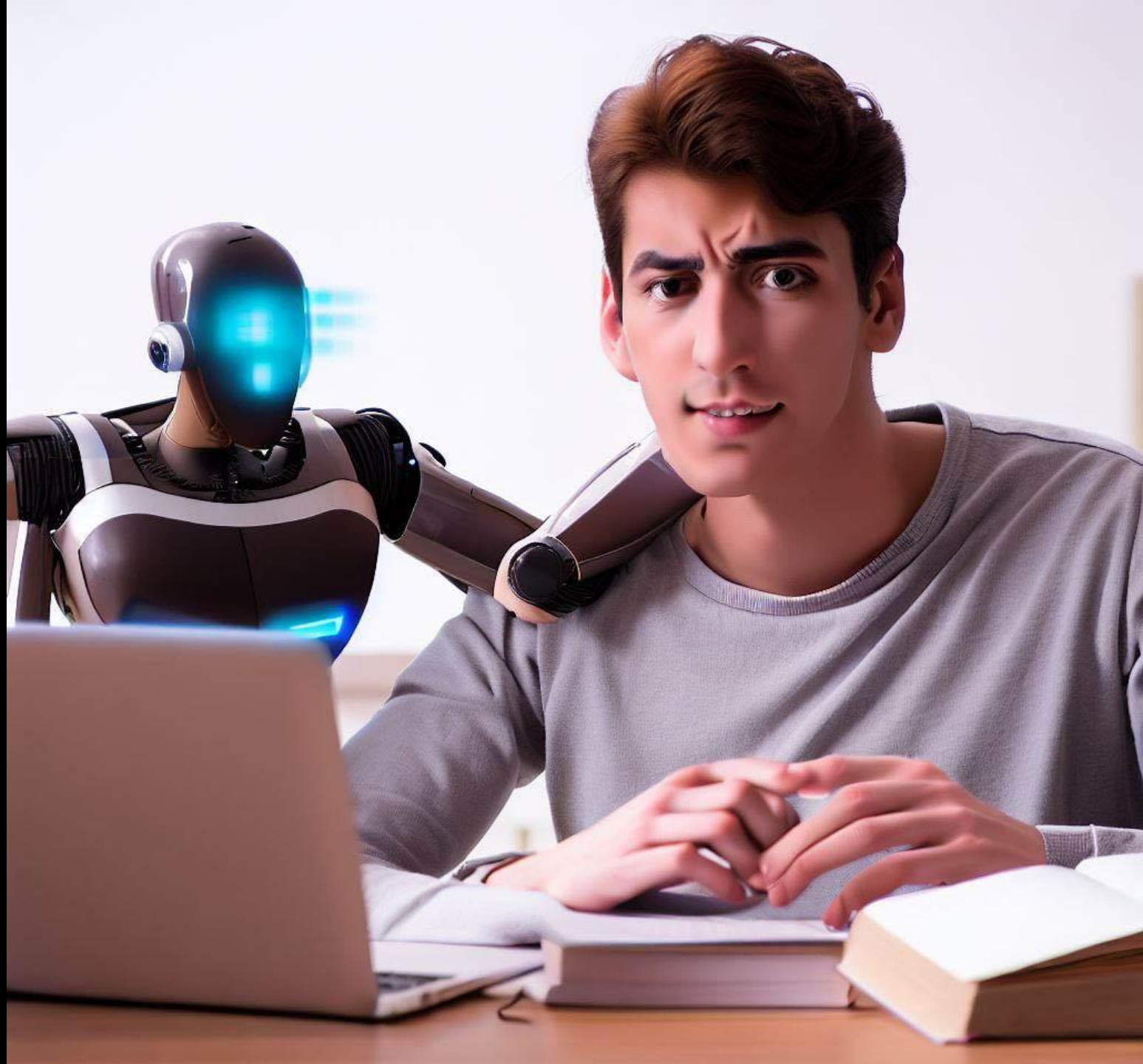
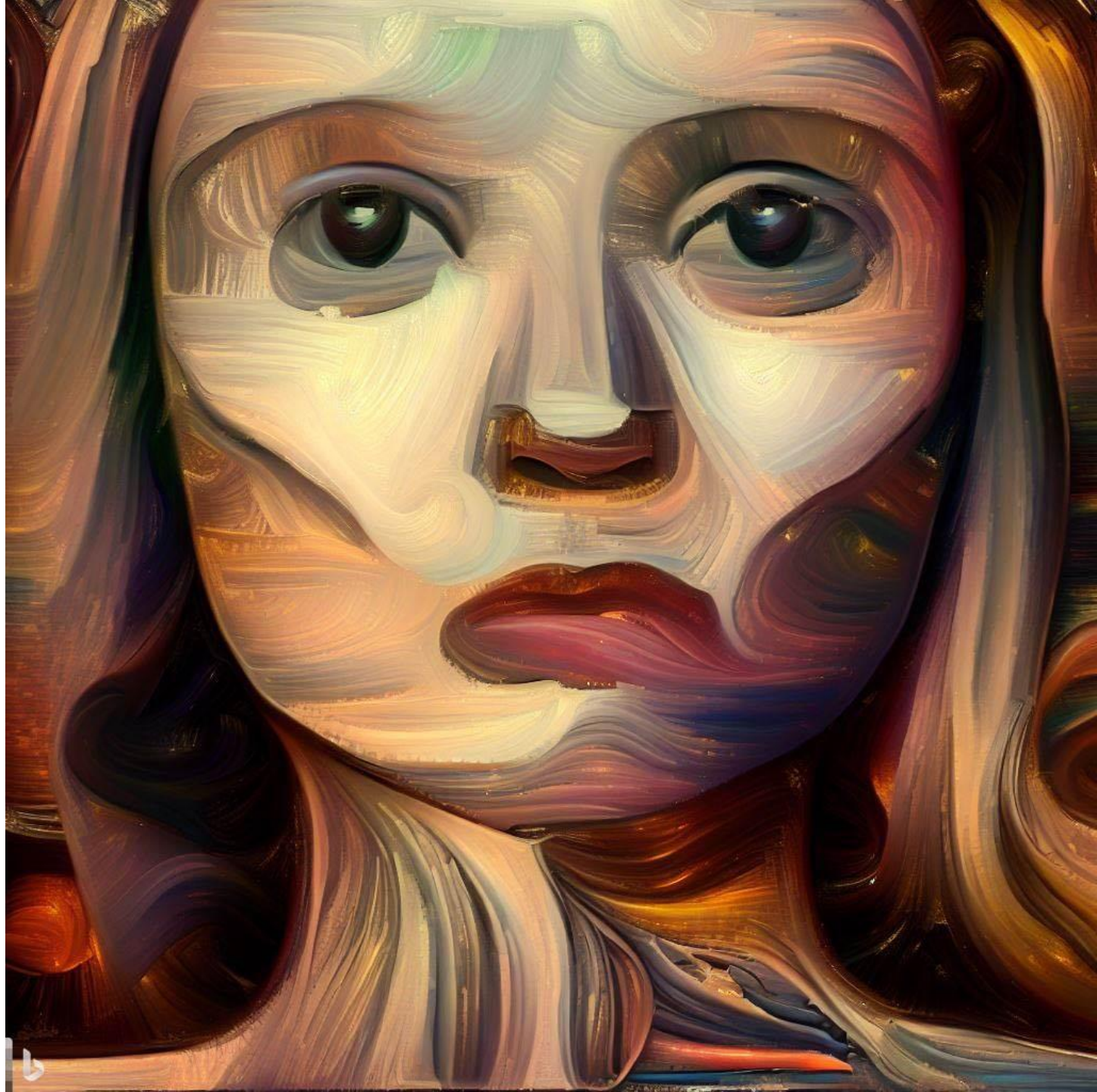


