



International Journal of Learning, Teaching and Educational Research
 Vol. 25, No. 5, pp. 1025-1048, May 2026
<https://doi.org/10.26803/ijlter.25.5.46>
 Received Feb 28, 2026; Revised Apr 21, 2026; Accepted May 22, 2026

Artificial Intelligence and the Flipped Classroom: Lecturer Perceptions in a South African Private-Higher-Education Institution

Farrell M. West*  and Christo P. van der Westhuizen 
 University of Johannesburg
 Johannesburg, South Africa

Abstract. Artificial intelligence (AI) is reshaping higher education by creating new opportunities for content development, student engagement and instructional practice. In South African private-higher education, however, AI integration is shaped by concerns related to lecturer readiness, ethical use and institutional support. This qualitative case study explores how lecturers perceive the use of AI within the flipped classroom, a model that emphasises active, student-centred learning. Guided by the Unified Theory of Acceptance and Use of Technology (UTAUT), the study draws on semi-structured interviews with 11 lecturers, analysed using thematic analysis informed by Braun and Clarke (2019) and Saldaña (2013). The study contributes to understanding how lecturers interpret and navigate the pedagogical use of AI within flipped-classroom practices in a South African private-higher-education context. The findings indicate cautious optimism. AI is valued primarily for supporting pre-class preparation through lesson planning, resource development and content generation, rather than facilitating in-class active learning. Concerns were raised about student over-reliance, superficial learning and the need for pedagogical support. Effort expectancy was shaped by time pressures and tool overload rather than technical difficulty, while peer support and institutional conditions strongly influence adoption.

Keywords: Artificial intelligence; flipped classroom; lecturer adoption; private-higher education (South Africa); UTAUT framework

Citation:

West, F. M., & van der Westhuizen, C. P. (2026). Artificial Intelligence and the Flipped Classroom: Lecturer Perceptions in a South African Private-Higher-Education Institution. *International Journal of Learning, Teaching and Educational Research*, 25(5), 1025-1048. <https://doi.org/10.26803/ijlter.25.5.46>

*Corresponding author: Farrell Mercia West; fwest@emeris.ac.za

1. Introduction

Artificial intelligence (AI) is rapidly changing higher education, transforming how teaching and learning are approached and practised. The rapid development of AI is reshaping multiple sectors; higher education is not exempt (Holmes & Tuomi, 2022; Jaboob et al., 2026; Selwyn, 2022; Wang et al., 2024). While AI has generated substantial interest for its potential to enhance teaching and learning, its integration into educational practice remains uneven. Historically, technology such as calculators, computers and mobile devices was met with resistance due to concerns about academic integrity and the educators' changing role (Cuban, 1986; Flavin, 2012; Linderoth, 2024; Selwyn, 2017). Similar concerns are now emerging in relation to AI, alongside its potential to support personalised learning, automated feedback and enhanced instructional processes (UNESCO, 2024; López-Villanueva et al., 2024). However, limited research examines how lecturers interpret and respond to AI within specific pedagogical approaches and institutional contexts, particularly within private-higher education.

One pedagogical approach that aligns with AI's affordances is the flipped classroom. This model shifts content delivery to pre-class preparation and uses contact time for collaborative and applied learning (Bergmann & Sams, 2012). The approach promotes active, student-centred learning and greater learner autonomy, particularly when supported by digital tools (Baig & Yadegaridehkordi, 2023). Within this context, AI can extend key flipped-classroom principles by generating instructional resources, supporting content preparation and providing ongoing student assistance beyond formal class time, particularly through generative-AI tools such as ChatGPT that enable on-demand content creation and support (Chan & Colloton, 2024; Suvendu & Deb, 2024; Zhen & Yahaya, 2024).

Despite these opportunities, integrating AI into teaching practice presents several challenges. Research highlights concerns related to lecturers' understanding of AI, their ability to evaluate AI-generated content and the implications for assessment and academic standards (Mutanga et al., 2024; Sanders & Mukhari, 2024). Successful implementation depends not only on access to technology, but on lecturers' readiness and willingness to incorporate AI into their pedagogical practices (Abdelaal & Sawy, 2024; Scherer et al., 2019). The introduction of AI requires educators to reconsider aspects of their professional role and develop new competencies, often in the absence of clear institutional guidance or structured support (Chan & Colloton, 2024; UNESCO, 2024).

These challenges are especially relevant in private-higher-education institutions. While these institutions often emphasise innovation and responsiveness, lecturers may be expected to adopt new technology without sufficient time, training or institutional support (Funda & Piderit, 2024; Hutchings & Quinney, 2015). A gap can therefore emerge between institutional expectations and the practical conditions needed for sustainable implementation. Understanding how lecturers experience and perceive this process supports meaningful adoption.

Within South Africa, AI research in higher education is emerging but remains limited, particularly in relation to private institutions (Sanders & Mukhari, 2024). Existing studies largely focus on general AI adoption, with less attention to how lecturers interpret and respond to AI within pedagogical approaches such as the flipped classroom. This study addresses this gap by examining lecturers' perceptions of AI integration in a South African private-higher-education institution.

