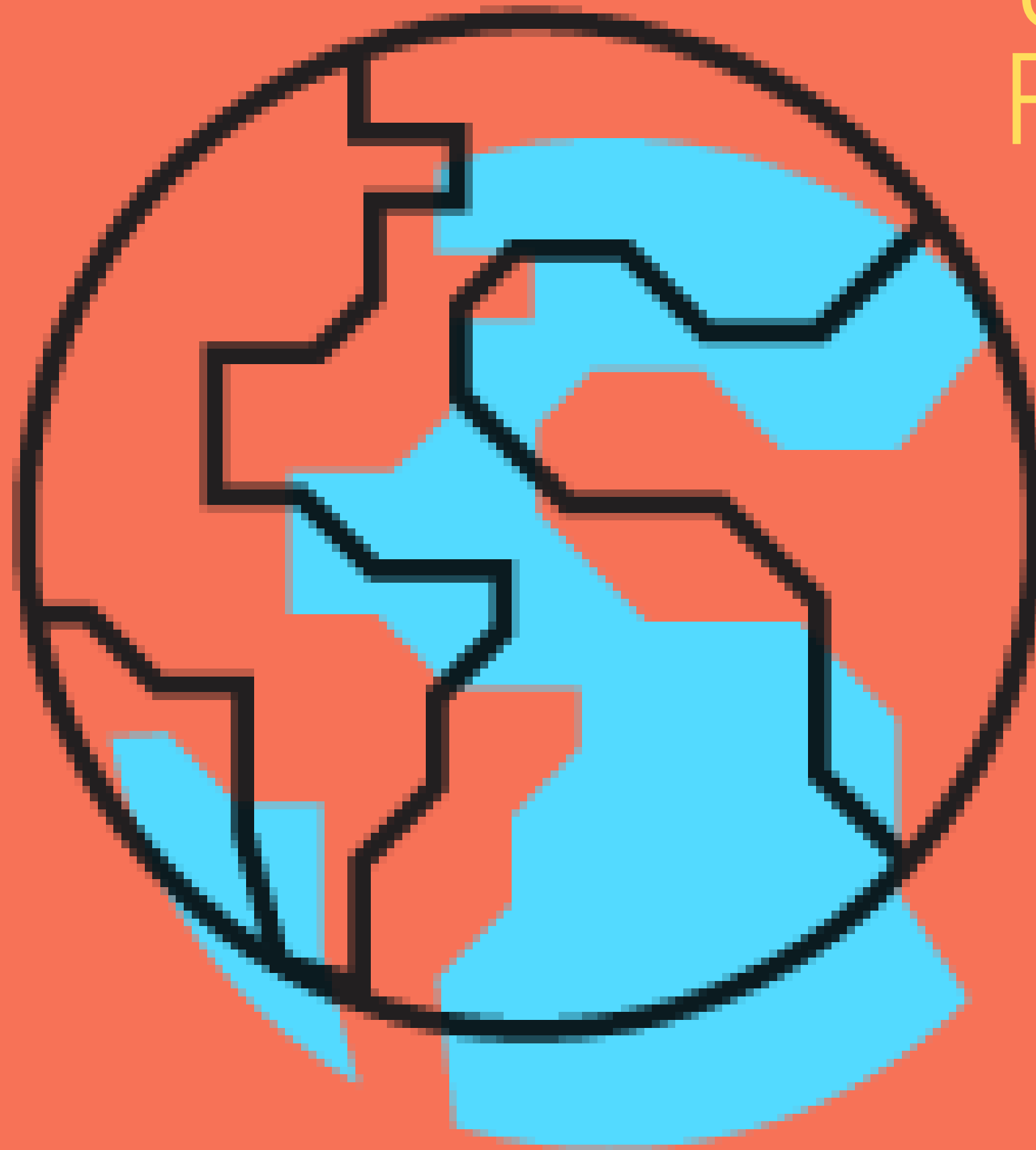


Unlocking the Potential of AI in Education



Exploring practical AI
tools and techniques
for teaching and
learning.

Hjörtur Ágústsson
04.12.2024

Unlocking the Potential of AI in Education

Exploring practical AI tools and techniques for
teaching and learning.



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Who am I?

Hjörtur Ágústsson

Hjörtur Ágústsson

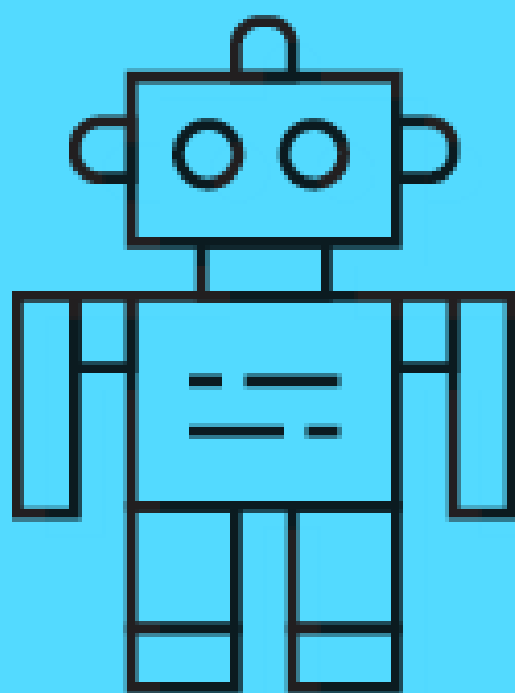
15 years of experience working in the educational sector