Navigating AI in Academia: Directing Student Interaction with Artificial Intelligence



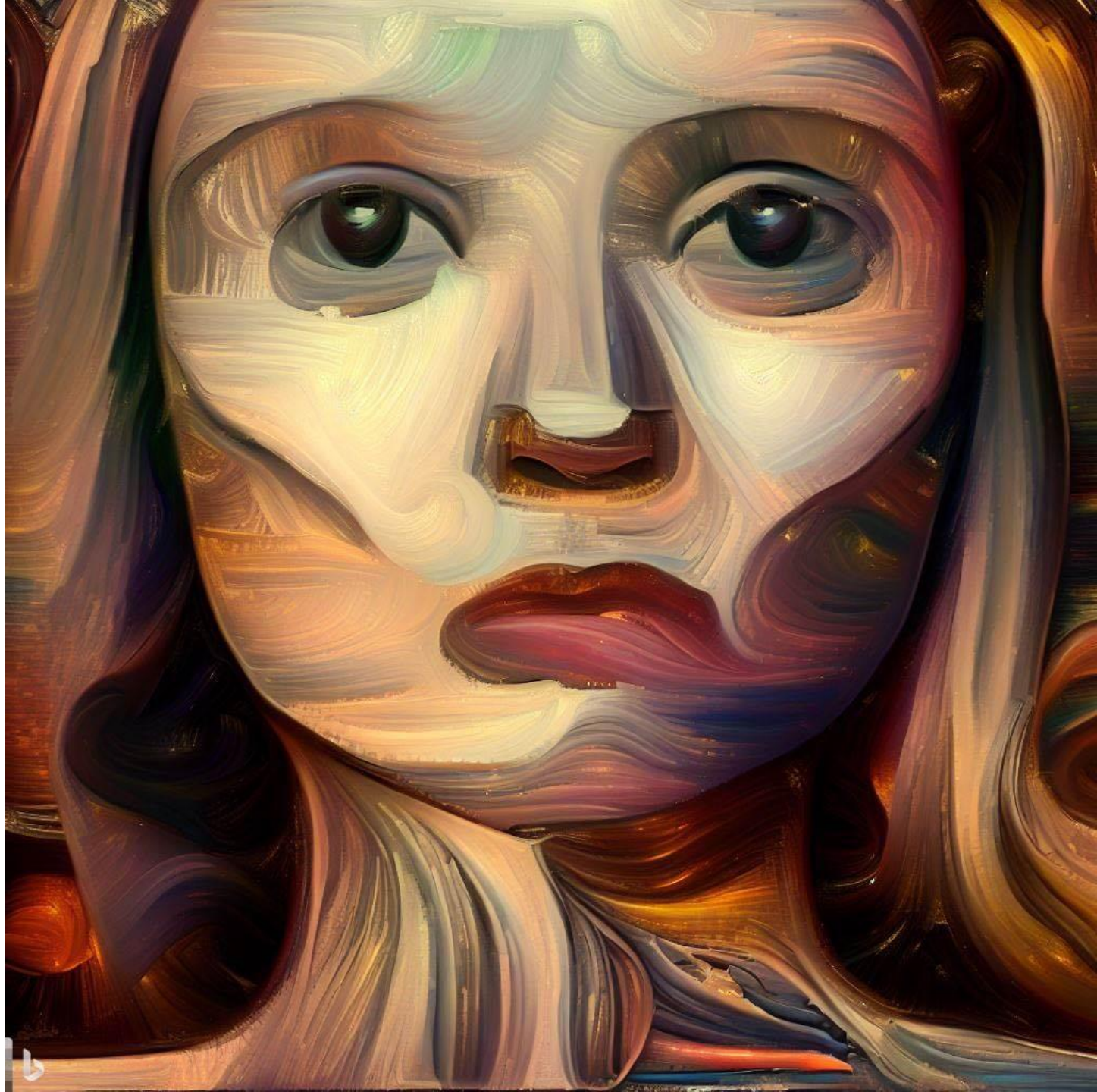
Today:

- What are the AIs available?
- What implications do they have for teaching and examination?



