Integrating Large Language Models into Higher Education: Guidelines for Effective Implementation

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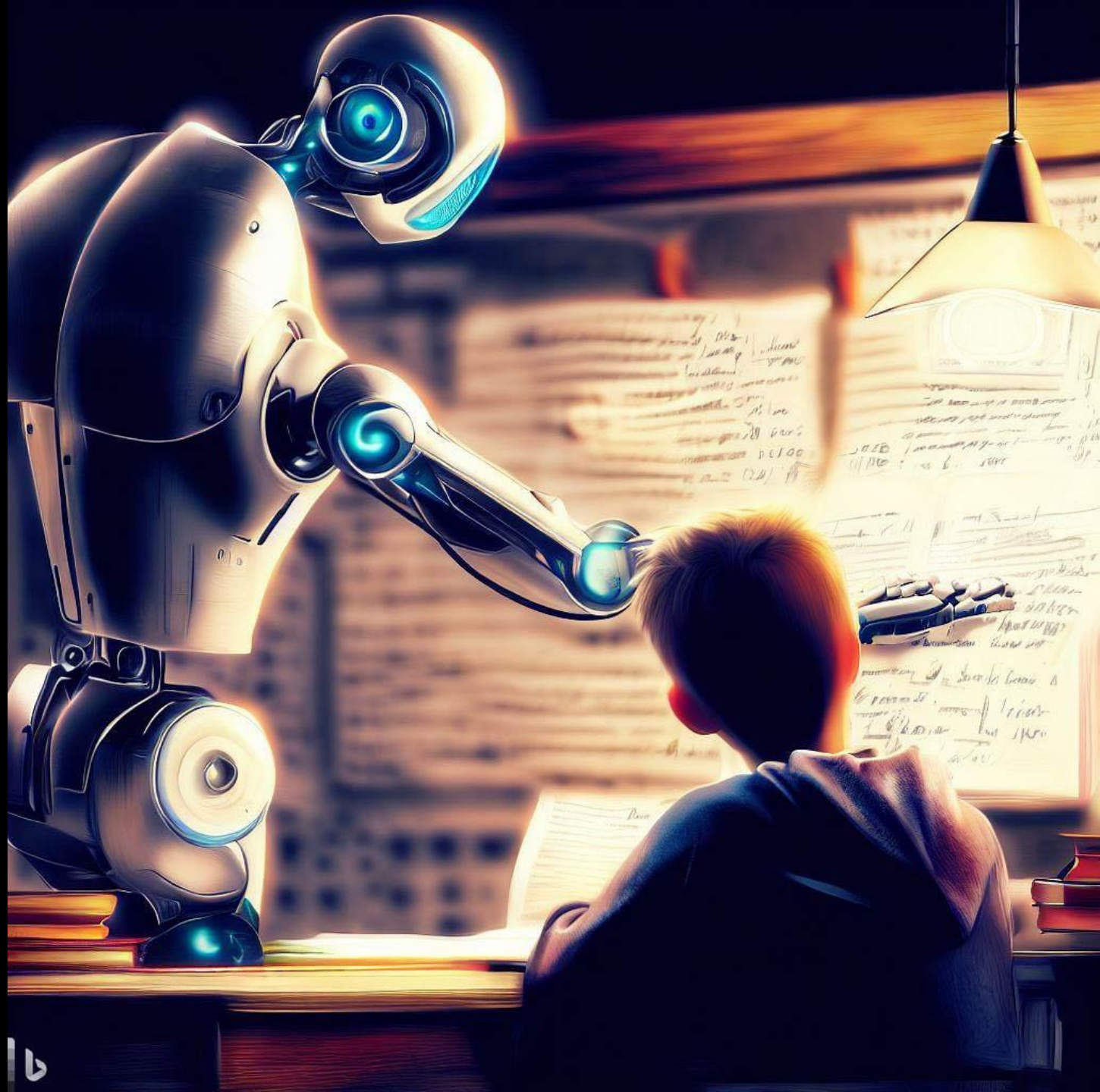
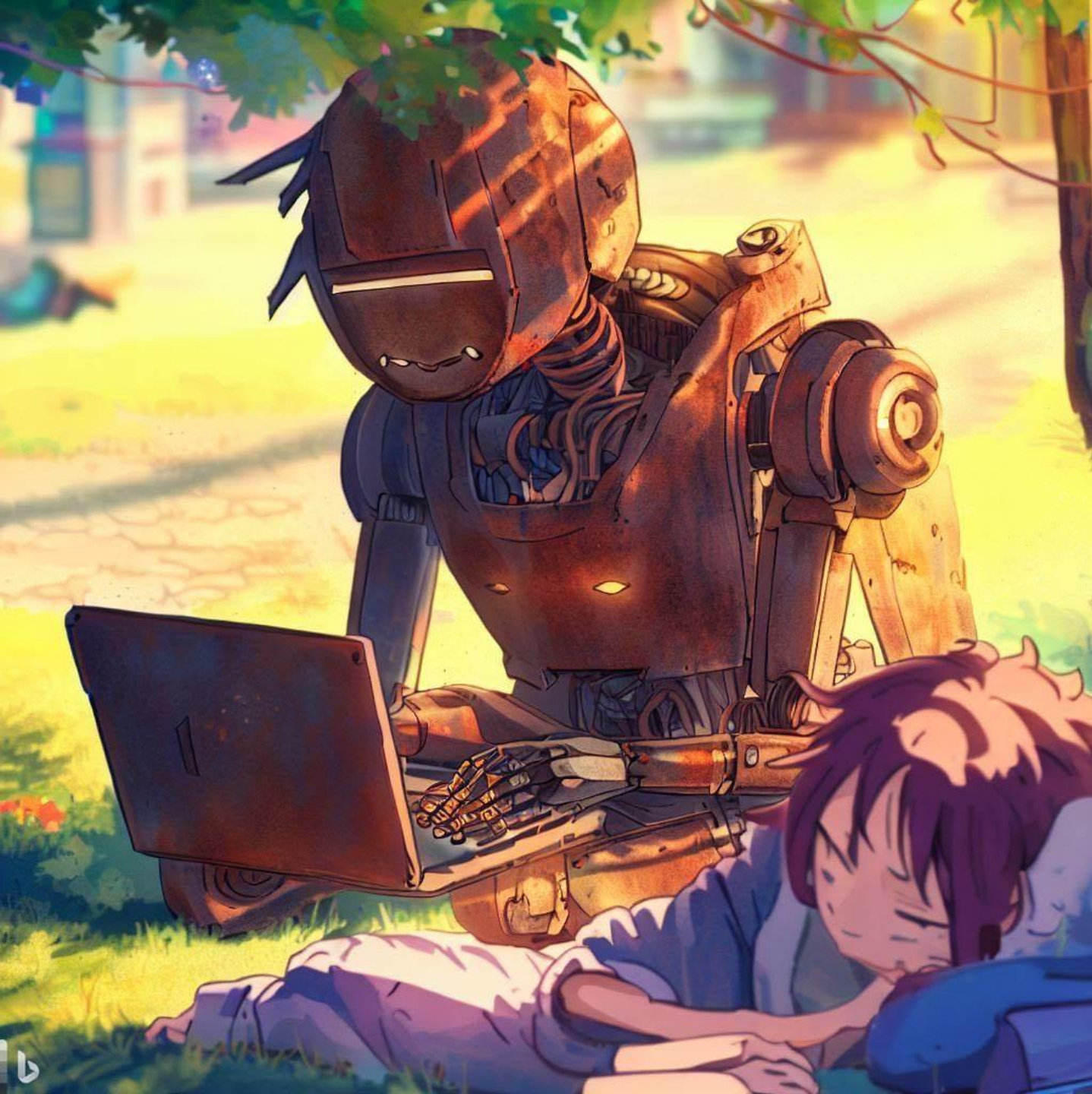# AI Tools