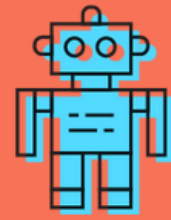
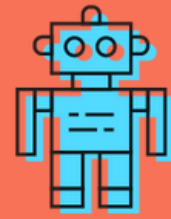
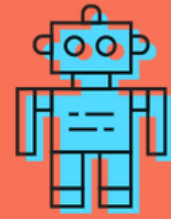
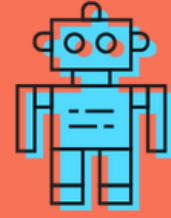
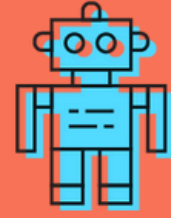
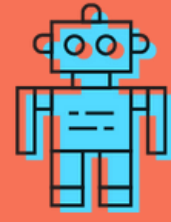
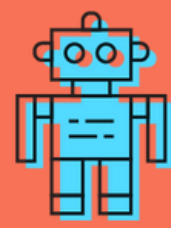
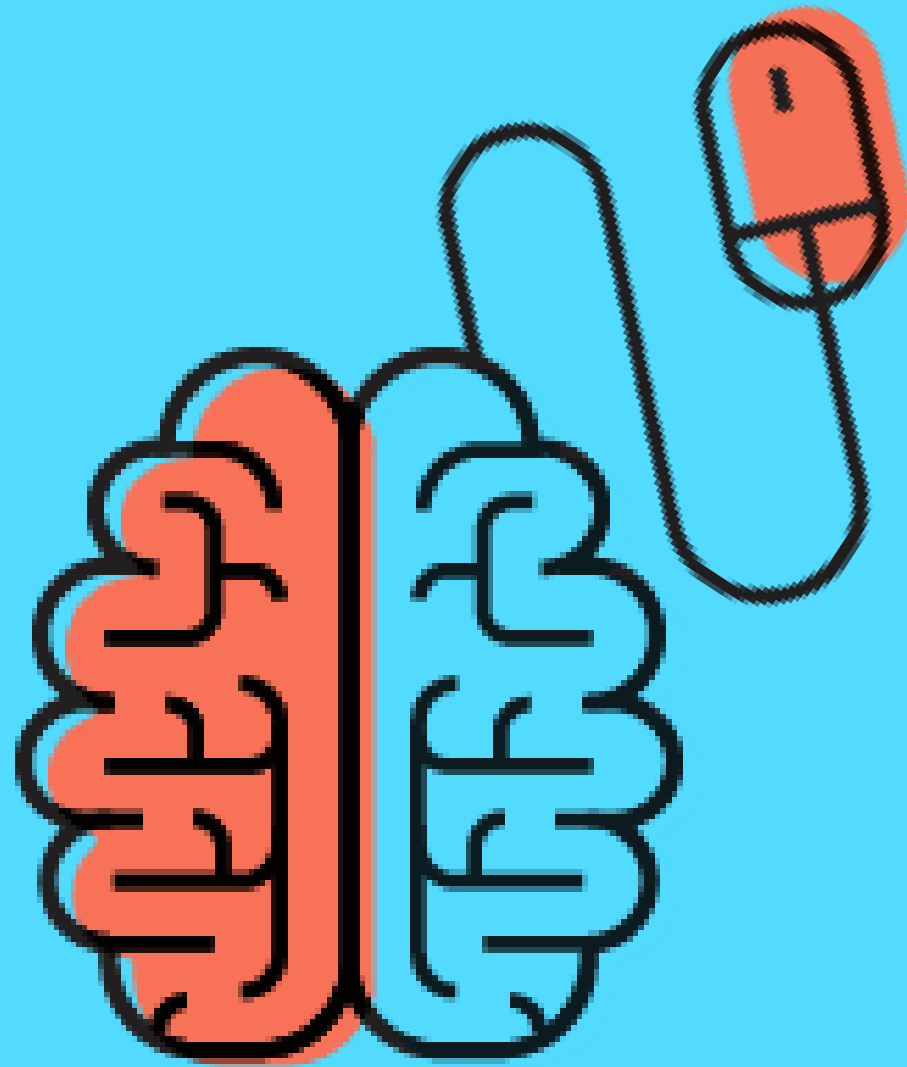
10 years working in Erasmus+ National Agency

