



Better Prompting with Copilot

HANDOUT



McGill

Teaching and
Learning Services

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Prompting methodology

Prompt types

Prompt Type	Summary	Example 1	Example 2
Chain-of-Thought	Step-by-step reasoning process	"Explain how you solved this calculus problem, step by step."	"Walk through your reasoning for selecting this research methodology."
Role-Play or Expert	Adopt persona or expertise	"You are a policy advisor—draft a memo on climate adaptation strategies."	"As a historian, interpret this primary source from the 18th century."
Self-Consistency	Multiple paths, same outcome	"Solve this physics problem using two different approaches—do they agree?"	"Write two different thesis statements for this essay and compare their conclusions."
Automatic Prompt Engineer	Improve prompt iteratively	"Revise this question to better elicit critical thinking from students."	"Improve this assignment prompt to encourage interdisciplinary connections."
Generated Knowledge	Use AI to create insights	"Generate a summary of recent trends in educational technology using AI tools."	"Use AI to brainstorm potential impacts of quantum computing on cybersecurity."

Not sure about a prompt?

Just ask!

Approach	Example Question to Ask Copilot
General Improvement	“Can you help me improve this prompt to make it more engaging for university students?”
Targeted Refinement	“How can I revise this prompt to encourage deeper critical thinking in a graduate-level seminar?”
Prompt Engineering Techniques	“Can you optimize this prompt using chain-of-thought or role-play techniques?”
Meta-Prompting	“What kind of prompt would better assess students’ understanding of this concept?”
Comparative Evaluation	“Here are two versions of a prompt—can you compare them and suggest which is more effective?”

Activity: Pick up a method and try



- Method:
 - Chain-of-Thought
 - Role-Play or expert
 - Self-consistency
 - Automatic prompt engineer
 - Generated Knowledge

- Pick up a method and use it in your domain
- Ask Copilot to help improve your prompt
- How can you use this prompt in your teaching?

Improving prompts

Good Prompt | Bad prompt

Aspect	Bad Prompts	Good Prompts
Clarity	“Tell me about evolution.”	“Explain the process of natural selection in simple terms.”
Specificity	“What are the benefits of energy?”	“List three benefits of renewable energy sources.”
Context	“What happened during the Industrial Revolution?”	“Describe the impact of the Industrial Revolution on urbanization in Europe.”
Completeness	“Compare two books.”	“Compare and contrast the themes of ‘1984’ and ‘Brave New World’.”
Avoiding Ambiguity	“Explain conditioning.”	“What are the main differences between classical and operant conditioning?”
Relevance	“What is photosynthesis?”	“How does photosynthesis contribute to the carbon cycle?”
Engagement	“Summarize the lecture.”	“Can you provide a summary of the key points from today’s lecture on quantum mechanics?”

Providing more context



Subject / Topic



Learning outcomes



Learner level



Blooms' taxonomy



Sample / example



Upload files (such as templates)

What output formats?

Category	Examples of Outputs
Text	Explanations, summaries, lesson plans, emails
Data & Analysis	Charts, statistics, visualizations, calculations
Creative	Stories, poems, dialogues, simulations
Code	Python, HTML, JavaScript, pseudocode
Visual	AI-generated images, diagrams, infographics
Web-Enhanced	Live search results, comparisons, citations

The Prompting Professor's Mini Poem

- **AI replied, so now I check—**
Did it go off track or hit the spec?
- **Clarity:** Is it clear or full of fog?
- **Context:** Did it chase the right dog?
- **Bias:** Is it fair or leaning wide?
- **Tone:** Does it teach or snark and chide?
- **Relevance:** Is it on-topic or astray?
- **Accuracy:** Are the facts okay?
- **Usefulness:** Can I use this today?
- **So prompt, then pause, and take a look—**
Before you add it to your teaching book!

The Image Inspector's Poem

AI drew a scene so bold—

But before I praise, I must withhold:

- **Clarity:** Is it sharp or strangely smeared?
- **Composition:** Are elements balanced or weird?
- **Context:** Does it match what I had in mind?
- **Bias:** Any stereotypes I need to unwind?
- **Realism:** Are shadows, shapes, and physics right?
- **Relevance:** Does it fit the prompt's insight?
- **Usefulness:** Can I use this in my slide tonight?











So pause, reflect, and take a glance—

Before you give that image a chance!

Activity: Create an image



Create an image that explains the difference between Copilot and Google

Copilot	Google
 Copilot	
 Conversational AI assistant	 Search engine
 Task-oriented responses	 List of links
 Generates content	 Finds information
 Remembers context	 No memory

Boost Your Copilot Efficiency!



Memory

Save preferences like tone, audience, or formatting rules for consistency.



Reusable Prompt Libraries

Build a go-to collection for tasks like simulations, feedback, or activity generation.

Practice? Ask Copilot to challenge you

"Create a set of 30 practice questions for a workshop for instructors called "Better Prompting with Copilot". Here are the learning outcomes:

- Identify characteristics of effective prompts for educational use.
- Apply advanced prompting strategies to improve Copilot's responses.
- Tailor prompts for different teaching scenarios (e.g., lesson planning, student engagement).
- Evaluate and iterate on prompts to achieve desired outcomes.

Use the attached handout to base the questions from.

For every question, make sure you give explanations for both the correct and incorrect answers. First, ask what types of questions they prefer to get and level of difficulty. Second, ask if they want questions based only on the handout or not. Third ask, if they prefer to get the questions all at once or one at a time to answer. Let's test this out now."