- ChatGPT, Bard

- Elicit, Scite

- GitHub Copilot

- Midjourney, DALL E 2

AI Optimists:

- Improved learning

- Preparation work life

- Fairness

AI Pessimists:

- Diminished learning
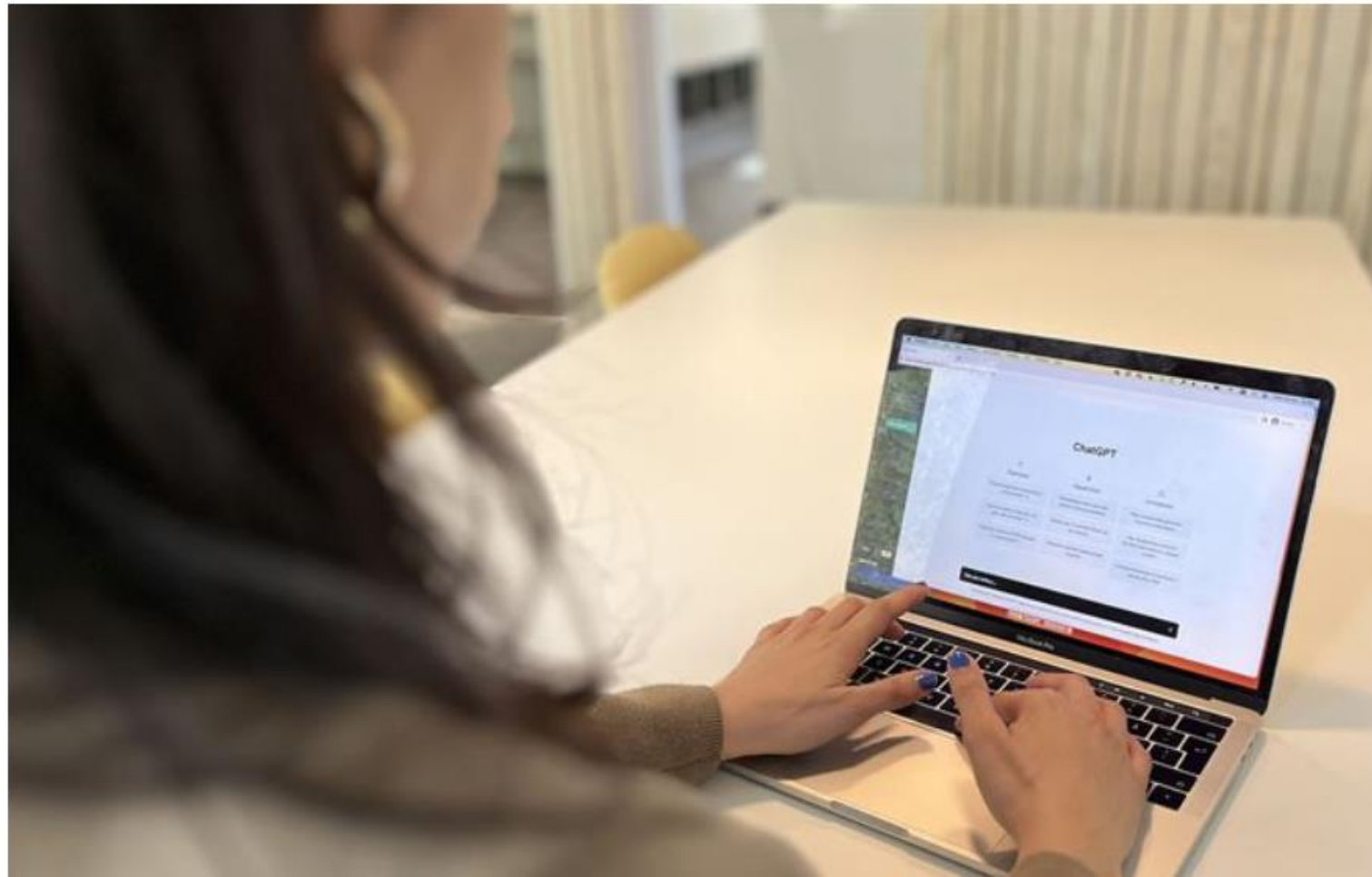
- Unfairness

- Academic integrity

Situation

- Two reasonable sides

- Both vocal and opinionated

Students positive towards AI, but uncertain about what counts as cheating

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Guidelines

- University level

- Program level

- Course level

Announcement: The Usage of AI Tools (Policy)

07/06/2023

Prof. Dr. Volker Markl

Chair of Database Systems and Informa:on Management (DIMA)

Technische Universität Berlin

June 7, 2023

Policy Statement.

1. Effective immediately, as a general policy, we do not permit the use of ChatGPT or other large language models (LLMs) in DIMA for the preparation of research papers, technical reports, theses, PhD dissertations, or any other original work.

Jyväskylä University School of Business and Economics (JSBE) has created the first set of guidelines for the use of artificial intelligence (AI) applications and language models in student assignments. The policy is generally permissive, because the intent is to teach students to use the emerging technology correctly and responsibly.

JSBE allows the use of AI in studies. JSBE has made a policy that the use of AI should not be prohibited or strictly limited in studies.

"Our view is that AI applications are an emerging technology and an important part of future job skills. They already have many use cases that are generally useful and can help student, so instead of restricting, we want to guide the students about their possibilities," says **Vilma Luoma-aho**, Vice Dean of Education at JSBE.

Invigilated exams versus assignments and projects

During classical written exams and digital exams in the [TUD secure exam environment](#), students do not have access to the internet, and therefore your students cannot access online AI tools. The same holds for oral exams that are held on campus.

On the other hand, if students work on assignments (exam-like or other) outside an exam hall and without invigilators (Dutch: surveillanten), the use of AI tools cannot be prevented.

Advice for fraud prevention in (non-invigilated) assessment

(+) **1. Discover possibilities and limitations and discuss them with your students**

(+) **2. Safe use of AI tools and plugins**

(+) **3. Be transparent and explain your choices**

(+) **4. Attribute correctly**

(+) **5. Reduce the need for students to rely on AI tools by making them feel confident**