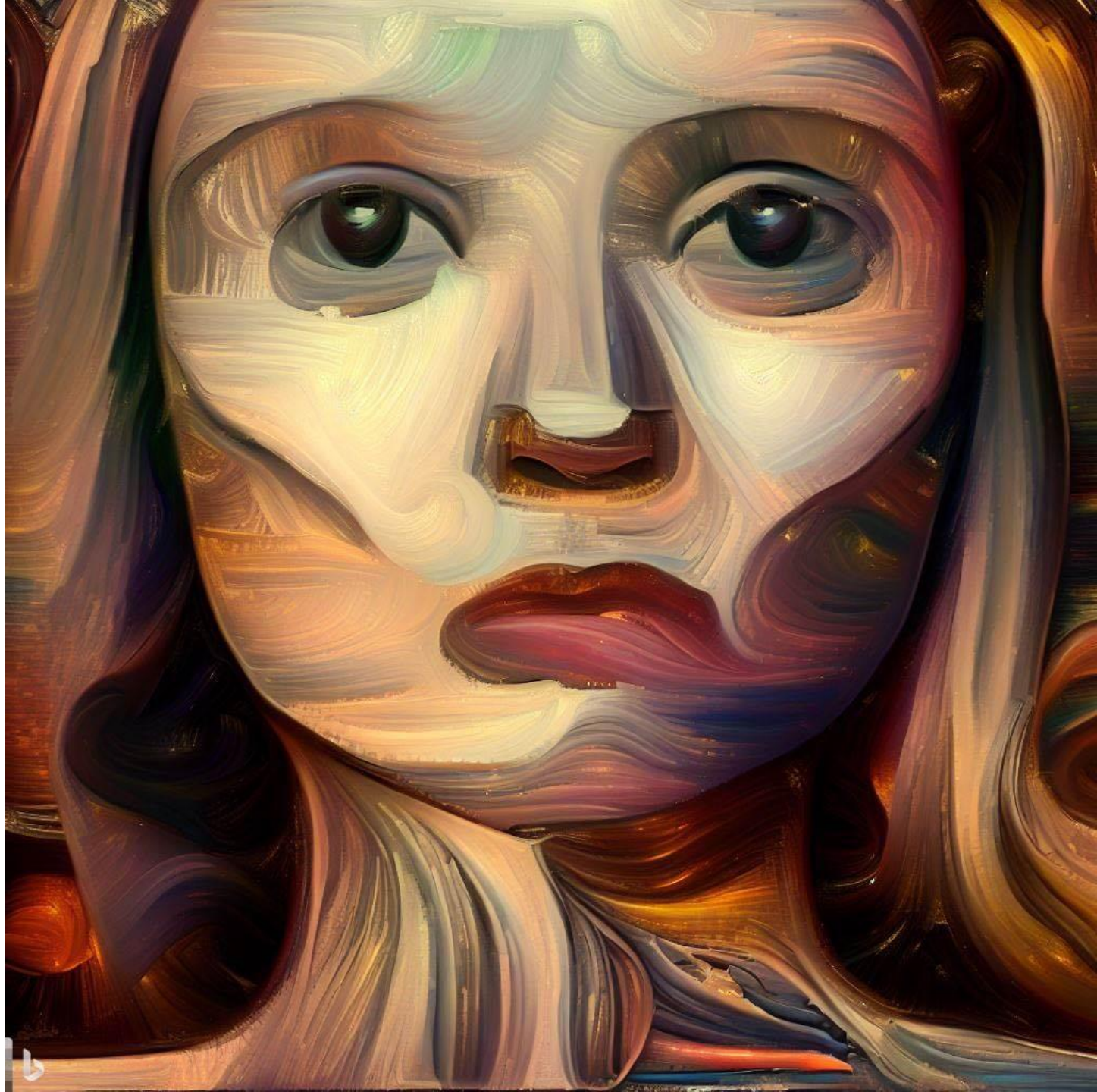
What are the AIs available?

- Machine learning
- Real-time/Turn-based
- Generalists/Specialists
- Directly/Indirectly



What are the AIs available?

- Test out yourselves!
- Skill/Area/Type





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Improving Student Engagement through AI

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AI-powered Personalized Learning

Integrating AI in Curriculum Development

Ethical Considerations for AI in Education

Challenges and Limitations of AI in Higher Education

Future Prospects of AI in the Education Sector

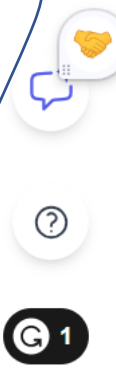
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Improving Student Engagement through AI

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Integrating AI in Curriculum Development

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In addition, some scholars have discussed the application of AI in teaching, the challenges AI faces or will face in its application and educational activities, and the future direction of...

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Many studies have been conducted on the application of these technologies in universities or educational institutions. For example, Fahimirad [15] studied the application of AI in teachin...

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- AI in Higher Education
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AI in Higher Education

Benefits of AI in Higher Education

Considering the main challenges and opportunities in education, Artificial Intelligence has the potential to provide significant solutions for higher education.

[\(Bagunaid et al., 2022\)](#) According to various international reports, AI in education is one of the developing trends in learning technologies that offers numerous pedagogical benefits. [\(Jia, 2021\)](#) These benefits include the automation and streamlining of administrative functions, personalized learning experiences for students based on their strengths and weaknesses, enhanced academic research through faster data analysis, and the creation of a smart campus environment.

[\(Milumbe et al., 2018\)](#)




Innovative Teaching Methods with AI

Ask a research question


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Try searching for

-  What is the impact of creatine on cognition?
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Recent searches

-  are there any critique of the concept "trustworthy AI"?

What is the best way to use AI in higher education?

What is the best way to use AI in higher education?

