

Navigating the Nexus of AI in teaching: Promising technology or a potential threat to integrity?

A need for revitalizing academic norms

Pro-rector for research and Professor Christine Øye Co-presenter Rector Gunnar Yttri at HVL 12th of April Swansea, EUA conference



Key figures HVL

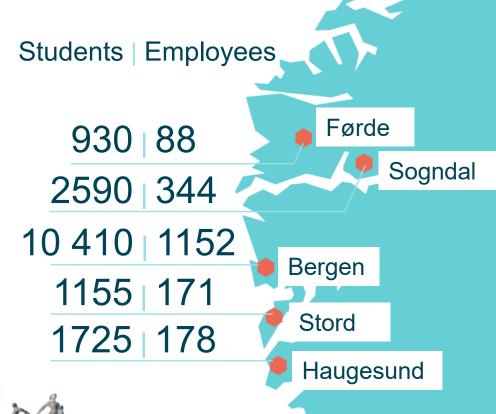












Our study portfolio



Health and Social Care Services



Sports, Outdoor Recreation and Public Health



Engineering and Maritime Sciences



Teacher Education and Creative Subjects



Natural and Social Sciences



Economics and Management

17

one-year programmes

49

bachelor's programmes

32

master's programmes

5

PhD programmes

90

programmes of continuing education

Aim & Background

> **Aim**:

To explore solutions for maintaining integrity while utilizing AI chatbots in learning environments in a university with a professional and working life profile



Al was traditionally in the 50s <u>not</u> developed to improve higher education Rather, it was thought to improve industries, military services and society at large



Digital education is based around a set of norms that might be at odds with "traditional education" Learning in social environments
Critical thinking and creativity
Equity and access
Teacher's role



Integrity at stake using AI chatbots?

- Al chatbots challenges the principle of academic integrity?
- Integrity in student learning encapsulates the moral and ethical principles that govern students' conduct in an educational context
- Involves a commitment to honesty, fairness, and respect for the scholarly work



Plagiarism and dishonesty

Pre-written answers

 Al chatbots have the capability to provide instant answers, explanations, and written content



Fair evaluation and assessment



Authentic learning and critical thinking

Hinder students' ability to think independently, analyse complex information, develop their own perspectives Erode the value of original thought



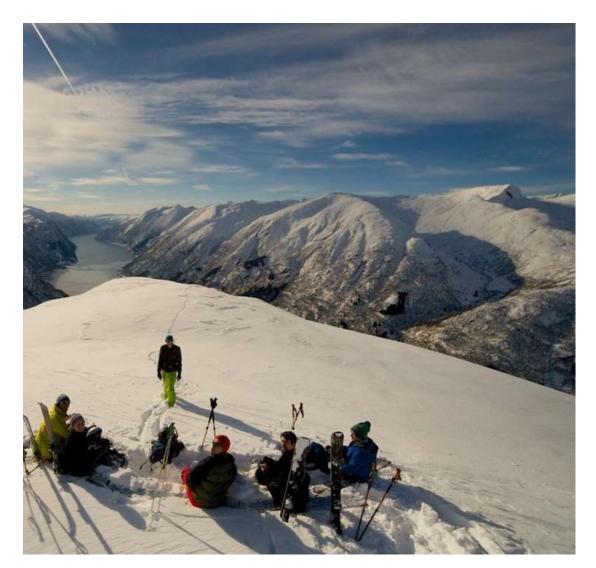
Transparency and openness



See Holmes et al. 2022; Kooli 2023

What are the pitfalls using Al-chatbots in a professional and working life university?

- Socio-Emotional Skills: Emotional intelligence, empathy, and interpersonal skills are difficult for Al chatbots to measure and cultivate
 - Al chatbots may struggle to interpret and provide feedback on complex scenarios that require a deep level of professional judgment
 - Lack depth and ability to complex problem-solving
- Concerns of privacy and data
 protection (e.g patient case studies)