The study is guided by the primary research question:

How do lecturers in a private-higher-education institution perceive the integration of AI within the flipped classroom?

The inquiry focuses on three areas: lecturers' perceptions of the benefits and challenges of AI use, factors influencing their willingness to adopt AI approaches and the institutional support required for effective integration. The study is informed by the Unified Theory of Acceptance and Use of Technology (UTAUT), which explains technology adoption in relation to performance expectancy, effort expectancy, social influence and facilitating conditions (Marikyan & Papagiannidis, 2025).

The study generated insight into how lecturers interpret AI and apply it within their teaching practices in the context of private-higher education. Rather than positioning AI as a replacement for academic expertise, it is considered a pedagogical resource to support teaching efficiency, extend flipped-classroom practices and support student learning. By providing empirical evidence from a South African private-institutional context, the study contributes to emerging research on AI in higher education and offers practical insight for institutions seeking to support lecturers in integrating new technology.

2. Literature Review

2.1 Constructivist Learning Theory and Flipped Learning

This review combines theoretical and empirical literature on AI adoption in flipped-classroom contexts. Constructivist-learning theory positions learning as an active process in which students construct knowledge through engagement, dialogue and reflection rather than passive reception (Clark, 2018; Taber, 2019). Constructivist approaches emphasise participation, inquiry and collaborative meaning-making, enabling learners to connect new information to prior experience and develop deeper understanding (Malik, 2017; Misra, 2020; Zajda, 2021). The flipped classroom aligns with these principles by shifting contact time from content delivery to participatory activities that support application, discussion and problem solving (Lee et al., 2016; McLean & Attardi, 2023). While constructivism explains the pedagogical logic of flipped learning, UTAUT provides the analytical lens for understanding lecturers' adoption of AI within this context.

2.2 Unified Theory of Acceptance and Use of Technology

UTAUT (Venkatesh et al., 2003) explains technology adoption through four constructs: performance expectancy, effort expectancy, social influence and facilitating conditions. The model integrates earlier acceptance theories and is

widely applied to understand technology use in organisational contexts, including higher education (Ajzen, 1991; Davis, 1989; Marikyan & Papagiannidis, 2025). Research indicates that adoption decisions are shaped by contextual factors such as institutional culture, infrastructure, workload and alignment between technology and pedagogical practice (Soares et al., 2024; Wu et al., 2022). In the case of AI, perceived value is often linked to time savings, ease of integration and availability of institutional guidance for responsible use (Momani, 2020; UNESCO, 2024). While extensions such as UTAUT2 include factors relevant to consumer technology use, such as hedonic motivation, price value and habit (Venkatesh et al., 2012), the original UTAUT model is better suited to this study because it addresses technology adoption within organisational contexts shaped by institutional structures and professional practice. UTAUT therefore provides an appropriate lens for understanding lecturers' willingness to adopt AI within flipped-teaching environments.

2.3 AI in Education

AI in education has evolved from rules-based systems to adaptive and generative tools capable of producing content, analysing learner data and supporting instructional decision-making (Holmes & Tuomi, 2022; Luckin et al., 2016; Wang et al., 2024). Recent developments in generative AI, particularly large language models such as ChatGPT, have expanded these capabilities by enabling on-demand content generation and interactive support (Chan & Colloton, 2024). Current applications include intelligent tutoring systems, chatbots, predictive analytics and automated feedback (Admane et al., 2024; Legowo et al., 2024). These tools are widely associated with personalised learning and the potential to reduce administrative and routine teaching tasks, allowing lecturers to focus on facilitation and mentoring (Abdelaal & Sawy, 2024; UNESCO, 2024).

Simultaneously, the literature highlights ongoing ethical and pedagogical debates, particularly regarding AI. Concerns include data privacy, bias, accountability and unequal access across institutions (Admane et al., 2024; Mutanga et al., 2024). Scholars caution that uncritical reliance on AI may limit students' independent thinking and deeper learning, raising questions about authorship, academic integrity and the role of lecturer knowledge construction (visible, 2024; Yusuf et al., 2024). These risks underscore the importance of lecturer competence and institutional guidance, as limited training may result in fragmented or superficial implementation (Chan & Colloton, 2024; UNESCO, 2024). Overall, the literature positions AI as both an instructional opportunity and a site of ethical and pedagogical tension.

2.4 AI in South African Higher Education and the Private Sector

South Africa's National AI Policy Framework emphasises ethical implementation, reducing digital inequality and strengthening collaboration across sectors (RSA Department of Communications and Digital Technology, 2024). However, infrastructural limitations and governance challenges often constrain large-scale adoption. Within private-higher-education, AI applications include chatbot tutors, learning analytics and administrative automation (Bosch et al., 2023; Funda & Piderit, 2024; Patel & Ragolane, 2024). Adoption remains uneven and is frequently driven by short-term initiatives rather than long-term institutional

strategy. Contextual factors such as load shedding, bandwidth limitations and linguistic diversity influence implementation (Bosch et al., 2023). These conditions highlight the need for context-sensitive approaches that translate global AI guidance into practical institutional support.

