

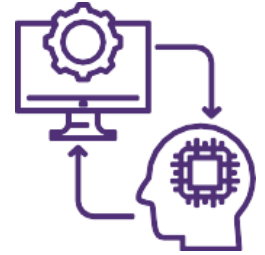
How to Use AI Without Hurting Your Learning



AI can either boost or hinder your learning experience, depending on how you use it. When utilizing generative AI tools, it's important to interact with content rather than solely relying on AI for answers. Asking a question like "How do I solve this problem?" and only reading the responses is an example of passive learning. For active learning to take place, you must think about the content or issue, attempt to solve it, then reflect on your thought process.

THE IMPORTANCE OF ACTIVE LEARNING

Understanding the significance of active learning strategies is crucial. Engaging consistently with content over spaced intervals helps you effectively learn and store information in your long-term memory. This allows you to recall the information, when necessary, especially in situations when AI tools are unavailable (e.g., during exams).



Step 1: Think First

Before engaging with AI, think about the content and ask yourself:

- What is the AI policy for my course? Check your syllabus to find out.
- What are the [Clemson University Guidelines](#) for responsible and ethical AI usage?
- What do I already know about the content?
- What is the question really asking?
- What formula should I use?



Step 2: Try It Yourself

Once you've thought about the content, attempt the task on your own:

- Try to solve the problem independently.
- If writing a paper, list your ideas.
- Try reframing the question in your own words.
- Remember that struggling is a part of the learning process. You don't have to get it right the first time, and your mental effort serves as the foundation for learning to occur.



Step 3: Check

Compare your efforts with the AI output:

- Ask AI what steps you may have missed.
- Prompt the AI tool to ask you guiding questions instead of providing the answer (e.g., What formula applies here?)
- Check in with AI to identify where your understanding is limited.



Step 4: Reflect

Reflect on your learning and use critical thinking skills to judge AI output:

- Is the AI response accurate and reliable?
- Contextually, what did I get right?
- Do I understand what I got wrong and why?
- Can I explain the correct answer on my own and without AI?

Remember to always check the AI output against course materials and resources for accuracy. AI can make mistakes, "hallucinate", and provide biased responses.

USE STUDY FEATURES!

- ⇒ Most AI tools, including ChatGPT, Gemini, and Claude, offer study or learning modes.
- ⇒ Be sure to select the study or learning features before posing your question.
- ⇒ These modes provide guidance, questions, and hints rather than complete answers.
- ⇒ These modes support learning and retention, focusing on understanding rather than simply finishing tasks.

ACTIVE LEARNING WITH AI IN ACTION

Use this space to work through the AI active learning steps above with content from one of your courses.

AI should support your thinking, not replace it.

References: Sawyer, R. K. (Ed.). (2022). *The Cambridge Handbook of the Learning Sciences* (3rd ed.). Cambridge University Press.

Collins, A., & Kapur, M. (2022). Cognitive apprenticeship. In R. K. Sawyer (Ed.), *The Cambridge Handbook of the Learning Sciences* (pp. 156–174). Cambridge University Press.