Student's (n = 2822) use of AI chatbots

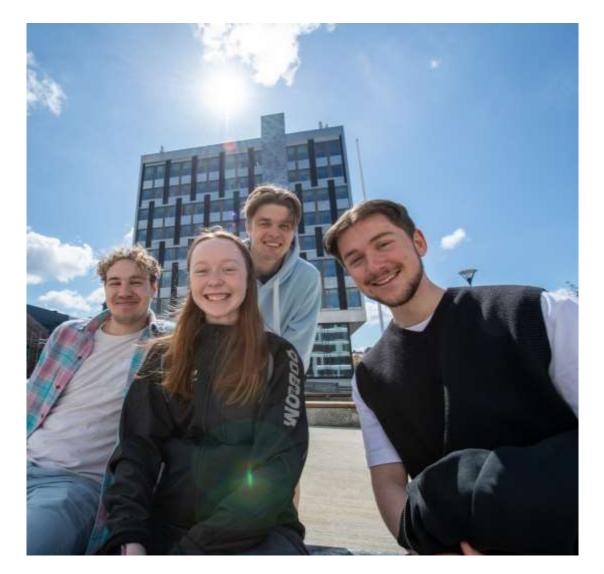
- Survey (closed and open alternatives)
 - > September 2023
 - > Under graduate 64 %
 - > After graduate 32 %
 - > Others 4%



24% of the respondents used the chat boot every week or more, while 63% of the respondents had never or only a couple of times used chatbots

Students are curious and critical!

- Students are both critical to Al chatbots as well as curious on how the chatbots can be a valuable learning tool
 - Valuable resources for clarifying content, arguments and language
 - Experienced as generating creative ideas and structuring the text
 - > Enhanced motivation and coping
 - Fairly high or high level of ethical concerns regarding the accuracy and correctness of the responses they receive from AI chatbots
 - Unsure of the accuracy, biases and reliability of the answers generated
 -Some students express particular concern regarding cheating and potential unfair assessment
 -A few students believe that AI chatbots can achieve better results than they can on their own





Survey (n=230) staff at HVL

- > 14% has never used a chatbot
- > 24% use a chatbot once a month
- > 22% use a chatbot a few times a month
- > 26% use a chatbot once or more days in a week
- > 14% use a chatbot once or more a day

Staff consider themselves to be:

- 33% being first starters
- 23% being in their early stages
- > 41% being middel range users
- > 3% being advanced users of Al

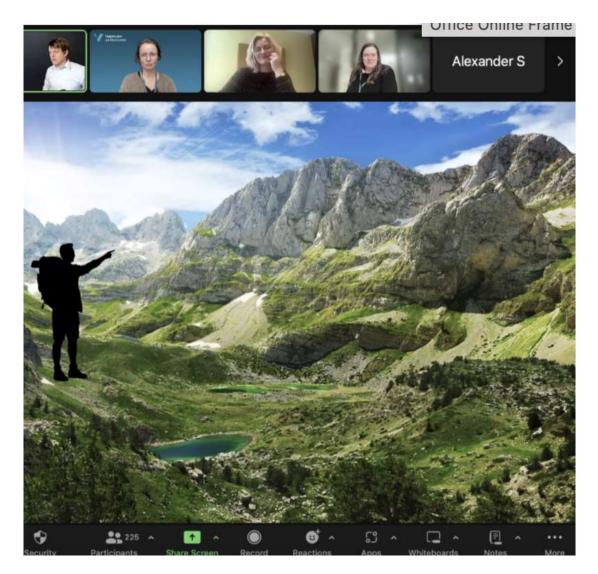
> Staff perspectives

- Unsure on how to use the chatbots
- Unsure on how it will affect teaching and learning
- Critical
 - Reference use and bias
 - Transperency
 - Integrity



Lessons learned at HVL so far...

- Need to formulate institutional guidelines for "legal" use of chatbots
- More courses targeting staff and students
- A need for international guidelines in higher education
 - Introducing AI-generated chatbots might get unintended consequences on student's learning; a need for research across countries and universities
 - > 13th of March 2024 Al Act EU





How to enhance integrity in a working life university to secure academic norms?

- The line between acceptable assistance and academic dishonesty can blur
 - A need to revise assessment and exam methods?

- Problem-solving tasks?
 - Enhancing critical thinking, creativity and collaboration
- Assessed through hands-on tasks?
 - > Assigned laboratory experiments and field work
 - Collect and analyse own data
- Active learning?
 - Through discussions, group work, and interactive assessments
- > Performance tasks that demonstrate their skills?
 - Apply skills in of real-world scenarios
- Implement strong anti-cheating measures?
 - Secure exam environments, monitored testing conditions, and plagiarism detection software

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See Kooli, 2023

Questions to discuss: A need for revitalizing academic norms?

- (1) What is at stake using AI generated chatbots for students learning and academic integrity?
- (2) How can universities effectively leverage chatbots to enhance student learning while ensuring academic integrity?



References

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Inclusion, challenging norms & collaboration