2.5 The Flipped Classroom in Higher Education

The flipped classroom shifts initial content engagement to pre-class preparation, using contact time for active learning and application (Bergmann & Sams, 2012; Lee et al., 2016). When students engage with preparatory material and in-class activities are well designed, the approach is associated with improved engagement and higher-order learning (Baig & Yadegaridehkordi, 2023; Setren et al., 2021). However, implementation requires substantial lecturer time for resource development and depends on student accountability for preparation (Lee et al., 2016; Wang & Yasir, 2023). Institutional support, including shared resources and student orientation, is therefore key to support sustainability (McLean & Attardi, 2023).

Private institutions are often described as more flexible in adopting instructional innovation due to smaller class sizes and curricular autonomy (Dutt et al., 2025; O'Malley et al., 2023). Nevertheless, staff development and resource allocation may not always align with the increased demands of flipped teaching, creating a gap between expectations for innovation and practical support needed (Karthikeyan et al., 2025; Verma et al., 2021). These studies suggest that flipped-learning success depends not only on its pedagogical design, but on lecturer capacity, student accountability and institutional support.

2.6 Integrating AI into the Flipped Classroom

Within flipped learning, AI is increasingly seen as useful for supporting pre-class preparation through adaptive content, personalised guidance and targeted practice. Generative AI, in particular, allows for quicker development of customised learning materials and student support (Chan & Colloton, 2024; López-Villanueva et al., 2024; Suvendu & Deb, 2024; Zhen & Yahaya, 2024). Learning analytics may assist lecturers during in-class facilitation by highlighting misconceptions and engagement patterns, while automated feedback can support formative assessment.

The literature emphasises that pedagogical value depends on purposeful integration. When AI is primarily used for content delivery, it may reinforce passive learning and undermine reflective and dialogic processes central to constructivist flipped learning (Suvendu & Deb, 2024; Verma et al., 2021). Effective implementation, therefore, requires alignment with inquiry-based learning and the continued facilitative role of the lecturer.

Lecturer perceptions play a key role in this process. While AI is often viewed as useful for personalisation and workload support, adoption is shaped by perceived usefulness, ease of use and institutional readiness, including training and policy guidance (Funda & Piderit, 2024; Suvendu & Deb, 2024). Concerns about academic integrity, professional judgement and changing teaching roles remain significant (Selwyn, 2022; Yusuf et al., 2024). These factors reinforce UTAUT's

relevance in understanding adoption within AI-enabled flipped-learning environments.

Across the reviewed literature, AI is framed as both an opportunity for enhancing teaching efficiency and a challenge to established pedagogical practices. While studies highlight its potential to support flipped learning through content generation, personalisation and feedback, they raise concerns related to academic integrity, student engagement and the evolving role of the lecturer. Despite growing interest in AI adoption, limited research examines how lecturers interpret these dynamics within specific pedagogical and institutional contexts, particularly in private higher education. This gap underpins this study's focus.

3. Methodology

3.1 Research Design and Paradigm

This study employed a qualitative, single-case design to explore how lecturers at a South African private-higher-education institution perceive AI integration into flipped-classroom practices. The study was situated within a constructivist-interpretivist paradigm, appropriate for examining how participants interpret emerging technology in their professional contexts and how meaning is shaped by experience and institutional practice (Creswell & Poth, 2018). The case-study design enabled an in-depth investigation of a bounded institutional setting in which AI use in flipped teaching is closely shaped by contextual conditions (Cohen et al., 2007; Yin, 2018).

3.2 Research Context

The study was conducted at a private-higher-education institution offering practice-led programmes in design, communication and business across multiple campuses. The institution enrolls several thousand students and operates through face-to-face learning across four campuses and a distance-learning-centre offering online study. A learning-management system is used for content distribution, communication and assessment. The institution's teaching approach is informed by a constructivist philosophy that emphasises active, student-centred learning and lecturer facilitation.

The institution promotes student-centred teaching approaches and allows lecturers autonomy in selecting pedagogical strategies, including the use of flipped-classroom models. While there is growing interest in AI use within teaching and learning, institutional guidance regarding AI use remains emergent, with not fully-standardised policies governing its integration across programmes at the time of the study. This context provided an appropriate setting for exploring variation in flipped-teaching practices and the emerging use of AI. To ensure confidentiality, the institution is not identified.

3.3 Participants and Sampling

Purposive sampling was used to recruit lecturers with experience of flipped teaching and exposure to AI in their practice. An initial screening form gathered contextual information on discipline, teaching experience and level of AI use. Eighteen lecturers completed the form and 11 were selected based on their ability to provide insight into both pedagogical practice and technology integration

(Cohen et al., 2007). Participants include full-time and part-time lecturers from a range of disciplinary backgrounds and teaching contexts, enabling a range of perspectives, although the study was not designed for comparative analysis across these groups. A summary of participant characteristics is provided in Table 1.