SUMMARY OF TOP 4 PAPERS BETA

The papers suggest that AI has the potential to impact higher education in various ways, but there are challenges to its adoption. Zawacki-Richter (2019) found that most AIED research comes from computer

Add information about all papers

- Abstract summary ✓
- Intervention
- Outcomes measured

Paper title	Abstract summary
<p>★ Systematic review of research on artificial intelligence applications in higher education – where are the educators?</p> <p>Olaf Zawacki-Richter, Victoria I. Marín, Melissa Bon...</p> <p><i>International Journal of Educational Technology in ...</i></p> <p>2019 Systematic Review 206 Citations DOI PDF</p>	<p>AI applications in academic support services and institutional and administrative services are presented.</p>
<p>★ Adoption of artificial intelligence in higher education: a quantitative analysis using structural equation modelling</p> <p>Sheshadri Chatterjee, Kalyan Kumar Bhattacharjee</p> <p><i>Education and Information Technologies</i></p> <p>2020 38 Citations DOI</p>	<p>The model can help the authorities to facilitate AI in higher education.</p>

Abstract summary

AI-based learning companions can accompany and support individual learners throughout their studies in school and beyond school.

What outcomes did they measure?

- Learning Outcomes
- Achievement Gaps
- Teacher Retention

Can I trust this paper?

- No mention found of study type
- No mention found of funding source
- No mention found of participant count
- No mention found of multiple comparisons
- No mention found of intent to treat
- No mention found of preregistration

Possible critiques

Newton et al. critique this paper, **Luckin et al.**, by saying:

While Luckin et al. (2016) are ardent advocates of the use of AI in education, they remain vague about its role in supporting creative thinking.

Other citations

Shar said:

Another factor is that AI tutors may not be able to show or provide the progression of problems or steps taken to get to the results as they cannot provide guidelines or rules (Luckin et al., 2016, p. 25).

Gentile et al. said:

Indeed, personalization can only be thought of with a careful analysis of the student, as stated by Luckin et al. (2016), who identifies the definition of the student model as one of the main issues.

knowledge, which is often
ed tech, AIED is also design
understandings of how lea
underpin ed tech powered
educational experiences t
teachers. What we do see
thoughtful deployment of
unimaginable by providing
intelligent support to learn
at the right time, to tackle
by the thoughtful applicat
individual learners through
place, shaping the learning
intractable problems in ed
social challenge that AI ha
that this provides a new in
smart machines, our educ
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isolated pockets of R&D a
Paying attention to the tec
development of a robust,
can access standardised
involving teachers, studen
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What is the best way to use AI in higher education?

What are the benefits of AI in higher education?

What are the risks of AI in higher education?

How can AI be used to personalize learning?

What are the ethical implications of using AI in higher education?

How can AI be used to improve the efficiency of higher education?

What is the best way to use AI in higher education?

SUMMARY OF PAPERS

The papers suggest that there is the potential to impact higher education in various ways, but there are challenges to its adoption. Zawacki-Richter (2019) found that most AIED research comes from computer

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artificial intelligence
are the educators?

Olaf Zawacki-Richter, Victoria I. Marín, Melissa Bon...

International Journal of Educational Technology in ...

2019 Systematic Review 206 Citations

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Adoption of artificial intelligence in higher education: a quantitative analysis using structural equation modelling



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AI in higher education

Zawacki-Richter ... Gouverneur 2019

Systematic review of research on artificial intelligence applications in higher education – where are the educators?

International Journal of Educational Technology in Higher Education

+ Comment

+ Add Papers

1 selected paper

Olaf Zawacki-Richter ...

Franziska Gouverneur

[Systematic review of research on artificial intelligence applications in higher education – where are the educators?](#)

International Journal of Educational Technology in Higher Education 2019

↓ PDF

According to various international reports, Artificial Intelligence in Education (AIEd) is one of the currently emerging fields in educational technology. Whilst it has been around for about 30years, it is still unclear for educators how to make pedagogical advantage of it on a broader scale, and how it can actually impact meaningfully on teaching and learning in higher education. This paper seeks to provide an overview of research on AI applications in higher education through a systematic review. Out of 2656 initially identified publications for the period between 2007 and 2018, 146 articles were included for final synthesis, according to explicit inclusion and exclusion criteria. The descriptive results show that most of the disciplines

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Research and Practice in Technology Enhanced Learning

Luckin ... Holmes 2016
↳ 103

Intelligence Unleashed: An argument for AI in Education

Baker Yacef 2009
↳ 912

The State of Educational Data Mining in 2009: A Review and Future Visions.

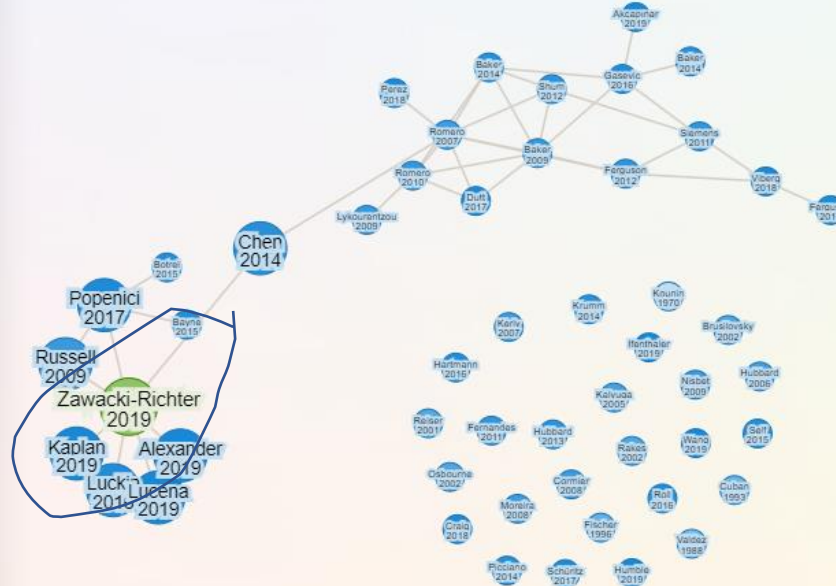
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Specialist

