

CTEL Course Resource Guide

Using AI to Fill Gaps in OER Content

Key Concepts & Highlights

Faculty transitioning a course to open educational resources (OER) or zero textbook cost may find that available materials do not include everything the course needs. A resource may be missing content, assessments, or presentations. Dr. David Perdian recommends using generative AI tools, such as Microsoft Copilot or Google Gemini, to create a first draft that helps fill these gaps. Faculty then serve as the editor, revising and verifying the material to ensure it is accurate, appropriate for the course, and responsive to student needs.

Recommended Strategies & Practices for Implementation

1. Strategy: Identify a Specific Gap in Existing OER

Why it matters:

Beginning with one clearly defined need makes the process more manageable and helps keep AI-generated content connected to the course.

How to implement:

- Review the first module or chapter of the course.
- Identify a missing item, such as explanatory content, an assessment, or a presentation.
- Define what the new material should help students learn or practice before using an AI tool.

2. Strategy: Use AI to Develop a First Draft

Why it matters:

Writing new course materials, assessments, and presentations can require significant time. AI can provide a starting point that faculty can refine.

How to implement:

- Use Microsoft Copilot or Google Gemini to request a first draft of the missing material.
- Include the topic, course context, intended students, and purpose of the resource in the prompt.
- Review the initial response and ask the AI tool to revise or reiterate when the draft does not yet match the course need.

3. Strategy: Take Over as the Editor

Why it matters:

AI-generated material is a starting point, not the finished course resource. Faculty oversight is necessary to ensure that the final content is accurate and appropriate.

How to implement:

- Check the content for accuracy and correct any errors or unsupported information.
- Revise the language, examples, depth, and organization to fit the course.
- Confirm that the material supports the intended learning need and is appropriate for students.
- Complete a final review before adding the material to the course.

Quick Tips

- Start with one gap in the first module or chapter.
- Treat AI output as a first draft rather than finished course content.
- Ask the AI tool to revise or reiterate when the first response is not close enough to the course need.
- Verify accuracy and edit the material for the specific course and students.
- Contact CTET for assistance with using AI to support OER development.

Additional Resources

[Dr. David Perdian - OER Content](#): CTET teaching tip on using AI to fill gaps in OER and zero-textbook-cost course materials.

[Microsoft Copilot](#): An AI tool faculty can use to begin drafting missing course content, assessments, or presentation material.

[Google Gemini](#): An AI tool faculty can use to develop and revise first drafts of course resources.

[OER Commons](#): A digital library for discovering and sharing open educational resources.

[OpenStax](#): Openly licensed textbooks and supporting educational resources.

[Creative Commons Licenses](#): An overview of Creative Commons license types and conditions.

[CTET Faculty Resources](#): Faculty-development resources and assistance with teaching, learning, OER, and AI-supported course development.