Table 1: Contextual overview and profile of participants

ID	Years' experience	Discipline/subject area	Teaching mode
PL	> 10 years	Experience design	Both
PF	2 – 5 years	Business management and introduction to research	Theory
PE	> 10 years	Interior design	Both
PC	2 – 5 years	Digital marketing, entrepreneurship and project management	Theory
PB	< 2 years	Game design	Practical
PA	> 10 years	Design studies and illustration	Both
PH	> 10 years	User-experience technology	Practical
PI	6 – 10 years	Digital marketing and sociology	Theory
PJ	> 10 years	Interior design	Both
PK	> 10 years	Economics, business and commerce; financial management	Both
PM	2 – 5 years	Communication sciences and strategic brand communication	Theory

3.4 Data Collection

Data were collected in two stages. An online screening form gathered contextual information, followed by semi-structured interviews as the primary data source (see Appendix 1). This approach allowed for consistency across participants while enabling deeper exploration of individual experiences (Cohen et al., 2007). The interview guide was informed by the UTAUT (Marikyan & Papagiannidis, 2025; Venkatesh et al., 2003) and included questions related to lecturers' perceptions of AI, the effort involved in using it and the influence of colleagues and institutional culture. Interviews were conducted online via Microsoft Teams, recorded with consent, transcribed verbatim and lasted approximately 45–60 minutes.

3.5 Data Analysis

Data were thematically analysed guided by Saldaña's (2013) coding framework and managed using ATLAS.ti. Analysis proceeded in three stages. First, transcripts were coded line-by-line using descriptive first-cycle coding to inductively capture key actions, perceptions and experiences. For example, a participant statement such as "*It's saving me days... I use it a lot for developing case studies*" (PK) was initially coded as *productivity* and later grouped into the broader category of productivity and efficiency. Second, codes were grouped into categories (see Appendix 2) and refined into themes through an inductive process. These themes were interpreted through the UTAUT framework, allowing for theory-informed analysis while remaining grounded in participants' accounts. Third, cross-theme analysis identified patterns, convergence and tensions across the dataset (Braun & Clarke, 2019; Saldaña, 2013). This process ensured that

findings remained closely aligned with participants' accounts while supporting theory-informed interpretation.

3.6 Trustworthiness

Trustworthiness was addressed through strategies aligned with credibility, dependability, confirmability and transferability (Shenton, 2004). Credibility was supported through iterative engagement with the data and the use of contextual information from the screening form. An audit trail documented key research decisions and analytic steps, supporting dependability. Reflexive memo writing enhanced confirmability by acknowledging the researcher's role in interpretation. Transferability was supported through contextual description of the setting and participant variation.

3.7 Ethical Considerations

Ethical clearance was obtained from the University of Johannesburg (Ethics Clearance Number: SEM 1-2025-061) and from the participating institution (R.15992 [RPGS04]). Institutional permission was granted prior to data collection. Participation was voluntary and based on informed consent, with participants free to withdraw at any stage. Identifying information was removed from transcripts, pseudonymous codes were used and the institution remained anonymous. Interview procedures were conducted with sensitivity to participants' professional context.

4. Results

The results are presented thematically and organised according to the UTAUT constructs (Venkatesh et al., 2003) to illustrate how lecturers perceive AI within flipped teaching and factors shaping their willingness to adopt AI-enhanced practices. Participant identifiers are used to preserve anonymity.

4.1 Theme 1: AI as a Productivity and Preparation Assistant (Performance Expectancy)

Most lecturers report using generative-AI tools (e.g., ChatGPT, Copilot, Gamma, Gemini) primarily to support teaching preparation. AI was described as a planning partner that assists with lesson structuring, idea generation, content summarisation, simplifying complex concepts and producing resources such as slides or case studies. One participant described AI as *"somewhat of an advisor... [to] bounce ideas off"* (PB), while another noted, *"Instead of Googling, I'll go into ChatGPT... and curate the bullet points"* (PH). For several lecturers, the value of AI was closely linked to workload pressures: *"It's saving me days... I use it a lot for developing case studies"* (PK).

In flipped teaching, AI was valued for making pre-class material more accessible and engaging. However, participants consistently emphasised the need for professional judgement: *"It gives beautiful examples... but I still have to adapt it to my class"* (PM). Overall, performance expectancy was high, with AI generally viewed by lecturers as useful in reducing preparation time and improving learning-resource clarity, while remaining under lecturer control.

4.2 Theme 2: Ethical Ambivalence and Student Misuse drive Pedagogical Redesign (Effort Expectancy)

Alongside these benefits, lecturers expressed concern about students using AI to bypass cognitive effort. Participants reported that students often submit polished work without understanding, with one lecturer observing that students *“hand in beautiful work but can't explain anything about it”* (PI) and another noting they are *“copying and pasting it in”* (PH). Concerns centred on the erosion of paraphrasing, synthesis and independent thinking: *“They find it absolutely impossible to paraphrase... I think I'm teaching them to cheat”* (PK). This reflects a tension between perceived efficiency of AI use and concerns about its impact on student engagement. As one participant stated, *“For me personally, I love it. For the students, I hate it”* (PM).

