THEMATIC · RESEARCH ON LEARNING

20 chat prompts

Prompts Grounded in Research on Learning.

Ready-to-use prompts for planning, teaching and reflection.

The right tool at the right time.
Part of the WISE Framework for Education at choosewise.education.

VOL. 61

Glossary

A few terms that recur throughout this guide. If you already know them, skip ahead to the framework on the next page.

AI — Artificial Intelligence

An attempt to make machines mimic brain functions — to "think" and learn roughly the way humans do. We don't fully understand how the brain works, but we can try to replicate the parts we do understand.

Prompt

An instruction given to a chatbot to get a desired response or task performed.

Iterate

After receiving a response from a chatbot, you refine and clarify the parts you're not satisfied with — sharpening the answer until it's what you want. The better your starting prompt, the fewer iterations you'll need.

Chatbot

A chatbot has been trained to find patterns in large amounts of text. It uses those patterns to generate a response to your prompt. The answer is produced in real time.

GPT

The underlying model (Generative Pre-trained Transformer) that a chatbot uses. The same GPT can power different chatbots — for example, Copilot and ChatGPT have both used OpenAI's GPT.

Generative AI

AI that creates (generates) text, images, video, or sound in real time when prompted to do so.

Bias

AI responses can be skewed or partial, depending on the data the AI was trained on and the biases present in that data. These biases are harder to spot in chatbots than in image-generating AI.

Hallucination

The text you receive from a chatbot is based on patterns in its training data, but word generation also involves randomness — meaning generated words can sometimes create a meaning that simply isn't true.

A framework for writing your own prompts

Role: Act as an experienced physics teacher.

Task: Create a lesson plan that introduces year 8 students to optics.

Context: I teach at a middle school, have 25 students in my class, and the lesson is 60 minutes long.

Format: Link content and activities to the physics curriculum and give me a plan that describes each part of the lesson and the materials required.

Tone: Use a formal but friendly tone.

A few chatbots to know

AI can also generate images and more, but we focus here on chat capabilities.

ChatGPT — OpenAI's chatbot

Gemini — Google's chatbot

NotebookLM — Google's tool that can, among other things, generate a two-voice podcast

Copilot — Microsoft's chatbot

Claude — Anthropic's chatbot

Perplexity — From San Francisco, was early to include source links

Duck AI — DuckDuckGo's chatbot, lets you pick among several GPTs

Mistral AI — A chatbot from France

Most chatbots have age restrictions.

BEFORE YOU START

How to use the prompts

All the prompts are starting points — examples to get you going.
Adapt them to fit your context.

After using a chatbot for a while, you'll learn what kinds of prompts work better or worse. Try the same prompt twice — first as-is, then with the prefix "Act as an experienced expert teacher in [subject]" — and see whether the quality of the response improves. A good response means a good prompt. A poor response means the prompt needs more context or adjustment. Some chatbots are better than others at certain tasks, so if you're not satisfied despite multiple tries, consider switching chatbot.

Brackets and privacy

You paste the prompt text into the chatbot's input field. Wherever brackets *[like this]* appear, replace the text inside with whatever fits your context.

Always double-check the responses — chatbot output is not guaranteed to be accurate.

Note: Think carefully before uploading texts or documents. Never upload personal data or sensitive information. Mind GDPR.

20 PROMPTS

Studies and research on learning

01 What does research on learning say about the benefits of spaced repetition compared to massed repetition (cramming) for improving students' long-term memory, and give three examples of how this can be applied in *[subject]* for a *[grade X]* class?

02 Based on studies on learning, how does active recall improve retention compared to passive review, and how can I use this in a *[grade X]* class in *[subject]* to teach *[specific unit, e.g. vocabulary]*?

03 What does research show about interleaved practice and its effect on long-term learning and problem-solving ability, and how can I implement this in a *[grade X]* class in *[subject]* with *[specific units, e.g. math operations]*?

04 According to research on learning, how does elaborative interrogation contribute to deeper understanding, and what three research-based questions can I use to get a *[grade X]* class in *[subject]* to explain *[specific theme, e.g. democracy]*?

05 What do studies say about self-explanation and its impact on conceptual understanding, and how can I use this method in a *[grade X]* class in *[subject]* to connect *[specific new concept, e.g. fractions]* to prior knowledge?

06 Based on research on dual coding, how does combining text and visual elements improve learning, and how can I apply this in a *[grade X]* class in *[subject]* to explain *[specific concept, e.g. ecosystems]*?

07 What does research show about the effect of concrete examples on understanding abstract concepts, and give three research-based examples I can use in a *[grade X]* class in *[subject]* to explain *[specific abstract concept, e.g. probability]*?

08 According to Hattie's research on feedback, how can effective feedback improve student learning, and how can I create three research-based feedback loops for a *[grade X]* class in *[subject]* to reinforce *[specific unit, e.g. writing]*?

09 What does research say about metacognitive strategies and their impact on self-regulated learning, and how can I use this in a *[grade X]* class in *[subject]* to get students to reflect on *[specific goal, e.g. problem-solving]*?

10 Based on research on peer learning, how does collaboration between students improve their learning, and what three research-based group tasks can I use in a *[grade X]* class in *[subject]* to deepen *[specific theme, e.g. historical analysis]*?

11 What does research show about chunking and its effect on reducing cognitive load, and how can I use this method in a *[grade X]* class in *[subject]* to break down *[specific complex content, e.g. chemical reactions]* into three parts?

12 According to research on scaffolding, how can structured support improve students' independent learning, and what three research-based support structures can I use in a *[grade X]* class in *[subject]* to teach *[specific unit, e.g. problem-solving]*?

13 What do studies say about memory techniques (e.g. mnemonics) and their impact on retention, and how can I implement three research-based techniques in a *[grade]* class in *[subject]* to learn *[specific content, e.g. historical dates]*?

14 Based on research on interleaved practice, how does mixed practice improve long-term learning compared to blocked practice, and how can I use this in a *[grade X]* class in *[subject]* to mix *[specific units, e.g. geometry and algebra]*?

15 What does research show about peer learning and its effect on both understanding and motivation, and what three research-based group tasks can I use in a *[grade X]* class in *[subject]* to deepen *[specific theme, e.g. social issues]*?

16 According to research on self-explanation, how can self-explanation improve conceptual understanding, and how can I get a *[grade X]* class in *[subject]* to explain *[specific new concept, e.g. density]* using three research-based steps?

17 What do studies say about dual coding and its effect on memory retention compared to text-only learning, and how can I apply this in a *[grade X]* class in *[subject]* to teach *[specific concept, e.g. circuits]* using both text and images?

18 Based on research on elaborative interrogation, how can probing questions deepen students' understanding, and what three research-based questions can I use in a *[grade X]* class in *[subject]* to explore *[specific theme, e.g. sustainability]*?

19 What does research show about feedback according to Hattie's Visible Learning, and how can I use three research-based feedback methods in a *[grade X]* class in *[subject]* to improve *[specific unit, e.g. writing]*?

20 According to research on metacognitive strategies, how can reflection on one's own learning improve performance, and how can I implement this in a *[grade X]* class in *[subject]* to get students to reflect on *[specific goal, e.g. problem-solving]* using three steps?

CONTINUE ON THE WEB

The right tool at the right time.

This collection is part of a library of AI prompts for every role in the school — free to use, adapt, and share.

More prompt sets

Find prompts for principals, subject teachers, school leaders, support staff and more at choosewise.education/prompts

The WISE Framework for Education

Four questions that turn any "should we use this AI tool?" conversation into a structured decision — choosewise.education/wise

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