EDLAB
Ignacio Bellido, Paula Díaz, Martin Ivanov, Hugo Mandák, Clara de Roo, Kuuëb Vossen
Supervisor: Ryan Magdalena

Bridging the Gap Between Policy and Reality on AI in PBL

What are the different perspectives on GenAI usage and policy regarding PBL at Maastricht University?

01 Introduction

GenAI tools are rapidly transforming education. Policy makes are concerned that overreliance on AI can undermine critical thinking and the PBL objective. This study investigates staff and student views on GenAI use and related policies at Maastricht University to identify how AI can enrich PBL without compromising its core principles.

02 Methodology & Analysis

Conducted expert interviews to get expert policy perspectives

- 5 experts from Maastricht University
- Semi-structured
- Thematic analysis

Conducted an online survey to gather student perspectives

- 85 UM undergrads
- 24 Qualtrics questions (17 Likert, 3 scenario-based, 4 demographics)
- Shared via 5 faculty WhatsApp groups over 2 weeks
- One-sample t-tests ($\mu_0 = 4$) on five GenAI dimensions
- Independent t-test for reading-difficulty effect

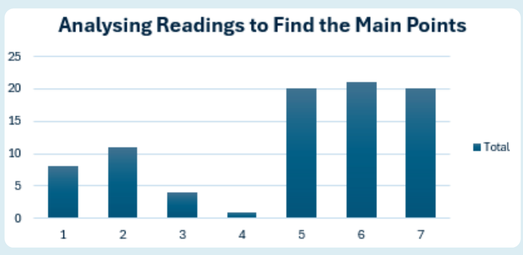
03 Results

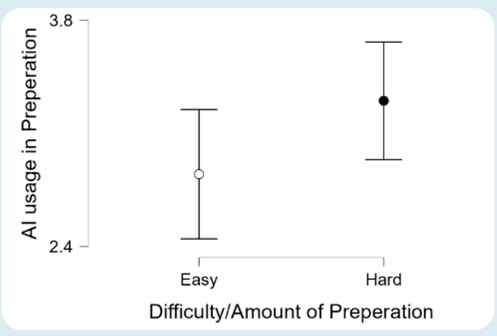
Interview

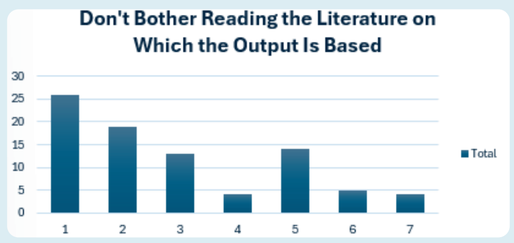
- **Enrichment of PBL**
  - Enhanced self-directed learning and creativity
- **Readiness and Training**
  - Need of improving digital literacy
- **Risk and Challeges**
  - Concerns of overreliance and bypassing learning
- **Balanced Policies**
  - Need of careful, clear and fleaxible policies.

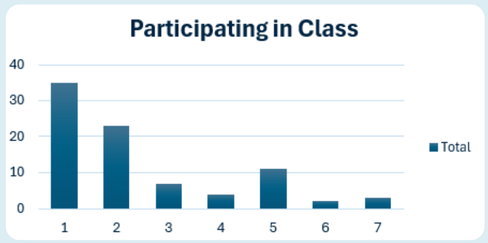
Survey

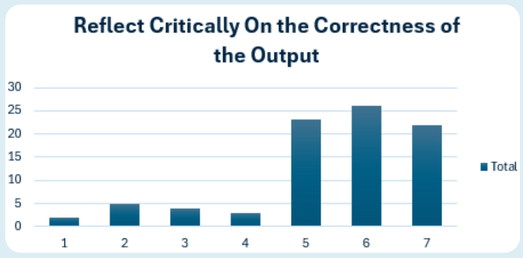
Category	Summarizing readings	Comparing to literature	Participation	Blind trust	Class preparation
Mean	4.94	4.98	2.89	2.5	3.91
P-Value	< 0.001	< 0.001	< 0.001	< 0.001	0.624











04 Conclusion

Contrast in perspectives on GenAI:

- Experts: between two extremes
  - See benefits in a PBL setting, e.g. 24/7 tutor
  - Fear of overreliance & possible undermining of UM's teaching philosophy
- Students: hesitant
  - See potential of AI to provide help with workload, but are rather hesitant to use such tools

Implications:

- Students' cautiousness prevents them from fully benefitting from AI tools, but avoids the problem of blind trust of AI output and over reliance on it
- Digital literacy education can encourage students to reap the benefits from AI and teach them how to use it to train skills instead of relying on it

05 Recommendations

General guidelines that allow for tailoring

More experimental research on actual use and effect of GenAI

Digital litereacy workshops for students and educators

GenAI as a personal tutor and coach

More research on how can GenAI be beneficial