In response, lecturers described increased pedagogical effort focused on task and assessment redesign. Strategies included requiring students to revise AI outputs, provide prompts and evidence of changes and demonstrate metacognitive engagement. For example, *“They do the task, then AI does it, and then they revise what AI gave them”* (PC) and *“I ask them to show the original prompt and how they changed the output”* (PH). Oral assessments and in-class explanations were also used to ensure accountability: *“Oral assessments are helpful. AI can't help them once they're up front”* (PH). These findings suggest that while AI tools are perceived as easy to use, lecturers experience them as increasing the effort required to maintain learning depth and academic integrity through pedagogical design.

4.3 Theme 3: Peer Support enables Experimentation amid Institutional Uncertainty (Social Influence)

Participants reported considerable uncertainty regarding acceptable AI use for both lecturers and students. Institutional messaging was described as unclear or inconsistent: *“We don't know where the line is. Some say don't use it, others say embrace it”* (PJ). This ambiguity contributed to uneven expectations across modules, which lecturers believed confused students: *“Students are confused... one lecturer allows it, another says it's cheating”* (PB).

In this context, peer learning emerged as a key driver of adoption. Informal sharing through conversations, WhatsApp groups and resource exchange enabled lecturers to experiment and build confidence: *“We're all just sharing tricks and hoping for the best”* (PI). Peer modelling was particularly influential when colleagues demonstrated practical approaches: *“They come to me for advice... if I can do it, they feel they can too”* (PK). Social influence was described as an important enabling factor, with peer support providing practical guidance and confidence for experimentation, while exposing the absence of shared institutional norms and the need for more-structured institutional guidance.

4.4 Theme 4: Lecturers want Curated, pedagogically-Grounded Institutional Support (Facilitating Conditions)

Participants emphasise that sustainable integration requires more than access to tools. Many felt overwhelmed by the number of platforms and uncertain about their credibility and relevance: *“Someone needs to tell us which tools are credible. There are too many”* (PL). Others highlighted the need for stronger alignment between

tools, disciplinary needs and learning outcomes: *“There’s no guidance on which AI tools actually align with our learning outcomes”* (PC). Lecturers called for practical, context-specific professional development focused on real teaching tasks. As one participant explained, *“Show us how these tools can be used in flipped classrooms, not just theory”* (PH).

Assessment design was identified as a key area for institutional support. Several participants argued for shifting from detection to responsible use: *“We need to stop punishing AI use and start assessing how well they’ve used it”* (PM). As another lecturer noted, *“We have to evolve the task, not just the policy”* (PD). Facilitating conditions were understood by lecturers as the need for coordinated pedagogical and governance support, including clear guidelines, curated tools, discipline-relevant examples and assessment frameworks.

Across the themes, lecturers viewed AI as a valuable tool for preparation and resource development, particularly where pre-class materials are vital. At the same time, concerns about students’ uncritical use were reported to lead lecturers to increase scaffolding and redesign assessments to require explanation, revision and accountability. Adoption was described as supported by strong peer networks, but inconsistent institutional guidance contributed to uneven practice. Participants emphasised the need for structured, pedagogically-grounded institutional support aligned with both flipped teaching and disciplinary contexts.

5. Discussion

Lecturers demonstrated a position of cautious optimism towards the use of AI in flipped-classroom practice. Perceived practical benefits were balanced by concerns about learning quality, ethical use and absence of clear institutional direction. Interpreted through UTAUT, perceptions were shaped by performance expectancy, effort expectancy, social influence and facilitating conditions, although these constructs reflected the contextual realities of private-higher education. These findings not only reflect UTAUT constructs but suggest the need to reinterpret them within pedagogical contexts. These findings are based on lecturers’ interpretations of their teaching practice and should be understood as situated perceptions rather than direct measures of student-learning outcomes.

5.1 AI as a Productivity and Preparation Assistant (Performance Expectancy)

Performance expectancy emerged as a strong driver of adoption. Participants widely recognised the value of generative-AI tools for supporting lesson planning, structuring content and developing learning materials. These tools enabled lecturers to manage time-intensive preparation associated with flipped teaching more efficiently. This finding aligns with research positioning generative AI as a collaborative resource that enhances productivity rather than replacing professional expertise (Admane et al., 2024). At the same time, participants emphasised that effective teaching remains dependent on subject knowledge, contextual judgement and relational learning dimensions. This suggests that adoption was conditional on AI supporting, rather than substituting, pedagogical work. The implication is that AI is most likely to be adopted when lecturers

perceive it as strengthening teaching efficiency while remaining under professional control.

5.2 Ethical Ambivalence and Student Misuse drive Pedagogical Redesign (Effort Expectancy)

In this study, effort expectancy is interpreted as extending beyond the original focus on ease of use to include pedagogical and cognitive labour required to adapt teaching and assessment in response to AI for student learning. Experiences of generic submissions led participants to question whether students were using AI to bypass cognitive effort, based on their interpretation of student work. This tension is particularly evident in flipped environments, where independent engagement is intended to support higher-order learning during contact time. The findings support Holmes and Tuomi's (2022) caution, as lecturers perceived that uncritical use of AI may reduce opportunities for reasoning and knowledge construction.