5 years working for the City of Reykjavik

2 year actively working with AI

3 children in Reykjavik schools

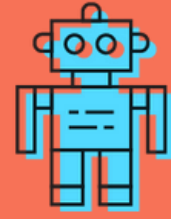
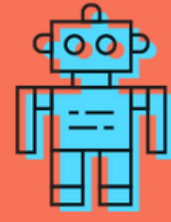
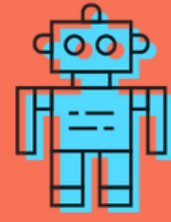
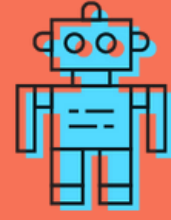
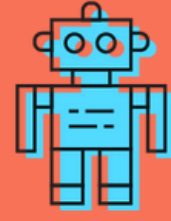
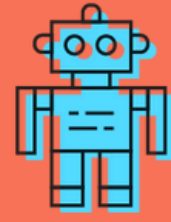
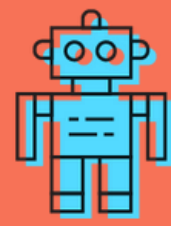
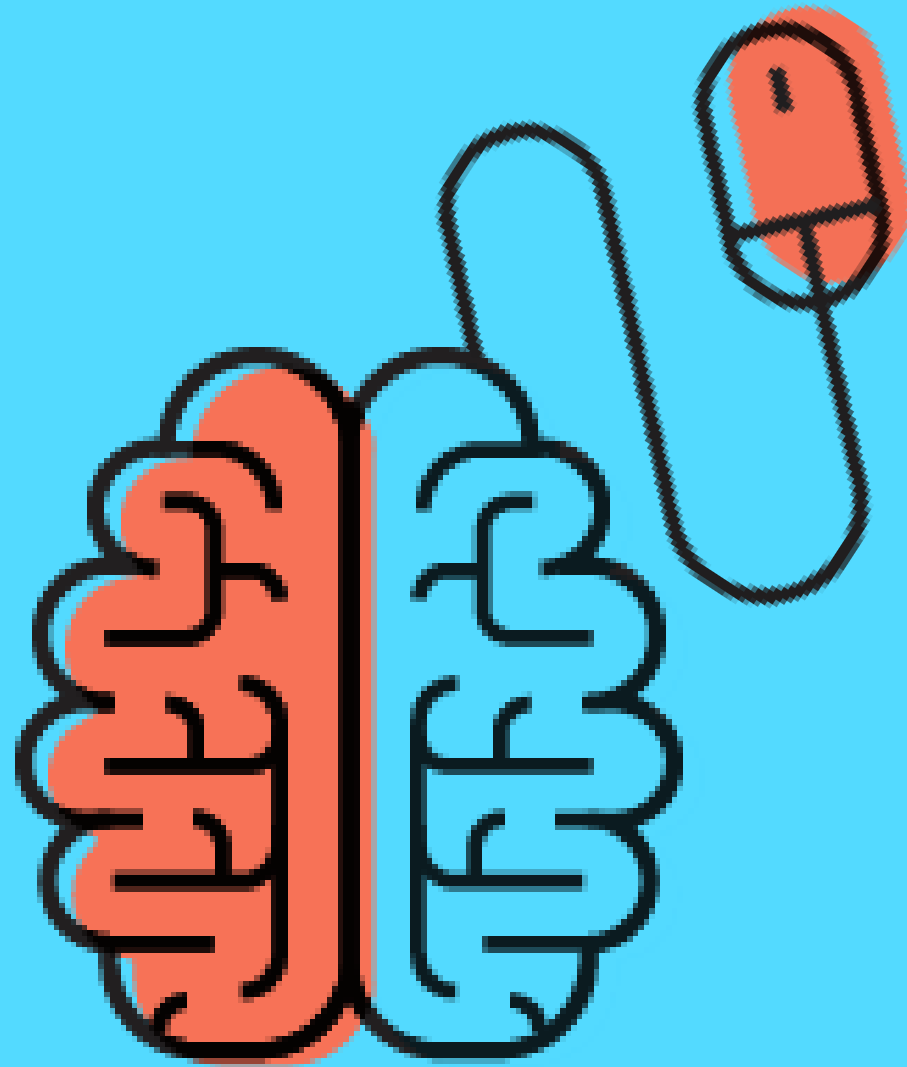




Introduction to AI

Chat GPT definition:

AI (Artificial Intelligence): The capability of machines to imitate intelligent human behavior, enabling them to perform tasks that typically require human intelligence, such as understanding language, recognizing patterns, and making decisions.

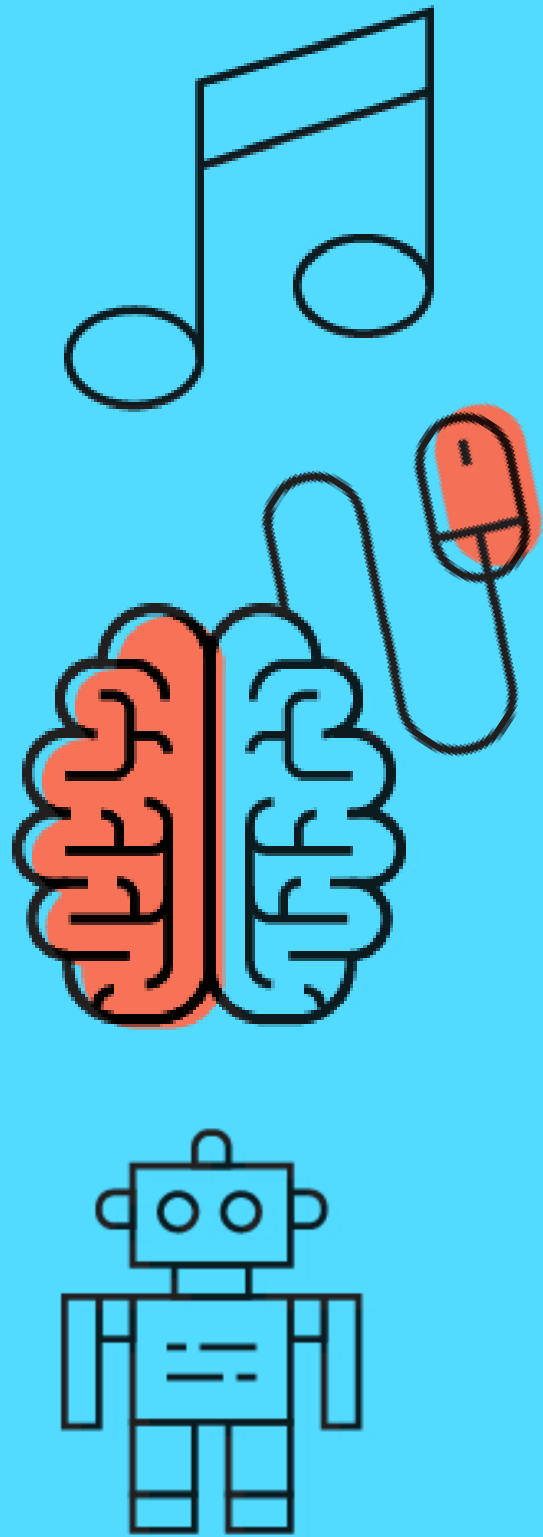


Introduction to AI

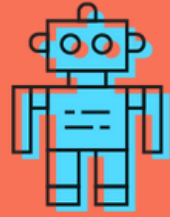
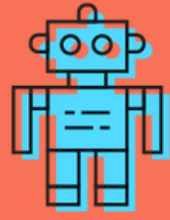
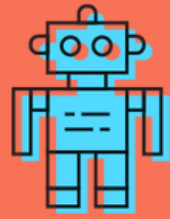
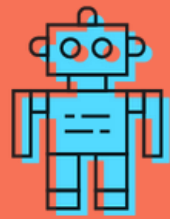
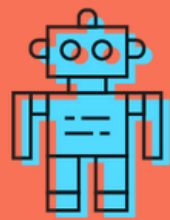
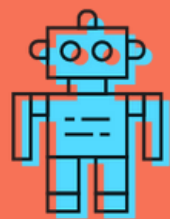
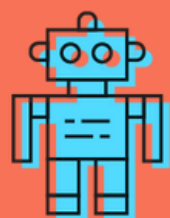
My definition:

Think of AI as an extremely "smart" and diligent intern or assistant. They'll do anything you want, but only if you provide clear instructions. But, they won't take any initiative on their own.