Indirect use

The image shows a screenshot of a research visualization tool. On the left, a sidebar lists various filters and actions: 'Similar Work' (1069), 'Earlier Work' (1669), 'Later Work', 'These Authors' (5), 'Copy', 'Edit', and 'Connections'. The main area is divided into two panels. The left panel, titled 'Similar Work', displays a list of papers with their titles, authors, and years. The right panel, titled 'Connections between your collection and 50 papers', shows a network graph with nodes representing authors and edges representing connections. The graph is filtered by year, with nodes for 2019, 2014, 2009, 2004, 1999, 1994, and 1970. A sidebar on the right offers options to 'EXPLORE PEOPLE' (These Authors: 132, Suggested Authors: 342), 'EXPLORE OTHER CONTENT' (Linked Content: 96), and 'EXPORT PAPERS' (BibTeX, RIS, CSV). At the bottom, there are navigation controls for 'Zoom Out', 'Fit All', 'Zoom In', and a download icon.

Similar Work

Filter: Relevance
Abstracts Comments [Select All](#)

Paper

Education

Collection

Similar Work 1069

Earlier Work 1669

Later Work

These Authors 5

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Connections [Click to Hide](#)

Connections between your collection and 50 papers

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Filter these items

2019

2014

2009

2004

1999

1994

1970

EXPLORE PEOPLE

These Authors 132

Suggested Authors 342

EXPLORE OTHER CONTENT

Linked Content 96

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Similar Work List:

- Popenici, Kerr 2017 (216)
Exploring the impact of artificial intelligence on teaching and learning in higher education.
Research and Practice in Technology Enhanced Learning
- Luckin, Holmes 2016 (193)
Intelligence Unleashed: An argument for AI in Education
- Baker, Yacaf 2009 (912)
The State of Educational Data Mining in 2009: A Review and Future Visions.
- Romero, Ventura 2010 (1349)
Educational Data Mining: A Review of the State of the Art
- Russell, Norvig 2009 (19174)
Artificial Intelligence: A Modern Approach
- Viberg, Mavroudi 2018 (209)
The current landscape of learning analytics in higher education
Computers in Human Behavior
- Siemens, Long 2011 (987)
Penetrating the Fog: Analytics in Learning and Education.
Educational Review
- Baker, Inventado 2014 (435)
Educational Data Mining and Learning Analytics
- Chen, Do 2014 (18)
TRAINING NEURAL NETWORKS TO PREDICT STUDENT ACADEMIC PERFORMANCE: A COMPARISON OF CUCKOO SEARCH AND GRAVITATIONAL SEARCH ALGORITHMS
International Journal of Computational Intelligence and Applications
- Romero, Ventura 2007 (1636)
Educational data mining: A survey from 1995 to 2005
Expert Systems With Applications
- Self, Self 2015 (8)
The Birth of "JJAIED".
- Picciano 2014 (38)
Big Data and Learning Analytics in Blended Learning Environments: Benefits and Concerns
International Journal of Interactive Multimedia and Artificial Intelligence
- Kerly, Bull 2007 (154)
Bringing chatbots into education: Towards natural language negotiation of open learner models
Knowledge Based Systems
- Ferguson 2012 (736)
Learning analytics: drivers, developments and challenges
International Journal of Technology Enhanced Learning

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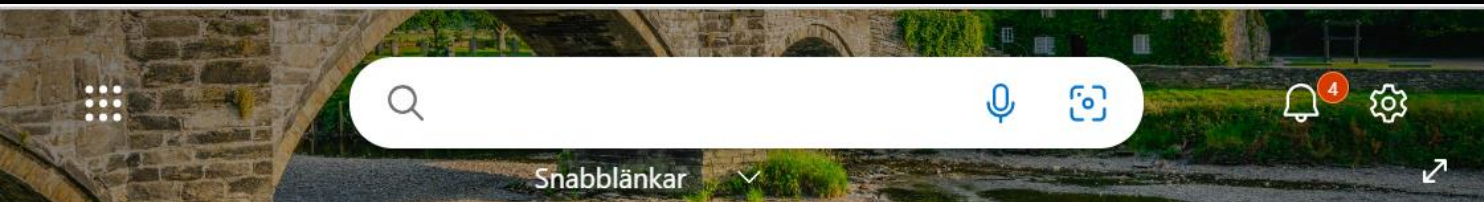
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Fråga mig vad som helst...

Using AI to Implement Effective Teaching Strategies in Classrooms: Five Strategies, Including Prompts

Dr. Ethan Mollick

Dr. Lilach Mollick

Wharton School of the University of Pennsylvania & Wharton Interactive

March 16, 2023

Abstract: This paper provides guidance for using AI to quickly and easily implement evidence-based teaching strategies that instructors can integrate into their teaching. We discuss five teaching strategies that have proven value but are hard to implement in practice due to time and effort constraints. We show how AI can help instructors create material that supports these strategies and improve student learning. The strategies include providing multiple examples and

Välj ett konversationsformat

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Välkommen tillbaka! Vad vill du chatta om?



