

Writing with integrity: Integrating AI into first-year graded assignments

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Lightning talk agenda

- Artificial Intelligence (AI) teaching plan
- In the classroom:
 - AI for class
 - Feedback on search strategy
 - Feedback on writing
 - Reflections

Learning outcomes

At the end of this lightning talk, we will be able to discuss:

- the pros and cons of having an AI teaching plan;
- the advantages of using AI to develop two core undergraduate research skills: developing a search string and writing a paragraph;
- the benefits of including reflections in AI-related activities.

“The university must act intentionally by promoting critical AI literacy within our community and strategically integrating AI technologies where and when appropriate.”

AI Framework for Carleton University (2026)

Intent: Artificial Intelligence (AI) teaching plan

- Three components:
 - Syllabus language
 - In-class discussions
 - Two Copilot activities
- Approved by an educational development facilitator

Context: first-year seminar on research methods

- Scaffolded written assignments
- Summative project: short, thematic literature review
- Emphasis on writing with integrity, i.e., ethically

Syllabus language re ethical use

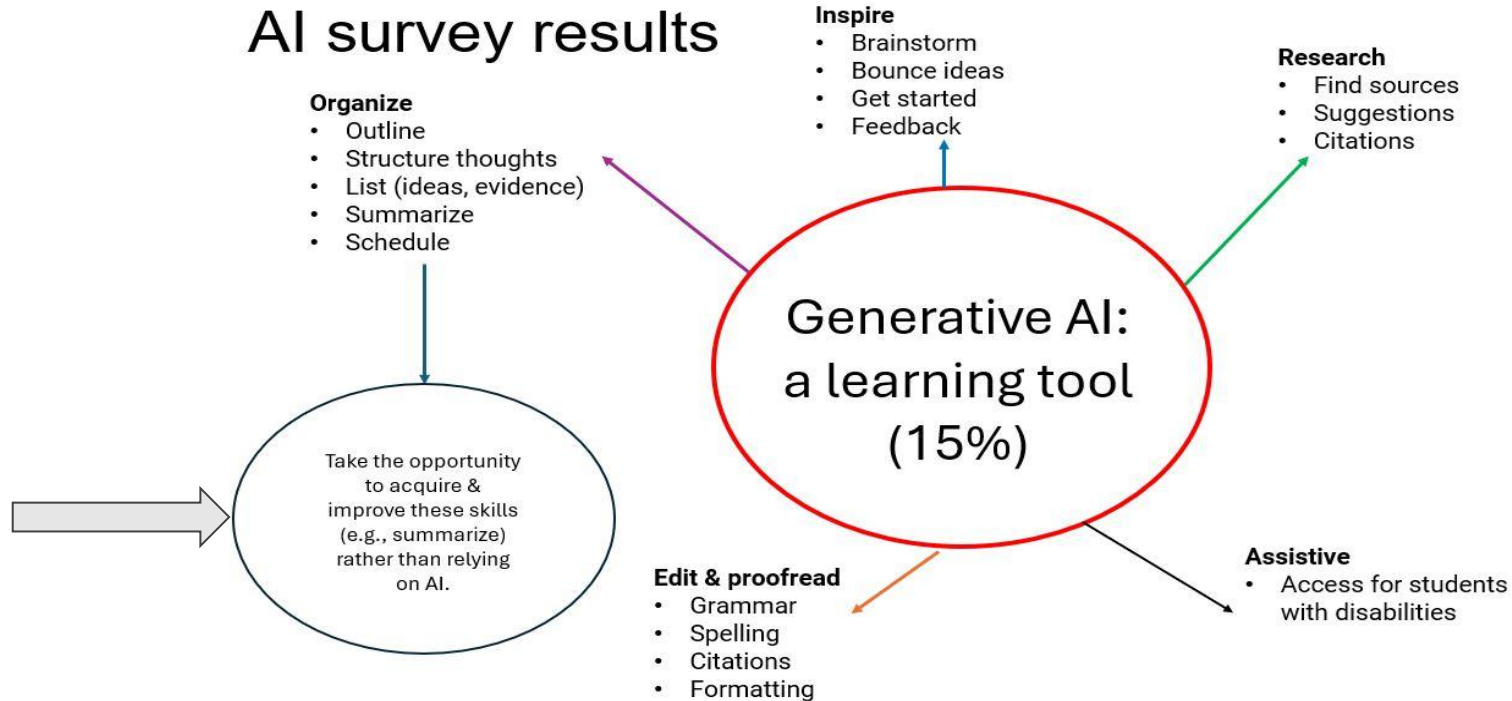
Students **may use artificial intelligence (AI) tools** for the following tasks and activities. AI content **should not exceed 15%** of content when used:

- Grammar and spell checking (e.g., Grammarly, Microsoft Word Editor)
- Citation drafting (e.g., Omni citation tool)
- Basic document formatting and design suggestions (e.g., Microsoft Word's formatting tools)
- Brainstorming ideas (e.g., use CoPilot to generate research topics for the literature review)
- Critically review research question and precision search terms.
- Critically review writing style (e.g., identify weak transitional sentences).

Students **may not use AI tools** for the following tasks and activities:

- Generating complete drafts and the final version of any graded assignments.
- Summarize the weekly readings, the reading activity sources, and the five peer-reviewed articles for the final literature review.

In-class discussion: How to use AI ethically?



“This policy supports **the use of AI as a supplementary tool**, helping students develop ideas and structure their work while emphasizing the importance of transparency and personal engagement with the content. AI can be used for inspiration and foundational support and can encourage students to critically assess and refine AI-generated material.”

FYSM1001A Syllabus (2026)

AI Activity 1: Rethink a search strategy

- Devise a search strategy, based on **an original research question**.
 - Use Copilot to evaluate and revise your search strategy if needed.
1. Use this prompt to evaluate your search strategy:
 - a. How can I improve my search terms, which are: [list your search terms and put your synonyms in brackets]?
 2. Copy and paste the Copilot results below.
 3. Revise your search strategy as needed, based on the Copilot results. Explain any changes to the search string as a result of the Copilot suggestions.
 4. Reflection: Will you use an AI (artificial intelligence) tool to help search for academic sources in the future, and why?

Outcomes

- ~ 33% of students do not change their terms.
- ~ 67% of students added more synonyms to their search string.

Why?

- “I used copilot’s revised version because it still retained my keywords and just helped add more synonyms.”
- “No, the only suggestion it made that I saw any merit to was the specification of time periods, for which I would be asking for “Pre-clovis evidence.” However, when I add this to my search, it does not provide any significant improvement to the results of the search.”

Reflections

“I have always been hesitant to use AI for my schoolwork, because I thought you couldn’t use it at all. However, I was surprised to learn that some professors encourage it in some cases. I would use AI in the future to help better my search for academic sources because I found the suggestions for this assignment really useful. My search string was strong before, but after adding Copilot’s suggested synonyms, I found a lot more sources that were exactly what I was looking for. You can tell by looking at how my result count went from 34 to 108.”

“I would use AI tools in future searches, but with caution. AI is helpful for creating search terms, refining research questions, and organizing search strategies. However, it cannot replicate the precision and caringness that a librarian has and the access to academic databases like omni is restricted. Personally, I would only use AI to help brainstorm and improve the authenticity of searching on omni.”

AI Activity 2: Rethink a paragraph

- **Write a sample paragraph** for the final literature review.
- Use the following prompt to receive Copilot feedback on the sample.

Please read this paragraph I've written and identify the biggest problems you see in my writing. Where, for instance, might my ideas be disconnected, transitions weak, a quotation mishandled, or the connection between the claim I make and the evidence I provide?

- Exchange writing samples with a classmate.
- Compare and reflect on their classmate's feedback to the Copilot feedback

Reflections: Copilot vs human feedback

- Human feedback was:
 - kinder;
 - insightful regarding overall clarity.
- Copilot responses were practical and responded clearly to the prompt (e.g., transitions, quotations, disconnected ideas).
- Again, students must know how to use AI tools ethically.

“The implications of being able to process virtually anything ... needs careful consideration. It is essential that educators start to talk about these issues with students; if we want students to use AI responsibly AI ethics must be baked into curriculum and include AI literacy, an emerging essential skill.”

A. Bowne & C. E. Watson,
Teaching with AI.

A practical guide to a new era of human learning (2024).

Final thoughts

One approach to AI literacy.

- A formal teaching plan consolidates classroom use of AI.
- Early discussions connect the syllabus statement to student understanding of the ethics of AI use.
- Activities: ethical decision points, based on the principle “do the original work first”

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