Different AI application of AI



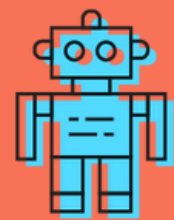
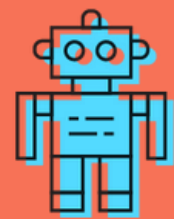
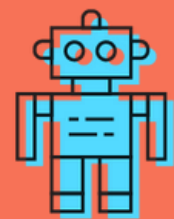
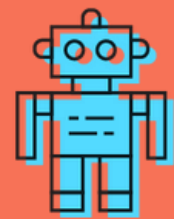
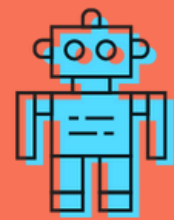
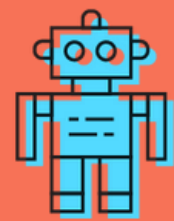
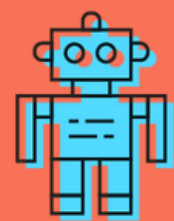
- The AI Spectrum:
 - Algorithms and social media
 - generating:
 - images
 - music
 - videos
 - Websites
 - Text
- Many different Large Language models
- ChatGPT, Bing/Copilot, Gemini, Claude AI, Meta AI



Let's play a small game

1. There once was a...

2. My school is...



Let's play a small game

1. There once was a...

2. My school is...

The primary function of Large language models (LLM's) do is predict what is the most likley word that should be generated next.



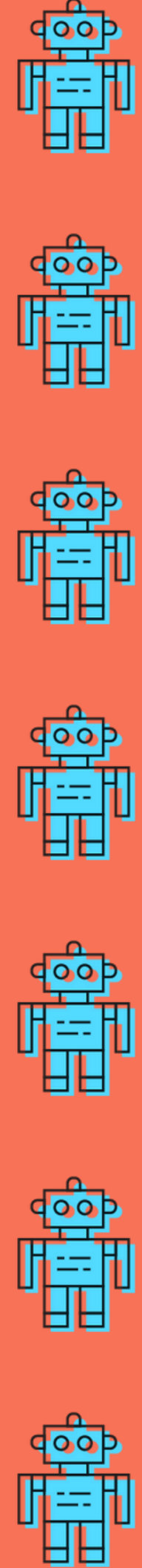
Choose an AI service and login/sign up

ChatGPT - <https://chatgpt.com>

Gemini - <https://gemini.google.com/>

Claude AI - <https://claude.ai/>

Copilot - <https://copilot.microsoft.com>

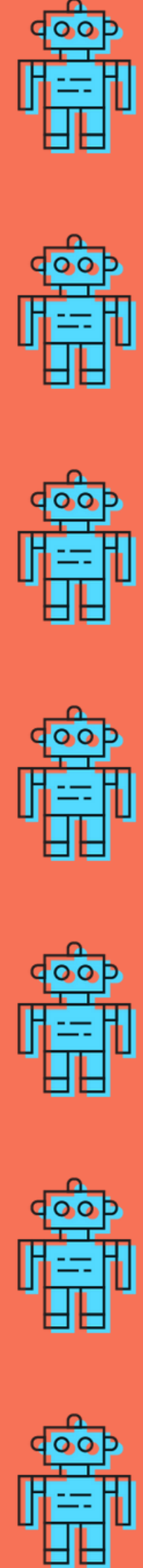


3

2

1

Three main
things to
remember when
using AI



3

2

1. You are the expert!

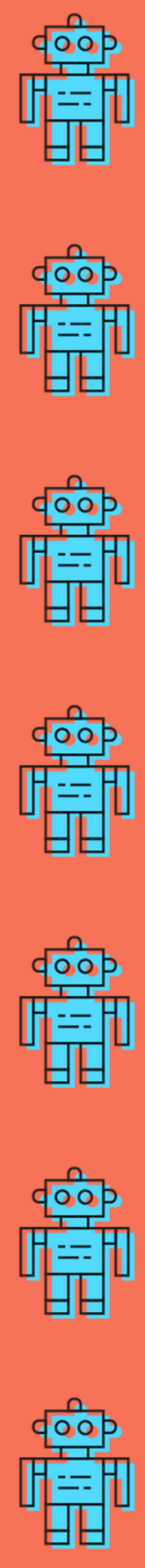
- AI supports your expertise but doesn't replace it
- Never blindly trust the ideas from AI
- Always read everything before you use it
- AI is a tool for you to use