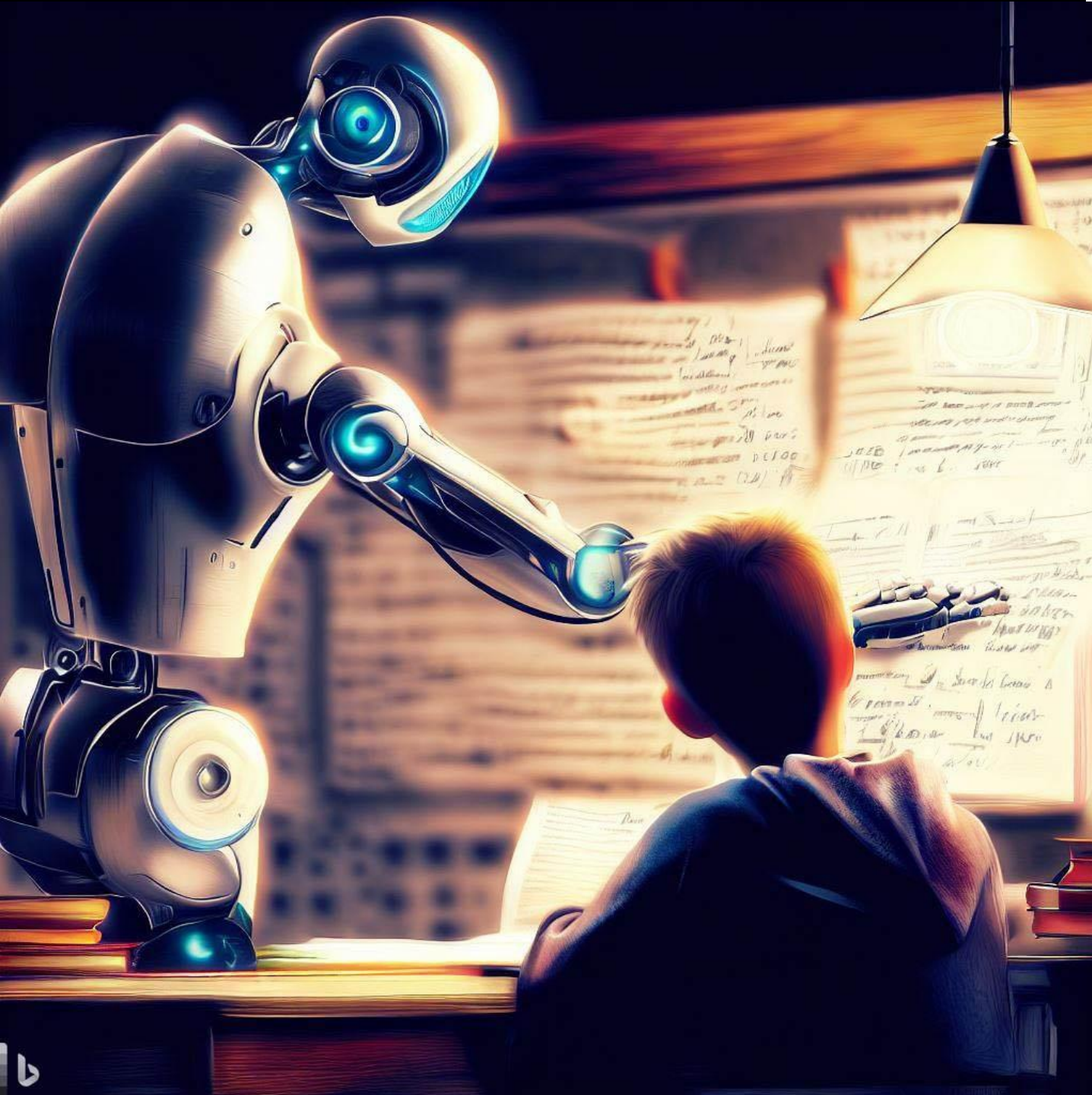
Teach me a new word!

Tell me a joke

Make me think



Fråga mig vad som helst...



Absolutely. Here are some general steps for writing an effective abstract for a scientific conference:



1. **Understand the Requirements**

First and foremost, ensure you fully understand the guidelines provided by the conference. They may specify a word limit, format, or key elements that need to be included.

2. **Identify Your Main Points**

Your abstract should quickly get to the main points of your study. Consider your objectives, methods, results, and conclusion. Make sure you know the key message or result you want your audience to understand.

3. **Start Writing**

With the main points in mind, you can start writing. Here's a suggested structure:

- **Introduction:** In one to two sentences, introduce the topic of your research, its context, and why it matters.
- **Objective/Purpose:** Clearly state the objective or the hypothesis of the work. What was the main question you were trying to answer?
- **Methods:** Briefly describe your methodology. This should include your study design, research process, the tools, and techniques you've used, and any variables you've controlled for.
- **Results:** Summarize the most critical findings of your research. What new knowledge did you uncover?
- **Conclusion:** Wrap up your abstract by stating the implications of your findings. If your results aren't final, talk about the potential implications.

4. **Edit for Clarity and Length**

Read through your abstract with a critical eye. Is your main argument clear? Have you highlighted the importance of your research? Ensure that your abstract is within the word limit provided by the conference.

5. **Peer Review**

Have a colleague or mentor read through your abstract. They can provide valuable feedback and help you see if anything is unclear or missing.