While AI tools were easy to use, their presence was experienced by lecturers as increasing pedagogical effort to maintain learning depth and academic integrity. Effort expectancy, therefore extended beyond usability to include instructional work needed to protect meaningful engagement. This suggests a conceptual shift in how effort is experienced in AI-supported-teaching contexts, where effort is associated with technology and pedagogical labour required to adapt teaching and assessment practices. The implication is that AI may simplify some technical tasks while simultaneously increasing educational workload for lecturers.

5.3 Peer Support enables Experimentation amid Institutional Uncertainty (Social Influence)

Social influence shaped adoption patterns. In the absence of formal guidance, lecturers relied on colleagues for practical advice and informal learning. Observing peers successfully integrate AI increased confidence and contributed to the normalisation of its use. This supports Marikyan and Papagiannidis's (2025) argument that shared professional practice can strongly influence adoption in uncertain environments. However, peer-led diffusion resulted in uneven practices across departments, exposing students to inconsistent expectations regarding acceptable AI use. While peer support enabled experimentation, lack of coordinated institutional messaging limited development of shared norms. This suggests that peer support functioned as both an enabler of experimentation and a sign of institutional uncertainty. The implication is that informal collegial learning can support early adoption but cannot replace coherent institutional guidance.

5.4 Lecturers want Curated, pedagogically-Grounded Institutional Support (Facilitating Conditions)

Facilitating conditions emerged as the most-significant factor affecting sustained integration. Participants did not resist AI itself but reported feeling overwhelmed by the rapid expansion of tools and the absence of strategic direction. Uncertainty about platform credibility, pedagogical relevance and alignment with learning outcomes contributed to decision fatigue, while time constraints limited opportunities for experimentation. These challenges reflect broader findings on

tool overload and time scarcity in educational-technology adoption (Admane et al., 2024; Luckin et al., 2016). Lecturers emphasised that effective support should include curated tools, discipline-specific examples, practical guidance embedded within teaching workflows and clear ethical frameworks focused on responsible use rather than surveillance. Many noted the need for curriculum and assessment redesign, as existing modules were not developed with AI in mind. This indicates that facilitating conditions should be understood not only in technical terms, but as pedagogical and governance support. The implication is that sustainable AI integration depends on institutions creating structured conditions that align technological innovation with teaching practice and academic standards.

The private-higher-education context provides an important lens for understanding these dynamics. Institutional flexibility allows lecturers to experiment independently, but the absence of coordinated policy or structured support contributed to uncertainty and inconsistent practice. Willingness to adopt AI was closely linked to alignment with professional values and educational purpose, supporting Scherer et al.'s (2019) view that technology acceptance depends on pedagogical fit and perceived usefulness. Private institutions may be well positioned to support innovation, provided that leadership establishes clear direction, shared expectations and structured capacity development.

Overall, AI was viewed as a potentially-valuable resource for improving efficiency and supporting instructional design within flipped teaching (Suvendu & Deb, 2024). However, this optimism was moderated by concerns about student over-reliance, perceived reduction in learning depth and limited institutional clarity. The findings extend the application of UTAUT in educational contexts by demonstrating that its core constructs operate differently within pedagogical settings. Effort expectancy was not limited to ease of use but included pedagogical and cognitive effort required to maintain meaningful learning.

Social influence was shown to intensify in the absence of formal policy, with peer networks shaping adoption in informal ways. Facilitating conditions were understood not only in technical support, but as pedagogical and governance structures necessary to guide responsible use. Adoption is therefore shaped not only by the functionality of AI tools, but by ethical alignment, institutional support and the ongoing need to protect meaningful learning (Funda & Piderit, 2024).

6. Conclusion

This study examined how lecturers in a South African private-higher-education institution perceive the integration of AI within flipped-classroom practice. The findings show that lecturers approach AI with pragmatic optimism. Generative tools were widely valued for supporting lesson planning, resource development and time-consuming preparation associated with pre-class learning. Simultaneously, this perceived usefulness was moderated by concerns about student over-reliance, superficial engagement and risks to academic integrity. Lecturers did not position AI as a replacement for professional expertise, but as a

resource whose value depends on careful pedagogical judgment, ethical use and contextual adaptation.

The study shows that willingness to integrate AI is shaped by more than technical capability. Time constraints, tool overload, inconsistent institutional guidance and the need to redesign assessment all influenced adoption. Peer support enabled experimentation but could not substitute for structured institutional direction. The key implication is that meaningful AI integration in flipped learning depends on clear policy guidance, curated professional development and assessment approaches that promote responsible and critical use rather than surveillance alone. In the South African context, these findings highlight the need for AI strategies that are responsive to infrastructural inequality, linguistic diversity and uneven access to digital resources. Overall, AI is most valuable when it supports, rather than compromises, the core aims of higher education: critical thinking, student agency and authentic engagement. These tensions between efficiency, ethics and pedagogy are likely to remain relevant in higher-education contexts beyond South Africa.