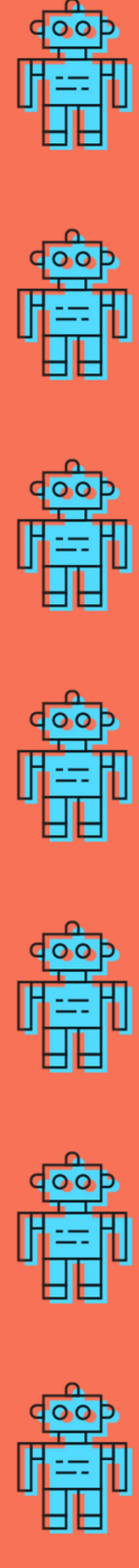
2. Create context for good content

- Always start with a first prompt defining the role of the AI in this specific chat
- The AI does not remember anything between chats
- Upload information, reference websites or upload documents
 - Parts of your national curriculum
 - Your course descriptions
 - learning materials
- The better the context the better the results

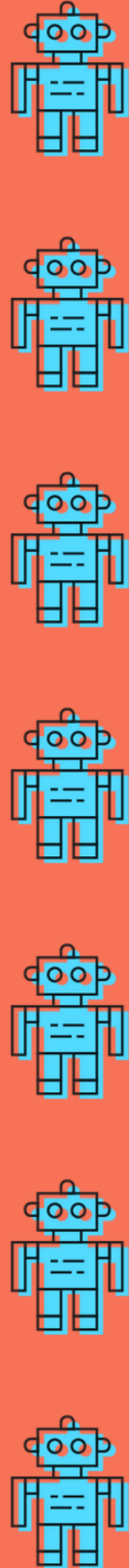
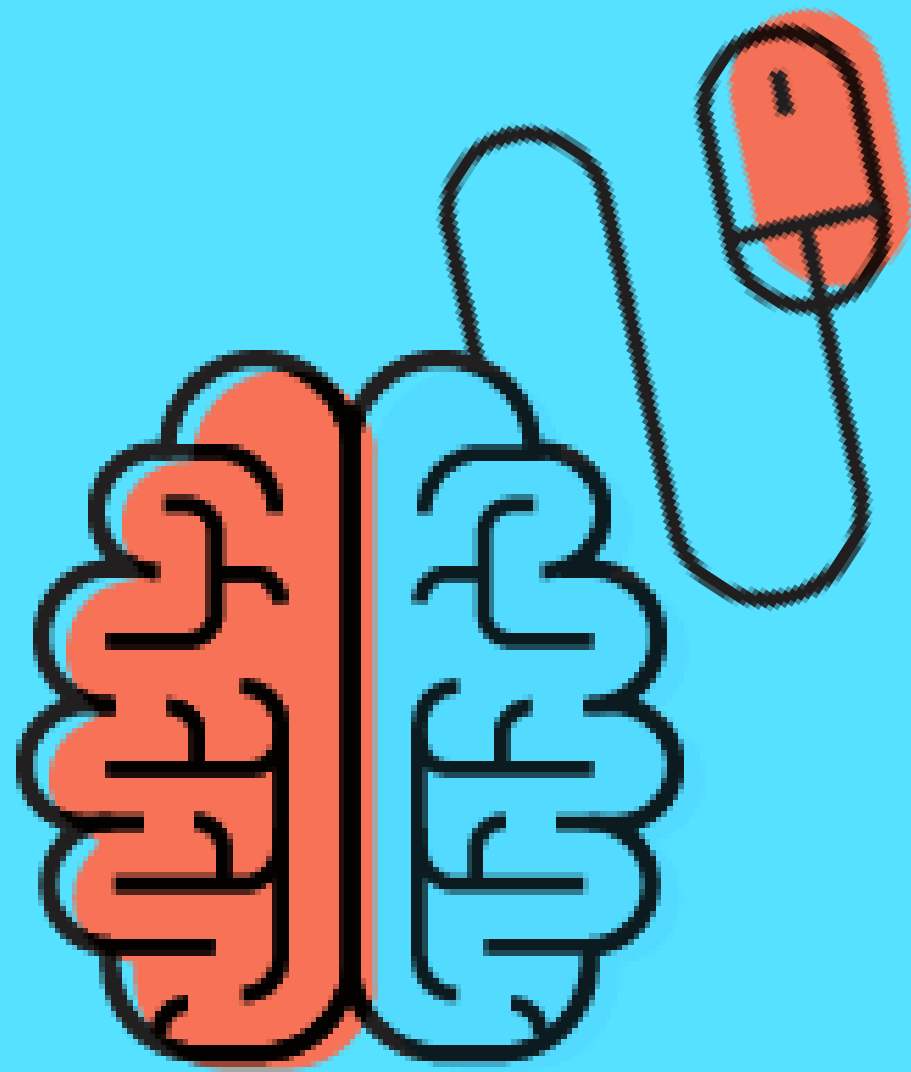
3. Good input leads to good output

- Precise prompts lead to better results
- If you know what you want and ask clearly you are more likely to get what you want
- Ask for a certain number of ideas
- Then work further with AI on the best ones