6. **Final Review**

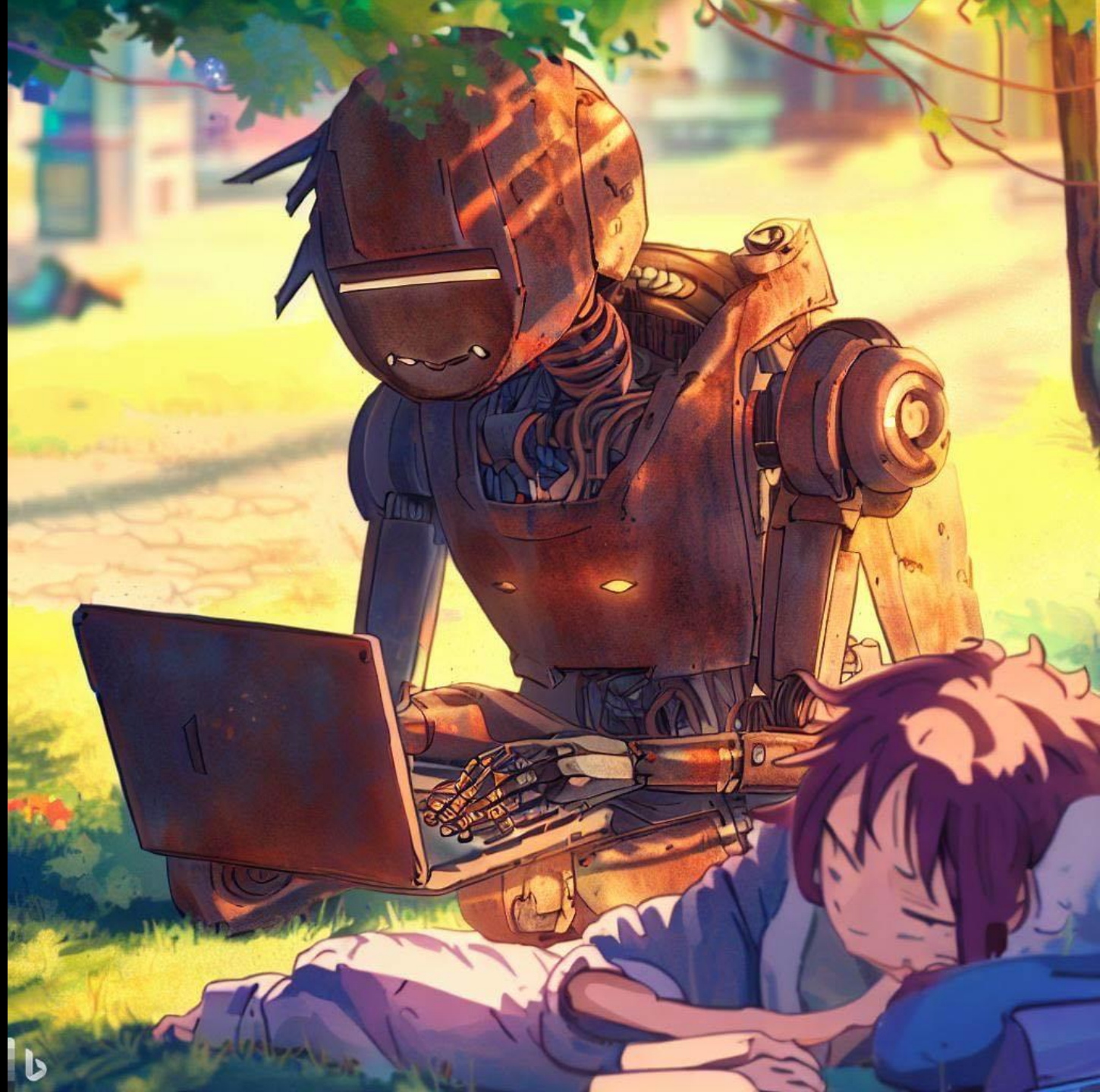
Review your abstract one last time. Check for any errors, unclear phrasing, or jargon. Ensure that everything aligns with the conference guidelines.

Remember, the goal of an abstract is to clearly and succinctly convey the key findings of your research. It should be understandable to a wide audience, not just experts in your field, and should be compelling enough to make people want to learn more.



Threats and opportunities:

- We want the students to learn core skills
- AI can **replace** student learning



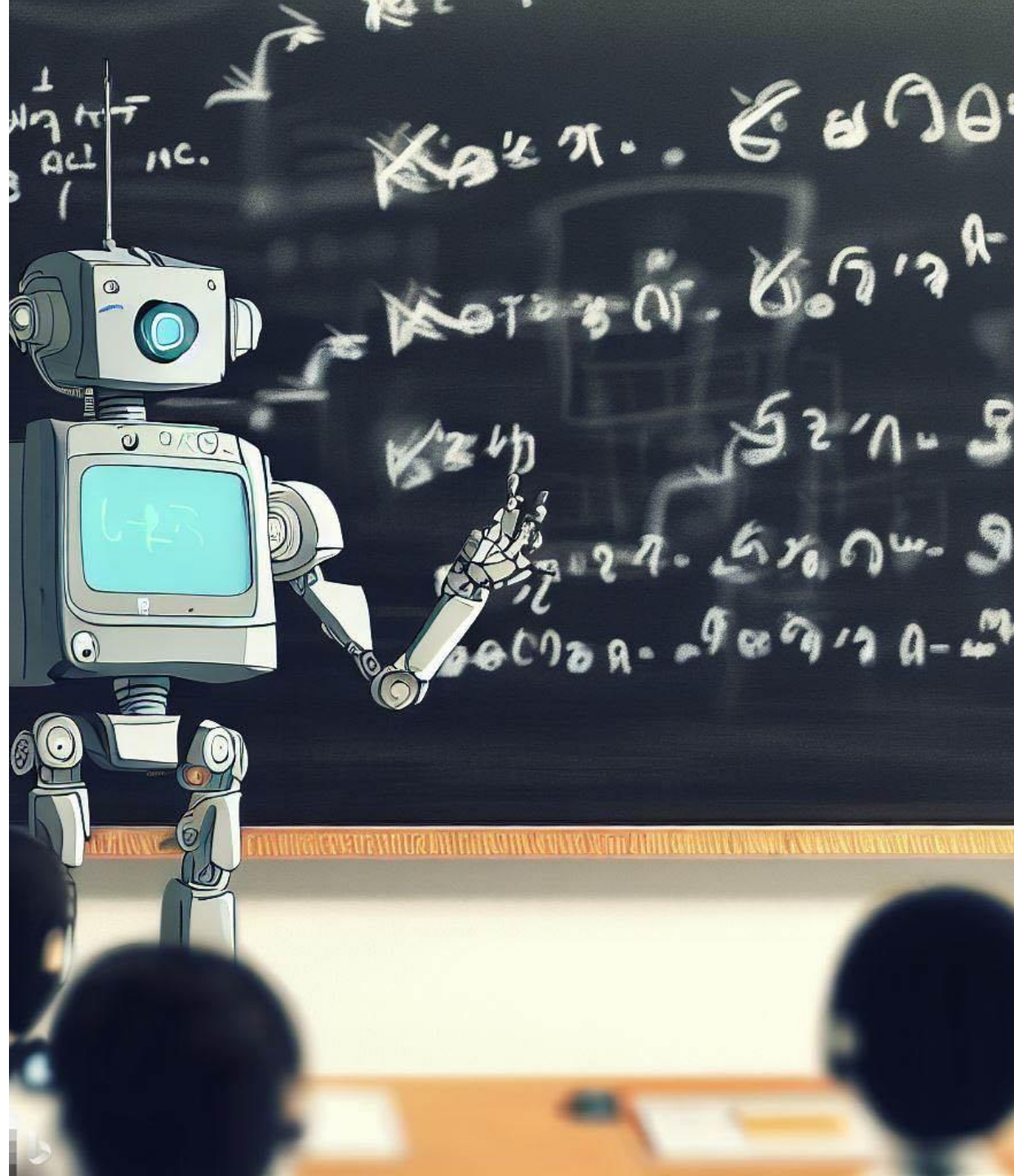
Threats and opportunities:

- We want the students to learn core skills
- AI can reinforce student learning



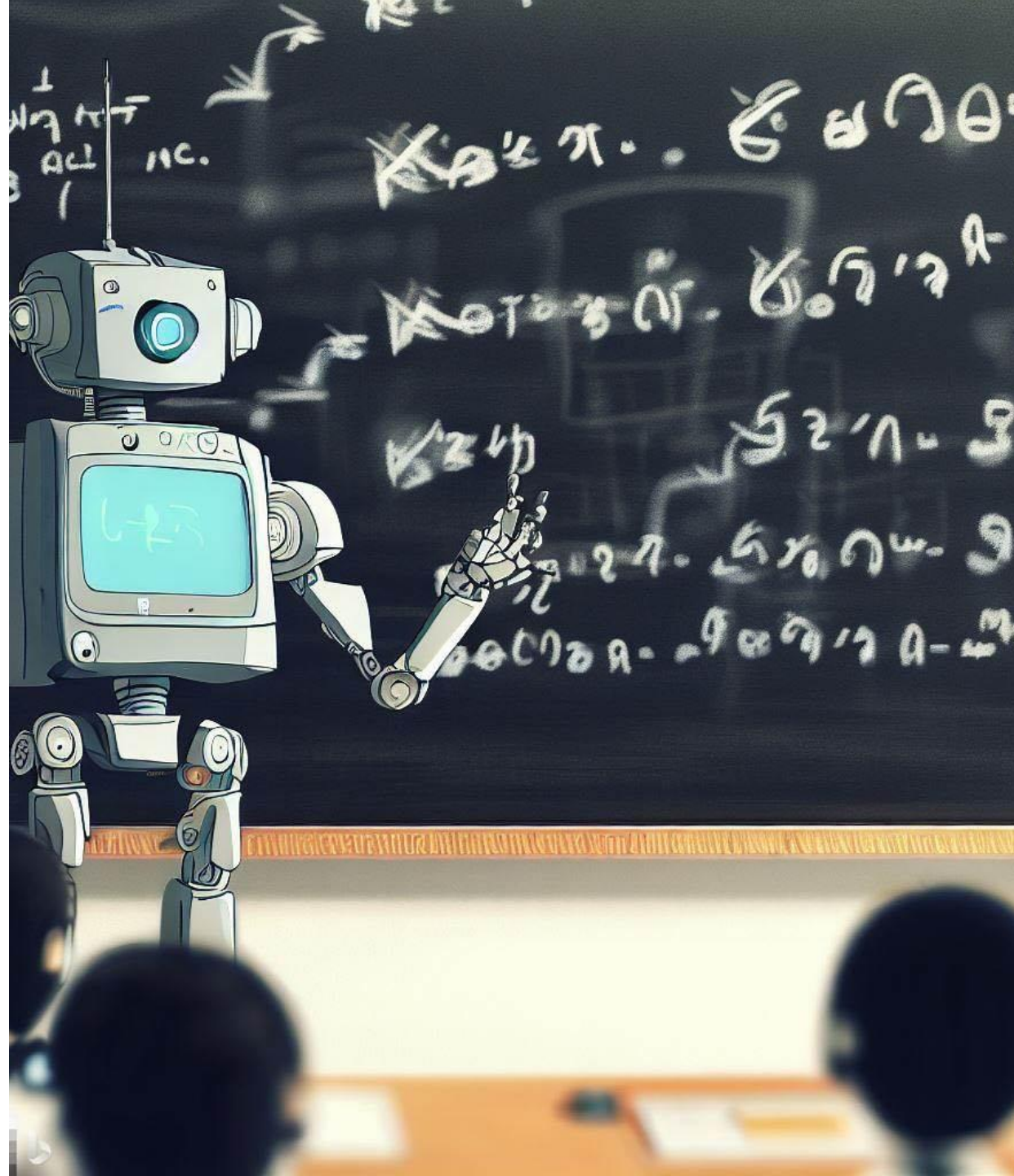
How should we guide?

- Learning objectives!
- How to cite usage?
 - a. APA rec
 - b. Citation marks “-”
 - c. Prompts and Chat History
 - d. Description of workflow
 - e. Reflection on the process



How should we guide?

- Learning objectives!
- Should we use proctored exams?



Be clear about what they can and cannot do:

- a. Direct use is disallowed, indirect use is allowed
- b. Direct use editing existing text is allowed while direct use synthesizing text is disallowed
- c. Direct use generating titles is allowed, indirect use writing code is not allowed

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Ideation	Brainstorming
	Evaluating ideas
	Providing counterarguments
Background research	Summarizing Text
	Literature Research
	Formatting References
	Translating Text
	Explaining Concepts
Coding	Writing code
	Explaining code
	Translating code
	Debugging code
Writing	Synthesizing text
	Editing text
	Evaluating text
	Generating catchy titles & headlines

Concluding remarks

- There is a wide range of AI
- These have a wide range of use cases
- They can also be used in a variety of ways
- Be mindful of the learning objectives