7. Limitations

Several limitations should be considered when interpreting the study's findings. The study was conducted within a single private-higher-education institution using a purposive sample of 11 lecturers. While this enabled in-depth, contextually-grounded insights, the findings reflect situated perspectives and are not intended to be statistically generalisable to other institutional or disciplinary contexts. Although participants represented a range of specialisations, teaching modes and levels of experience, the study was not designed to compare perceptions systematically across these variables.

Further research across multiple institutions and disciplinary contexts can therefore strengthen understanding of how AI adoption may vary according to specialisation and experience. The researcher's position within the institution may have influenced aspects of interpretation, although reflexive practices were maintained throughout the research process. The study captures perceptions at a particular moment during a period of rapid technological change. As generative-AI tools and institutional responses continue to evolve, lecturers' attitudes and practices may shift over time.

8. Implications and Future Research

The findings suggest that lecturer engagement with AI reflects a considered professional response rather than simple acceptance or resistance. While AI was valued for improving efficiency and supporting flipped teaching, its integration depended on pedagogical relevance, ethical use and institutional support. Meaningful integration requires more than access to tools. It depends on pedagogically-relevant training, clear ethical frameworks, curated resources and leadership that supports experimentation while maintaining academic standards.

Future research should explore how flipped-learning environments can be designed to develop students as critical users of AI. Longitudinal and multi-institutional studies can provide further insight into how lecturer practices and institutional strategies evolve as AI becomes more embedded in higher education. Research should incorporate student perspectives and, where possible, analysis of student work or assessment outcomes to examine how lecturer concerns about AI use relate to actual student practices and learning performance. Overall, AI can support teaching and learning, but only when integrated deliberately and with clear pedagogical intent.

9. Acknowledgments

The author acknowledges the use of ChatGPT (OpenAI) and Grammarly to support language editing, clarity and grammatical accuracy in this manuscript. These tools were used solely for language and presentation. The content, analysis and conclusions remain the original work of the author.

10. References

- Abdelaal, N., & Sawy, I. A. (2024). Perceptions, challenges, and prospects: University professors' use of artificial intelligence in education. *Arab World English Journal (AWEJ) Special Issue on Artificial Intelligence in Education*, 7(1), Article 1309. <https://doi.org/10.29140/ajal.v7n1.1309>
- Admane, R., Priti, S., Sawale, R. S., Sajitha, J., Kurup, A., Sanjose, A., & Thomas, S. A. (2024). Artificial intelligence in education: Tailoring curriculum to individual student needs through AI-based systems. *Library Progress International*, 11(6), 8847-8856. <https://bpasjournals.com/libraryscience/index.php/journal/article/view/2052>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Baig, M. I., & Yadegaridehkordi, E. (2023). Flipped classroom in higher education: A systematic literature review and research challenges. *International Journal of Educational Technology in Higher Education*, 20, Article 61. <https://doi.org/10.1186/s41239-023-00430-5>
- Bergmann, J., & Sams, A. (2012). *Flip your classroom: Reach every student in every class every day*. International Society for Technology in Education.
- Bosch, T., Jordaan, M., Mwaura, J., Nkoala, S., Schoon, A., Smit, A., Uzuegbunam, C., & Mare, A. (2023). *South African university students' use of AI-powered tools for engaged learning*. SSRN. <https://doi.org/10.2139/ssrn.4595655>
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589–597. <https://doi.org/10.1080/2159676x.2019.1628806>
- Chan, C., & Colloton, T. (2024). *Generative AI in higher education: The ChatGPT effect*. Routledge. <https://doi.org/10.4324/9781003459026>
- Clark, K. R. (2018). Learning theories: Constructivism. *Radiologic Technology*, 90(2), 180–182.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6th ed.). Routledge. <https://doi.org/10.4324/9780203029053>
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE.
- Cuban, L. (1986). *Teachers and machines: The classroom use of technology since 1920*. Teachers College Press.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>