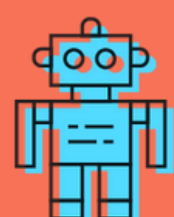
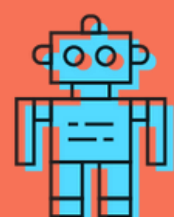
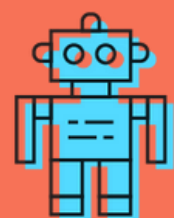
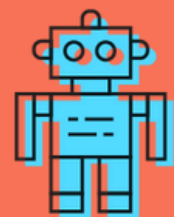
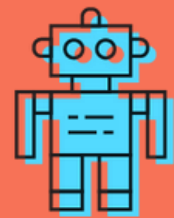
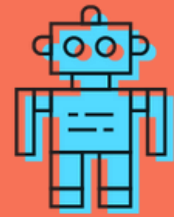
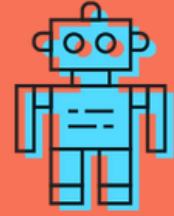
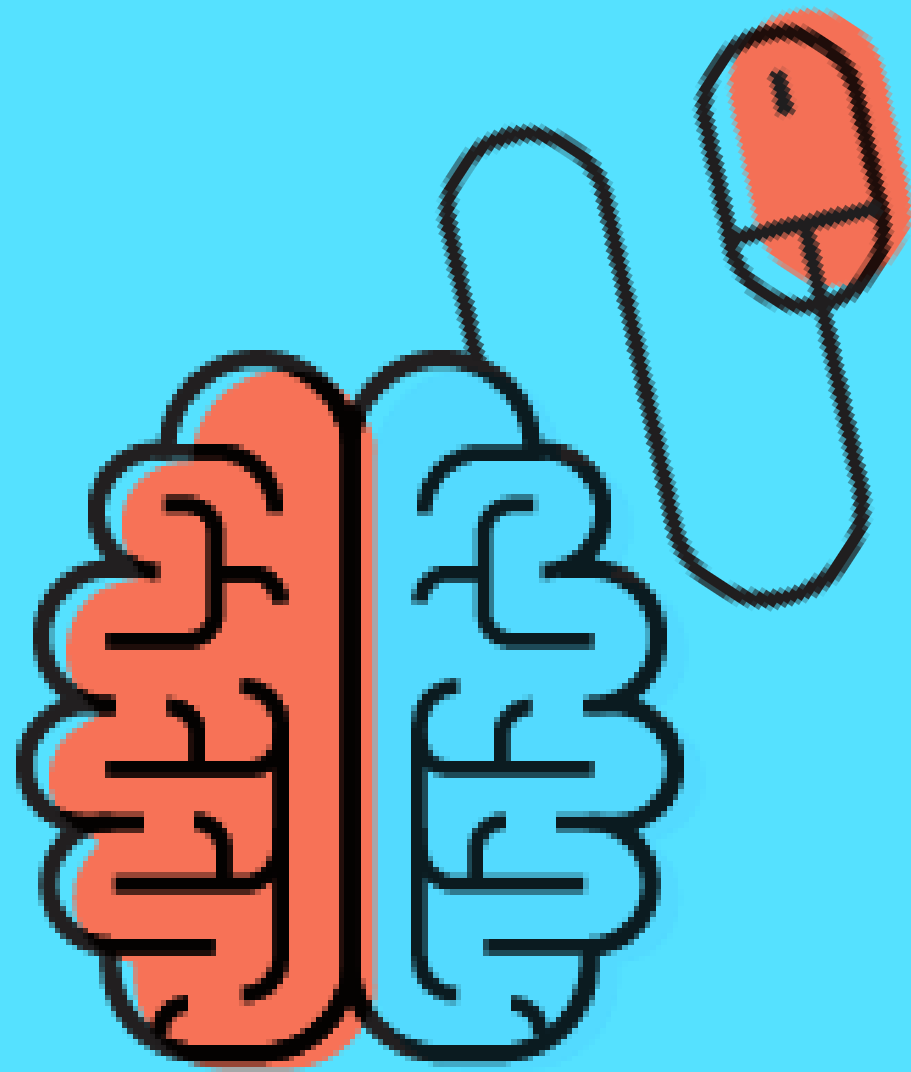
1. You are the expert!
2. Create context for good content
3. Good input leads to good output



Let's test the AI

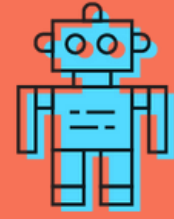
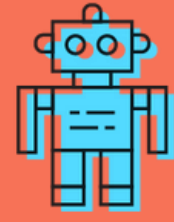
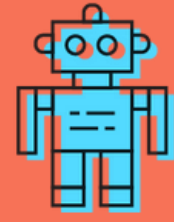
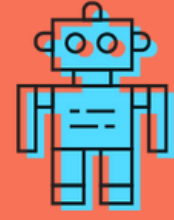
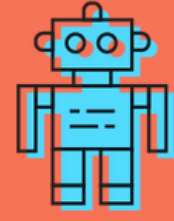
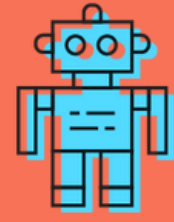
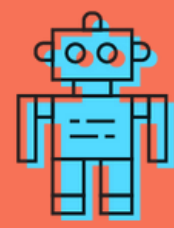
If you want to try yourself go to:
bit.ly/aibarcamp





First prompt example

You are going to act as my teaching assistant. I am a 8th grade English teacher in Iceland. The children in my class are 13-14 years old. During our conversation I will inform you about our learning goals and curricula in English and will ask you for assistance in getting ideas for teaching methods, assignments, evaluation rubrics and other relevant tasks. If you understand our task just answer with "ok".



