

Students' Perspectives on Lecturers' Use of Artificial Intelligence in Higher Education: Perceptions and Impacts

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Abstract: The use of artificial intelligence (AI) in higher education is rapidly increasing, both among students and lecturers. However, knowledge about how students perceive lecturers' use of AI remains limited. In Norway, there are significant differences in the use of such tools across various disciplines. Students in economics and business administration are among those who report the highest use of AI, while students in health and social studies report the lowest use. It is therefore interesting to examine how students perceive lecturers' AI use within the academic communities of economics and administration, as well as health and social studies. The aim is to explore students' views on lecturers' practices, and students' acceptance and engagement with such tools in their own learning. This study addresses two research questions: (1) How do students experience openness and perceived value related to the use of AI in teaching? (2) How do lecturers' practices with AI relate to students' attitudes toward and use of the technology?

Keywords: Artificial Intelligence, Student Perceptions, Lecturer Technology Use, Innovation, Technology Acceptance

1. Introduction

Artificial intelligence (AI) is rapidly transforming a wide range of industries, including the field of education. With advances in machine learning and natural language processing, AI has the potential to enhance individual learning processes (Harry, 2023; Wu & Yu, 2024). The use of AI in higher education has increased rapidly in recent years (Crompton & Burke, 2023; Delcker et al., 2024; Mah, 2016; NOKUT, 2025), and tools such as ChatGPT are reshaping the landscape of higher education. This has sparked debate about the implications of AI for the future of teaching and learning (Korseberg & Drange, 2024; Von Garrel & Mayer, 2023).

In Norway, the national student survey *Studiebarometeret* shows that the use of AI has increased significantly in just the two years it has been collecting data on the topic. In 2023, 59% of students reported using AI tools in their studies; in 2024, the figure was 81% (NOKUT, 2025). However, students are not a homogenous group, and *Studiebarometeret* reveals substantial variation between academic disciplines. Among students in economics and business administration, 79% reported using AI often or occasionally. In contrast, only 48% of students in health, social work, and sports sciences reported the same (NOKUT, 2025). This may also raise questions about how lecturers engage with AI across different academic disciplines.

2. Theoretical Framework

This study is grounded in the Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1977) and the Theory of Planned Behavior (TPB) (Ajzen, 1991). These models provide a framework for understanding how attitudes and subjective norms influence students' intentions and behaviours related to AI usage. Both theories have previously been applied in research on students' adoption of AI tools (e.g. Katsantonis & Katsantonis, 2024; Suh & Ahn, 2022).

TRA and TPB are based on the assumption that behaviour is guided by intention, which in turn is influenced by two central factors: the individual's attitude toward the behaviour and the perceived subjective norm. In TPB, perceived behavioural control is included as a third factor (Ajzen, 1991; Fishbein & Ajzen, 1977). This study focuses on attitude and subjective norm— as these are particularly relevant for understanding the value of students' perceptions of lecturers' use of AI.

2.1 Attitudes

Attitude can be defined as "a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour" (Eagly & Chaiken, 1998). It reflects the individual's assessment of whether a specific behaviour is positive or negative, based on expected outcomes and the desirability of those outcomes (Ajzen, 1991; Fishbein & Ajzen, 1977).

2.2 Subjective Norms

Subjective norm refers to an individual's perception of how significant others expect them to behave, as well as the individual's motivation to comply with these expectations (Fishbein & Ajzen, 1977). For example, subjective norm may influence intention if a student perceives that lecturers or academic staff have strong preferences for the use of AI, and the student is motivated to act in accordance with those expectations.

In a literature review, Hoya et al. (2024) demonstrates that subjective norms influence students' attitudes toward data use and AI. They particularly highlight how this is evident in studies on teacher education. Teo (2009) demonstrated that subjective norm influenced attitudes toward data use in teacher education in Singapore, Ursavaş et al. (2019) reported that subjective norm had a strong impact on behavioural intentions and attitudes toward educational technology among Turkish pre-service teachers, while the effect was weaker among in-service teachers. Sanusi et al. (2024) found that subjective norm was among the strongest predictors of pre-service teachers' intention to learn about AI in Nigeria. Similarly, Zhang et al. (2023) found that both perceived usefulness and subjective norm predicted AI use intention among German teacher students. Studies in other disciplines confirm this trend. Gado et al. (2022) found that subjective norm influenced psychology students' engagement with AI tools, and Ivanov et al. (2024) reported similar results in a broader university student sample.

However, there remains a research gap concerning the factors influencing students' attitudes toward AI across different academic disciplines and geographic regions, particularly with respect to the role of lecturers.

3. Aims and Research Questions

Building on the theoretical framework and the practical challenges outlined above, this study aims to contribute to a broader understanding of students' attitudes toward artificial intelligence in higher education. Specifically, it investigates how students perceive the use of AI by their lecturers, and how these perceptions relate to their own engagement with AI tools. The overall aims of the study can be divided into two research questions:

How do students experience openness and perceived value related to the use of AI in teaching?

How do lecturers' practices with AI relate to students' attitudes toward and use of the technology?

4. Methodology

This study employs a mixed-methods approach, combining quantitative and qualitative data to examine students' perceptions of lecturers' use of AI at a Norwegian university. The primary emphasis is on quantitative survey data, supplemented with an open-ended qualitative question to gain deeper insight into students' experiences and viewpoints regarding AI integration in teaching.

4.1 Survey Development

The attitudinal dimensions in the survey are based on the "Student Attitude Toward Artificial Intelligence" (SATAI) scale developed by Suh and Ahn (2022) which operationalizes the cognitive, affective, and behavioural dimensions of students' attitudes toward AI. This was supplemented with two items measuring students' attitudes toward lecturers' use of AI. These items were developed based on TRB (Ajzen, 1991), TRA (Fishbein & Ajzen, 1977). In addition, two questions were included to capture students' perceptions of how lecturers use AI in teaching. To explore students' perceptions of what lecturers, use AI for, the survey included an open-ended question.

4.2 Sample and Data Collection

Data were collected in the spring of 2025 through a digital survey distributed to students in economics and administration, as well as in health and social sciences. Including students from contrasting academic disciplines strengthens the study by enabling comparisons between groups that report high and low levels of AI use in the national student survey *Studiebarometeret* (NOKUT, 2025). The survey was administered using the Nettskjema.no platform and distributed via the university's learning management system, Canvas, as well as during lectures. A total of 104 students participated in the survey. Data collection has been completed, and the next step in the research process will be to analyse the data.

4.3 Data Analysis

Quantitative data will be analysed using SPSS. Qualitative data will be analysed using thematic analysis to identify patterns in how students perceive lecturers' use of AI in teaching.

5. Contributions

This study contributes to the growing body of research on AI in higher education by examining students' perceptions of lecturers' use of AI. Existing research has primarily focused on students' own adoption of AI tools. This study addresses a less explored area—how students experience and respond to AI use by their lecturers.

The results may have practical implications for the use of AI in teaching within higher education and may provide a foundation for further research on how lecturers' practices influence students' attitude formation and technology use.

Ethical Considerations

The study was conducted in accordance with the institution's guidelines for research ethics and data protection. Participation was voluntary and anonymous, and informed consent was obtained.

AI Declaration

Artificial intelligence (AI) was used as a support tool to improve language and phrasing in the article draft. All scholarly analysis, data interpretation, and conclusions were conducted solely by the authors. No AI tools were used to generate content or perform analyses. However, selected sections of the text were revised and translated with assistance from ChatGPT. The authors have reviewed and verified all content to ensure academic integrity.

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