KOMPASS

AI AND PROMPTING

Topic Sheet

AI and Prompting

What is a prompt?

A prompt is an input or instruction given to an artificial intelligence (e.g. a chatbot or an image generator) to produce a specific output. Prompts can consist of individual keywords, full sentences, numbers, images, files, etc.

Roles, rules and style guidelines can also be defined.

Examples of simple prompts:

- Explain climate change to me in simple words.
- What are the advantages and disadvantages of AI?
- Create an image of a cute cat.

Prompts influence significantly the AI's output. It determines how detailed the response will be and from which perspective the AI will answer.

What does prompting mean?

Prompting refers to the deliberate process of formulating, adjusting, and refining a prompt to obtain better and more accurate results from an AI. It is not only about what is asked, but also how it is asked. Even small changes in a prompt can have a big impact on the response.

Examples of prompts:

- Vague prompt: "Write something about AI."
- Precise/good prompt: "Write a short, factual 200-word overview on the use of AI in education. The target audience is students ages 15-16."

What is prompt engineering?

Prompt engineering is the systematic and professional advancement of prompting. The goal is to design prompts so that AI models reliably deliver high quality, correct, and desired results. While prompting is often intuitive, prompt engineering uses targeted strategies, testing and repeated optimisation.

What makes a good prompt?

To create a good prompt, as many of the following points as possible should be integrated:

- Clarity: Is the prompt formulated as clear and understandably as possible?
  Use of simple language, short sentences, and active phrasing.

- Context: Is there a context the AI should know?
  Context can include the target audience, who the sender of the message is, and if the AI should be assigned a role.

- Precision: Is the task clearly defined in terms of content?
  The prompt should specify as clearly as possible which information is expected in the result. If the wording is unclear or too general, the answer might be vague. Thus, examples also help the AI to better understand the task.

- Structure: How should the output be organised?
  A description of the format (e.g., bullet points, table, etc.), length, order and other formatting help the AI produce a clear and suitable response.

- Reflection: Has the prompt been reviewed and, if necessary, adjusted after seeing the result?
  If the answer is not suitable, the prompt can be redefined more clearly, simplified, or expanded.

Why is prompting important?

AI systems are not neutral, they respond to inputs and reproduce patterns from their training data. Conscious prompting can therefore help to:

- Reduce misunderstandings
- Mitigate biased responses (see the TOPIC SHEET? “”, available at www.ki-kompass.lu)
- Produce higher-quality results
- Use AI systems more responsibly

Prompting is therefore a key skill for a reflective and responsible use of Artificial Intelligence.

Inspiration for the classroom

Below you will find three example prompts that meet the "good prompt" criteria to varying degrees.

Step 1: Ask students to analyse these prompts and modify them to make the results more precise.

Step 2: Ask them to input both versions (original and improved ones) and compare the outputs.

Step 3: Have them ask the AI to improve the prompts.

- You are a computer scientist and should explain the term “Artificial Intelligence” in easy-to-understand language for 12-year-old students. Make sure your explanation is no longer than three paragraphs, each with a maximum of 50 words.
- Can you summarise the given text for me? The summary should be no longer than 200 words. Highlight important words.
- I must write a short text about climate change. The terms “greenhouse gas,” “heatwave,” and “water shortage” must be used. Can you make three separate suggestions so I can choose the best one? Each suggestion should be a maximum of 500 words. The target audience is people who do not believe in climate change.

Note: Teachers should check the resources to see if they are suitable for the respective class and context and adapt their use if necessary.

To implement the teaching ideas presented, the tools provided on the KI Kompass website should be used.

References

- Promptingguide.ai / DAIR.ai: *Leitfaden zum Prompt-Engineering.* Available at: https://www.promptingguide.ai/de (last accessed: 21.01.2026).
- Section | AI: What is Prompting for AI? The Beginner’s Guide to AI Prompt Writing. Available at: https://www.sectionai.com/blog/what-is-prompting (last accessed: 21.01.2026).
- MeinGPTDocs: *Best Practices – Practical tips for Better Prompting.* Available at: https://docs.meingpt.com/en/prompting/05-basics-best-practices (last accessed: 21.01.2026).