort
- **2 STEM Liaisons covering:**
  - Life Sciences
  - Mathematics
  - Molecular Sciences
  - Physical Sciences

ASU Library
Arizona State University

Request Breakdown

Initial requests sought materials to replace or support existing curriculum as courses moved from in-person to solely online. In recent years, the university's enrollment has increased significantly with a rapidly growing online population.

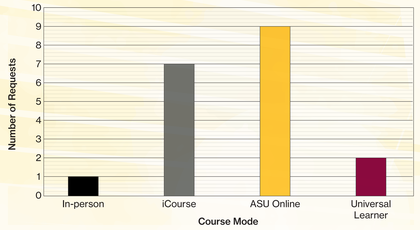
Time Period: Summer 2022 – Fall 2024
Total Number of Requests received: 10

Subjects:

- Astronomy
- Biology
- Chemistry
- Earth Science
- Mathematics
- Physics
- Sustainability

Type of Librarian Recommendation	Number of Recommendations
OER Repositories	2
OER Simulations	4
OER Textbooks	3
OER Videos	2
Open images	3
Stock images	1
Library Materials (subscriptions)	2
OA papers	1
Podcasts	1

OER Requests by Course Mode



Type of Initial Request	Number of Requests
Textbooks	1
Simulations	4
Videos	2
Images	3
Supplementary materials	2
Problem sets	1

Initial Request	Librarian Recommendation	What was Implemented
Replacement images for online canvas-based course.	Openly-licensed images and OER simulation.	NASA simulation and selected replacement open images were integrated into course.
Calculus assignment problems for group of courses.	OER textbooks.	No further communication after recommendation was shared.
Lab simulations for virtual laboratory.	Recommended OER and library resources (JoVE, Current Protocols and Knovel).	Team decided to use library literature, specifically open access articles were selected for the techniques portion of the course.

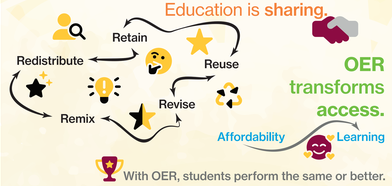
OER Definition

Our working definition of OER = broader, accessible and no pay

Open Educational Resources

are techniques, materials and tools used for **teaching**, **learning** and **research**, shared under public domain or **open license** for re-use.

creative commons



Adapted from "OER is sharing" by giulia.forsythe

Main Takeaways

Trends

- Requests were mixed between seeking OER materials and seeking materials that could be OER.
- Requesters were willing to use OER but not produce OER.
- Some departments were willing to pay for convenience vs. utilizing OER.
- Departments are not willing to maintain or update resources.

Challenges

- Not knowing what is actually implemented, not seeing the end product.
- Selecting license types for resources to align with all three online modes.
- Certain types of online course development could prevent use of certain OER (commercial use).

Future Work

Next Steps

- **Expand scope of project.**
  - STEM Division (Health Sciences and Engineering)
  - Other Divisions (Arts, Humanities, Social Sciences, Open Science and Scholarly Communication and E-Learning and Instruction)
  - Library-wide
  - University-wide

Future Directions for OER advocacy

- Working with Faculty and staff towards CC licensing and creating open education texts
- Creating a unified approach to OER

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