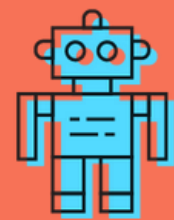
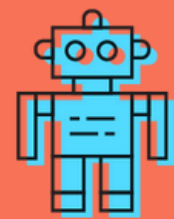
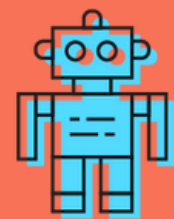
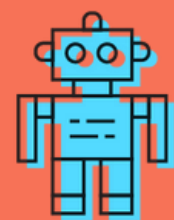
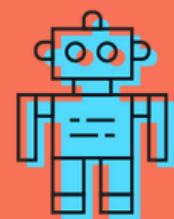
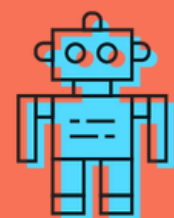
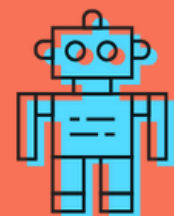
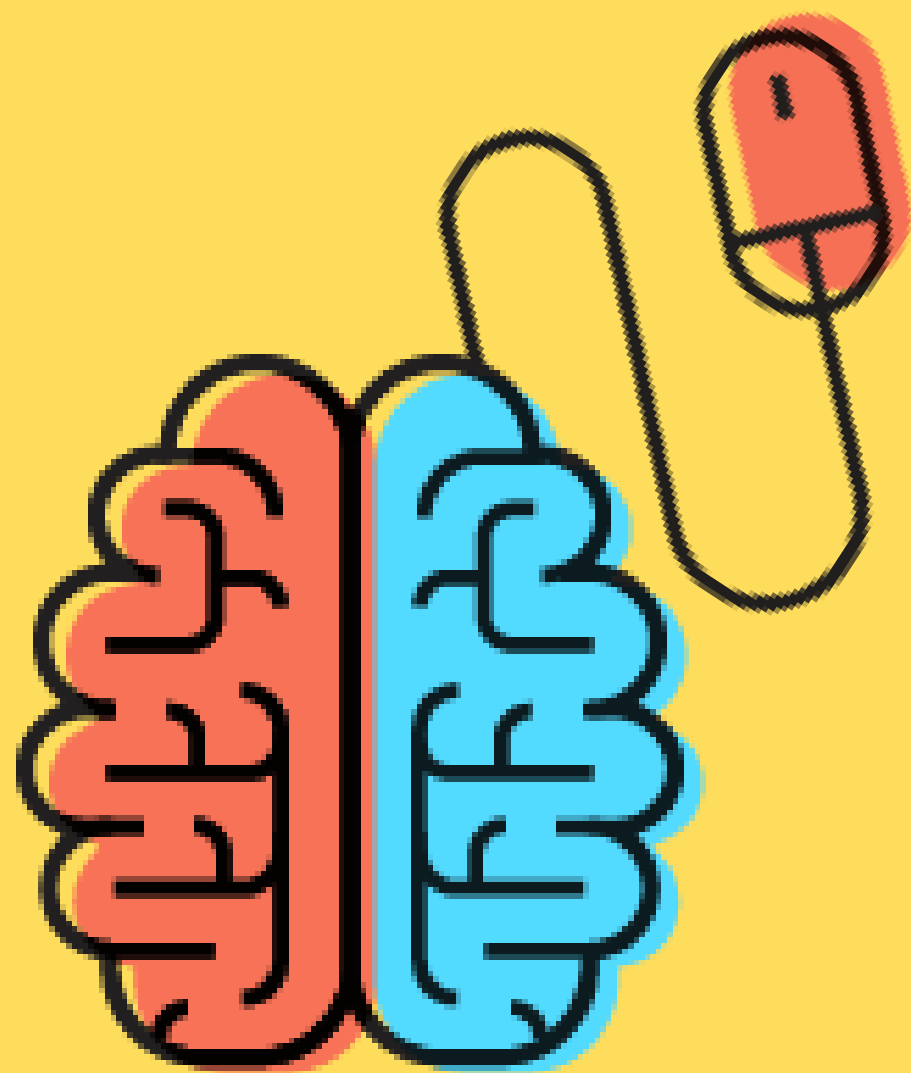
Improving for Teaching Methods with AI

Goal: Use AI to enhance teaching strategies.

Task: Ask AI for tips on improving a specific teaching method (e.g., group work in English).

Reflection: Were the suggestions practical? Could they work in your classroom?

Sample prompt: “Suggest 3 practical strategies to improve group work in my 8th-grade English class. Focus on increasing student collaboration while ensuring that all students actively participate.”



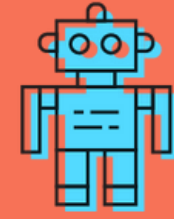
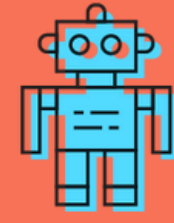
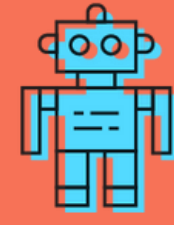
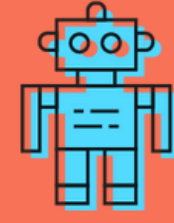
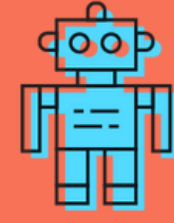
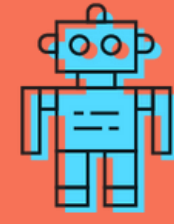
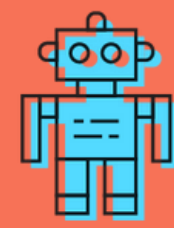
Designing single lessons

Goal: Use AI to develop a lesson plan.

Task: Ask AI to create a 1-hour lesson plan for a topic of your choice.

Reflection: How realistic and adaptable was the plan?

Sample prompt: “Design a 1-hour lesson plan for introducing irregular verbs to 8th-grade students. Include interactive activities, a short quiz, and a group exercise. The goal is for students to correctly identify and use at least five irregular verbs in sentences by the end of the class.”