(+) **6. Focus on the process**

(+) **7. Take fraud detection measures**

Perceived legitimacy

the right to exercise authority

→

Rule-following under disagreement

Students positive towards AI, but uncertain about what counts as cheating

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Perceived legitimacy

- Faculty: large lee-way

- Students: motivation, action

- Both pessimists and optimists

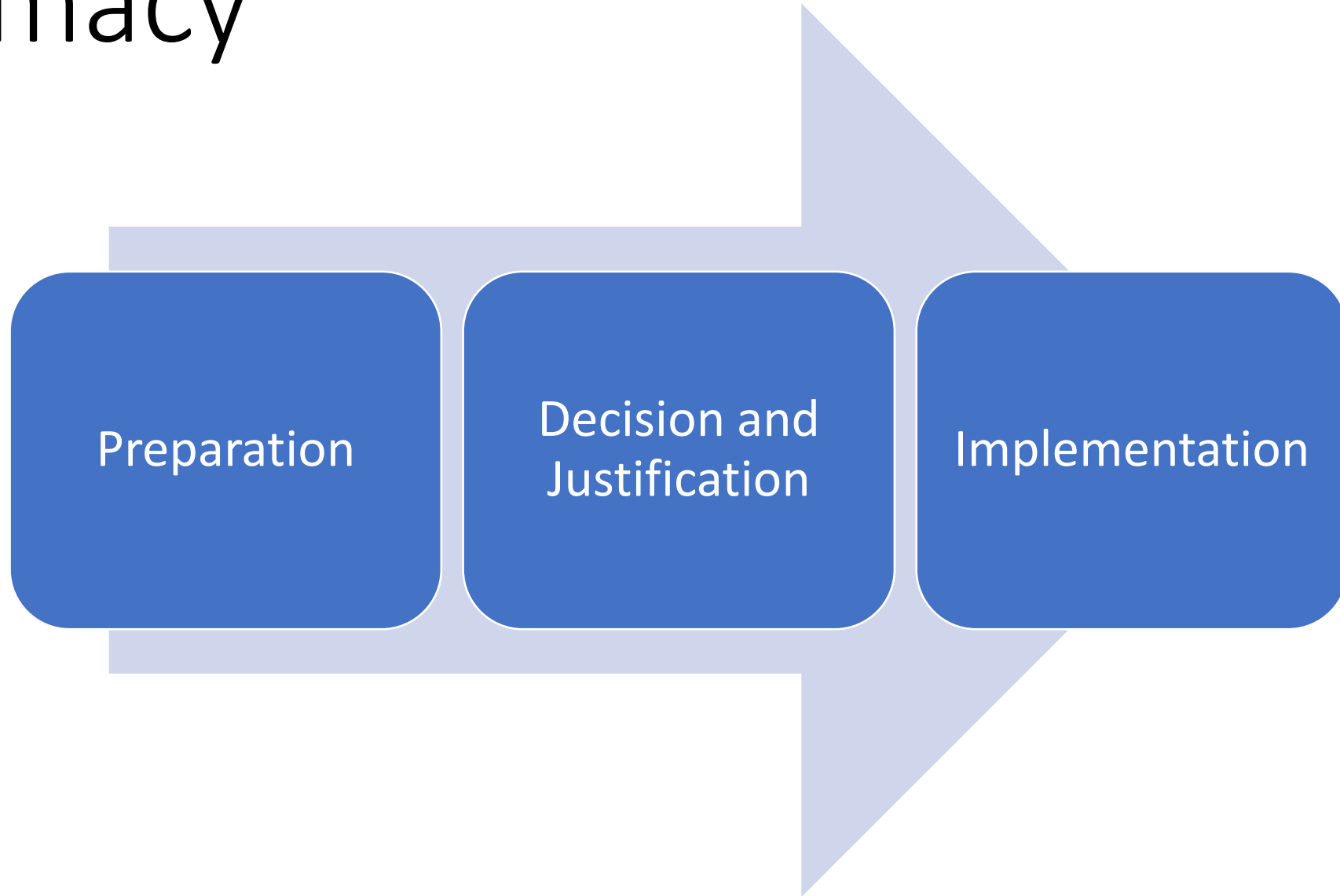## Students positive towards AI, but uncertain about what counts as cheating

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The problem

- Powerful AI tools (e.g., LLM)

- Student use in higher education?

- Different views

- Guidelines and perceived legitimacy

Producing perceived legitimacy

Preparation

Decision and Justification

Implementation

Preparation

- Transparency in process

- Include all stakeholders or representatives

- Faculty, students, other personnel

- Higher quality decisions

Preparation

- Set up clear norms:
  1. Equality of discussion,
  2. Reciprocity,
  3. Reasoned justification,
  4. Reflection,
  5. Sincerity, and
  6. Respect

Decision and Justification

- Decision & Justifications = Clear and Transparent

- Shared values:
1. Quality of education,
2. Students' success after graduation,
3. Academic integrity

Decision and Justification

- Also:
    a. Include other viewpoints
    b. Take them seriously
    c. Show why they fail

- Focus on positive, not external inevitable facts

- Delivered in person

Implementation

- Give the 'losers' (if any) something

- For example: resources and responsibilities

In conclusion

- Policies for managing AI in higher ed is essential

- Perceived legitimacy requires a well-devised process

- Preparation, decision & justification, implementation

Thank
you for
listening!