

Goal: The goal of this work is to develop a scholarly database of articles detailing teaching methods related to the Guiding Principles for Effective Learning Environments developed by the community during the 2023-2024 academic year. Using generative artificial intelligence (GAI) to facilitate this work, allowed us to produce useful summaries of a great number of articles.

Writing the Prompt

All three student researchers, alongside Professor Frederick, reviewed and studied different resources on AI prompt writing, which provided thorough information on how to effectively format it and the elements to include. You can explore some resources here:

- [Highly instructive YouTube video](#)
- [AI for Education Prompt Library](#)
- [Ethan Mollick & Lilach Mollick Prompt Library](#)

The six basic things to include in AI prompt writing are task, context, exemplar, persona, format, and tone. Here is a brief explanation of what we identified for each of them:

- **Task:** analyze and summarize the article, highlight the practical actions/practices recommended, identify keywords, and give the bibliographic information.
- **Context:** higher education, is set in a small teaching-focused college, and we are looking to improve inclusion in the classroom.
- Exemplar: (not provided)
- **Persona:** an expert in higher education pedagogy with particular expertise in diversity, equity, inclusion, justice, and accessibility (DEIJA)
- **Format:** in the following order: title, bibliographic information, keywords, summary in a paragraph, and a descriptive list of prescribed/recommended actions and practices
- **Tone:** professional language that can also be accessible to someone with limited knowledge of alternative teaching methods

Based on this, we developed the following prompt:

I am a professor at a small teaching-focused college hoping to learn new teaching practices and processes that I can implement in my teaching to become a more effective and inclusive instructor, outlined by the six guiding principles of centering student learning; transparent and intentional design; exploring concepts and practices across theoretical, cultural, and social differences; fostering belonging; ongoing pedagogical and professional growth and development; acknowledging and working to alleviate the impact of structural inequities on learning; and promoting equitable access to learning. You are a researcher in higher education pedagogy with particular expertise in diversity, equity, inclusion, justice, and accessibility. Analyze the attached article, summarize it in a paragraph, identify keywords, and highlight the practical actions recommended by the article. Format it to show the title of the article, its bibliographic information, a list of the keywords, the summary in a paragraph, and a descriptive list with examples of recommended practice. Write it in a professional language that can be understood by someone with little background knowledge of alternative teaching methods.

Note: the prompt was also slightly edited after a few tries to optimize the format and information provided.

Prompt Validation Process

To validate the AI prompt results, all student researchers and Professor Frederick read the same scholarly article and followed the same task as the AI. We read the article and individually developed a summary, a list of keywords, and a descriptive list of the recommended practices. The article was selected from our shared Zotero library, which was compiled by the Literature Team of the Working Group on Inclusive and Accessible Teaching and Learning during the summer of 2023. These summaries and analyses were then compared with the results given by the AI. The AI-generated summary, bibliography, list of keywords, and list of practices were accurate and aligned with our takeaways from the article. Each student researcher validated the summary with an additional scholarly article. In total, the prompt was validated with four different articles before proceeding.

How was it used?

Employing an AI prompt allowed us to review a larger number of scholarly articles in a shorter time frame and create a more exhaustive list of resources to share. The AI prompt was used to extract the information outlined previously from each scholarly article and create a substantial and detailed library of resources related to each of the Guiding Principles for Effective Learning Environments, as well as provide practical examples.