Methods for project based learning

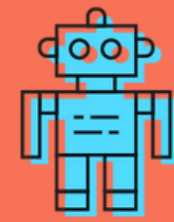
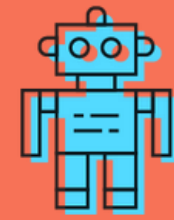
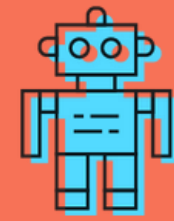
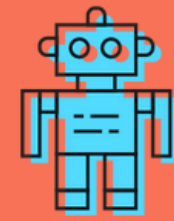
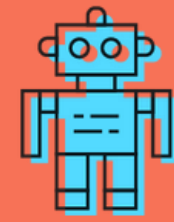
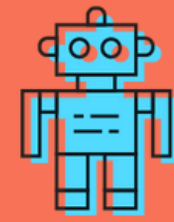
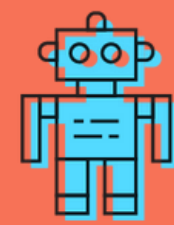
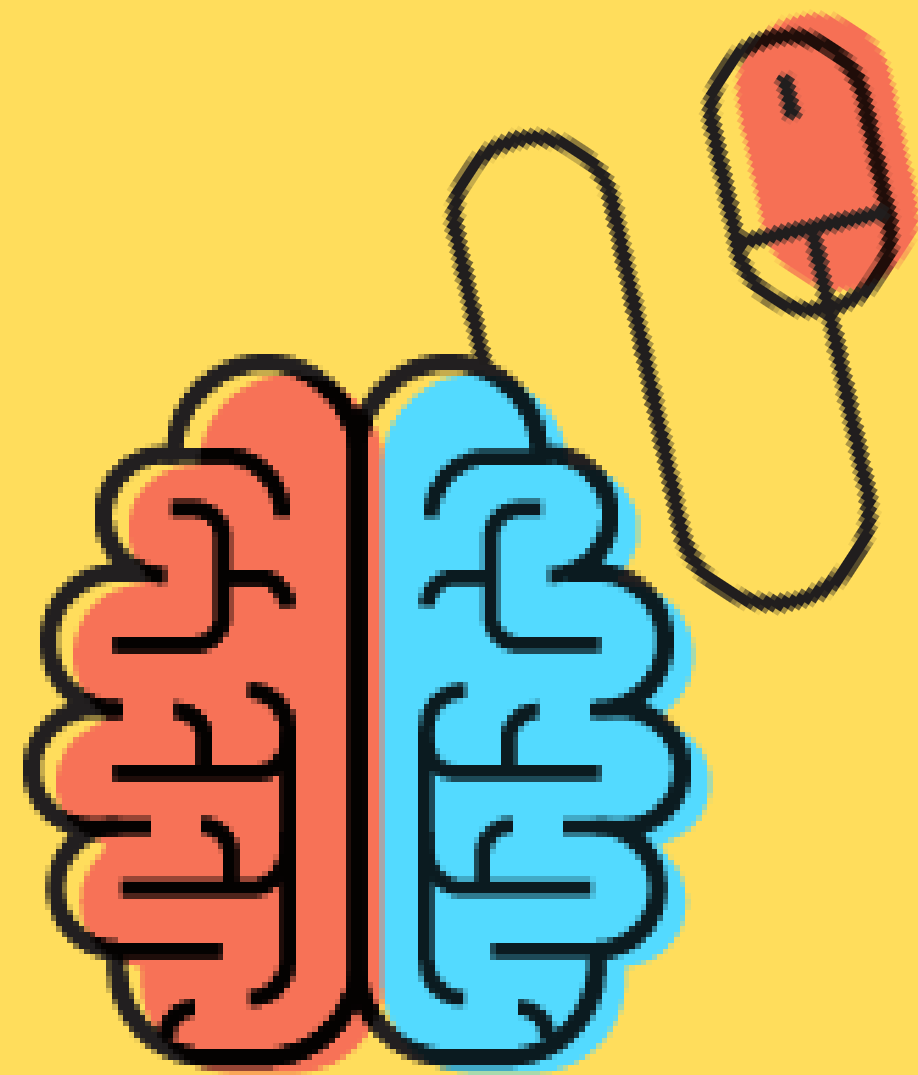
Goal: Use AI to generate creative teaching materials.

Task: Ask AI to suggest ideas for a project on a specific topic.

Reflection: How original and useful were the ideas?

Sample prompt: "Suggest 3 interdisciplinary project ideas that integrate photosynthesis and English for my 8th-grade students. We have three 80-minute lessons. Projects should include creative writing, science-based vocabulary activities, and a group presentation."





Creating Grading Rubrics with AI

Goal: Use AI to design a grading matrix for assignments.

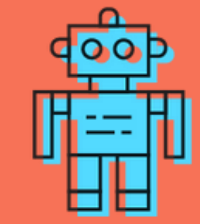
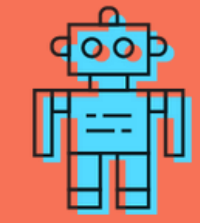
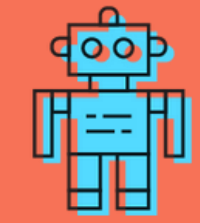
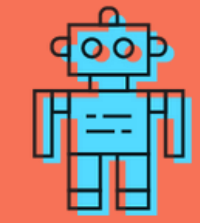
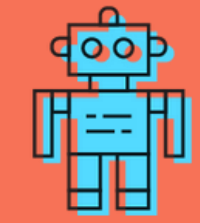
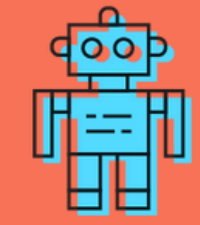
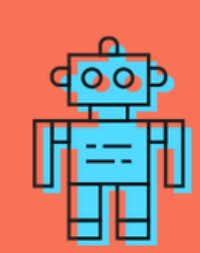
Task: Generate criteria and weightings for an essay assignment.

Reflection: Is the matrix clear and fair? Would it work for your students?

Sample prompt: "Create a detailed grading rubric for a 500-word essay on photosynthesis for 8th-grade students. Include criteria such as scientific accuracy, creativity, grammar, structure, and adherence to word count, with clear point allocations for each."

Remember!

1. You are the expert!
2. Create context for good content
3. Good input leads to good output





Other useful AI tools

Curipod – Storybased and gamified education

Eduaide – Lesson planner and teaching assistant

Meshy – 3D models with AI

Gamma.app – Presentations and websites

Suno – Create music

MagicSchool – 60+ AI tools for teachers

Leonardo AI – Images

Midjourney – Images

And many more

Thanks for you attention

Any final questions?

Link to presentation

