Prompting tips: Using AI tools to support evidence synthesis.

Introduction

These tips aim to help Australian Public Service (APS) officers interested in using AI tools to support evidence synthesis. This guidance is for video 12 from the "Artificial Intelligence (AI) tools for Evaluation in the Australian Government" series.

This video series and resources are meant to inspire ideas and learning. They are not designed to be a manual. It aims to show how AI tools, especially generative AI (Gen AI) can support the evaluation process. The goal is to help evaluators and APS staff explore how AI can be useful, and where it is less useful.

Al can help with repetitive tasks but cannot replace expert knowledge. APS officers must carefully review AI outputs. Any AI-based decisions and products must be owned by the officers. This human oversight can help ensure that results are accurate, fair, and culturally appropriate.

Please note that you should only use AI tools that have been approved by your agency or department. Any documents that you upload to the tool should only be up to the security clearance level approved for the tool by your agency or department.

Prompt engineering

A prompt is an instruction in natural language that tells a Gen AI tool to perform a task. Prompt engineering is the process of creating and refining these prompts to get a suitable output from the tool. $^{
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m 1}$ below shares some overarching tips for using Gen AI tools. This is derived from the AI Colab's "AI for Policy People" course, available through APSLearn. These tips are organised along four pillars:



¹ Prompts overview | Microsoft Learn

Chat, not search

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Table 1: Essential prompt engineering tips

Share specifics and context	Provide examples	Avoid leading or biased prompts	Chat, not search
Gen AI tools like Copilot are not search-engines. They don't work on keywords, they work on the meaning of words and how they are used, just like people. For more tailored, and useful responses from AI tools, you should provide as much context as you can, with specific requests. Vague prompts lead to generic answers.	Gen Al tools can "read between the lines" pick up a lot of indirect instructions when you share raw examples about your topic of interest. Examples help reinforce your specific requests.	Use balanced prompts/requests to get well-rounded responses. Avoid leading or biased prompts. If you are unsure that the Gen AI tool has considered all aspects of your query, simply ask it to be appropriately critical.	Use Gen AI tools conversationally. Ask clarifying questions, build on responses, and treat it like a colleague you're bouncing ideas off. Don't expect a perfect response in one go. Iterate, get a rough version, revise and refine through additional prompts.

What is evidence synthesis?

Evidence synthesis involves bringing together findings from multiple sources such as reports, datasets, stakeholder feedback, and literature. This can help us form a coherent understanding of what works, for whom, and under what conditions. Al tools can help speed up this process by:

- Summarising large amounts of text
- Identifying consistent and conflicting findings
- Flagging gaps in available evidence.

Example prompts to support evidence synthesis

Before prompting, please upload relevant data and documentation. These are some example prompts that you could use to prime the AI tool for evidence synthesis.

- 1. "Summarise key findings from [document name] in 2 pages." (You may repeat this step for as many uploaded items as required)
- "Compare key findings related to [topic] in [document name] with those in [document 2. namel."
- "What themes related to [topic] are consistent across these documents?" 3.
- 4. "Highlight any conflicting findings for [topic] across these sources."
- 5. "What are some gaps in the evidence about [topic] presented in these documents." You can repeat prompts 2-5 for all topics of interest.
- "Create a table summarising findings and implications for all topics discussed above." 6.

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Validating AI outputs

You should test your synthesised findings with key decision makers and stakeholders. This will require an iterative process. You will find new insights as you continue engaging, and you may find evidence gaps too.

Finally, you must make sure that these insights meet the needs of the evaluation commissioners. They should also answer your key evaluation questions. This is to ensure that the evaluation's findings are useful to program staff, and decision makers.

Policy and training

All use of AI tools must comply with the Policy for the responsible use of AI in government. Your use of AI tools should also comply with any guidance and any specific requirements from your entity's accountable official under the Policy for the responsible use of AI in government.

The ACE strongly recommends that you complete the APS Learn course, Al in government fundamentals. This course has been designed to provide all APS staff with foundational knowledge of AI, and the principles of safe and responsible use. Lastly, you can test a suite of AI tools on GovAI. This is a secure, APS-only platform designed to help APS officers learn about and use artificial intelligence (AI).