- Dutt, A., Vimla, V., Asif, N., & Raj, K. (2025). Benefits and challenges of flipped classroom approach in college education: A quantitative investigation. *Journal of Informatics Education and Research*, 5(1), 696–704. <https://doi.org/10.52783/jier.v5i1.2047>
- Flavin, M. (2012). Disruptive technologies in higher education. *Research in Learning Technology*, 20, Article 19184. <https://doi.org/10.3402/rlt.v20i0.19184>
- Funda, V., & Piderit, R. (2024). A review of the application of artificial intelligence in South African higher education. In *Proceedings of the 2024 Conference on Information Communications Technology and Society (ICTAS)* (pp. 44–50). <https://doi.org/10.1109/ICTAS59620.2024.10507113>
- Holmes, W., & Tuomi, I. (2022). State of the art and practice in AI in education. *European Journal of Education*, 57(4), 542–570. <https://doi.org/10.1111/ejed.12533>
- Hutchings, M., & Quinney, A. (2015). The flipped classroom, disruptive pedagogies, enabling technologies and wicked problems: Responding to “the bomb in the basement”. *The Electronic Journal of e-Learning*, 13(2), 106–119. <https://www.ejel.org>
- Jaboob, M., Al-Ansi, A. M., & Riyadh, H. A. (2026). Artificial intelligence in higher education: A PRISMA 2020 review. *International Journal of Educational Management*, 40(1–2), 113–132. <https://doi.org/10.1108/IJEM-09-2024-0560>
- Karthikeyan, M., Madan, B. S., Suchitra, V., Varshini, E. M., Sarkar, R., & Boopathi, S. (2025). Flipped classroom methods for enhanced student engagement and knowledge development in Indian higher education. In *Advances in educational technologies and instructional design* (pp. 313–342). <https://doi.org/10.4018/979-8-3693-4058-5.ch013>
- Lee, J., Lim, C., & Kim, H. (2016). Development of an instructional design model for flipped learning in higher education. *Educational Technology Research and Development*, 70(1), 437–456. <https://doi.org/10.1007/s11423-016-9502-1>
- López-Villanueva, D., Santiago, R., & Palau, R. (2024). Flipped learning and artificial intelligence. *Electronics*, 13(17), Article 3424. <https://doi.org/10.3390/electronics13173424>
- Legowo, B., Nurhasanah, F., Saddhono, K., Budiastuti, V. I., Sutomo, A. D., & Murwaningsih, T. (2024). Enhancing educational outcomes through exploring optimized options of artificial intelligence and deep learning. In *Proceedings of the International Conference on Advanced Computing and Innovative Technologies in Engineering (ICACITE)* (pp. 929–934). <https://doi.org/10.1109/ICACITE60783.2024.10616772>
- Linderoth, C. (2024). Competing visions of artificial intelligence in education: A sociotechnical perspective. *Learning, Media and Technology*. <https://doi.org/10.1177/14782103241228900>
- Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence unleashed: An argument for AI in education*. Pearson. <https://www.pearson.com/content/dam/one-dot-com/one-dot-com/global/Files/about-pearson/innovation/open-ideas/Intelligence-Unleashed-Publication.pdf>
- Malik, S. (2017). Revisiting and re-representing scaffolding: The two-gradient model. *Cogent Education*, 4(1), Article 1331533. <https://doi.org/10.1080/2331186x.2017.1354434>
- Marikyan, D., & Papagiannidis, S. (2025). Unified theory of acceptance and use of technology: A review. In S. Papagiannidis (Ed.), *TheoryHub book*. <https://open.ncl.ac.uk/ISBN/9781739604400>
- McLean, S., & Attardi, S. M. (2023). Sage or guide? Student perceptions of the role of the instructor in a flipped classroom. *Active Learning in Higher Education*, 24(1), 49–61. <https://doi.org/10.1177/1469787418793725>

- Misra, P. K. (2020). Implications of constructivist approaches in the classrooms: The role of the teachers. *Asian Journal of Education and Social Studies*, 7(4), 17–25. <https://doi.org/10.9734/ajess/2020/v7i430205>
- Momani, A. M. (2020). The unified theory of acceptance and use of technology. *International Journal of Sociotechnology and Knowledge Development*, 12(3), 79–98. <https://doi.org/10.4018/ijskd.2020070105>
- Mutanga, M. B., Jugoo, V., & Adefemi, K. O. (2024). Lecturers' perceptions on the integration of Artificial Intelligence Tools into Teaching Practice. *Trends in Higher Education*, 3(4), 1121–1133. <https://doi.org/10.3390/higheredu3040066>
- Ofori-Ampong, K. (2024). Beyond the hype: Exploring faculty perceptions and acceptability of AI in teaching practices. *Discover Education*, 3(1), Article 3. <https://doi.org/10.1007/s44217-024-00128-4>
- O'Malley, R. M., Blakeley-Jones, W., Vasquez, I. G., & Osei, S. (2023). *Efficacy of Flipped Classroom Models in English Language Teaching: Investigating the Impact of Flipped Classroom Strategies on Student Motivation, Engagement, and Learning Outcomes*. <https://doi.org/10.62583/rseltl.v1i2.10>
- Patel, S., & Ragolane, M. (2024). The implementation of artificial intelligence in South African higher education institutions: Opportunities and challenges. *Technium Education and Humanities*, 9, 51–65. <https://doi.org/10.47577/teh.v9i.11452>
- RSA Department of Communications & Digital Technologies. (2024). *SA national AI policy framework*. <https://www.dcdt.gov.za/sa-national-ai-policy-framework/file/338-sa-national-ai-policy-framework.html>
- Saldaña, J. (2013). *The coding manual for qualitative researchers* (2nd ed.). SAGE
- Sanders, D. A., & Mukhari, S. S. (2024). Lecturers' perceptions of the influence of AI on a blended learning approach in a South African higher education institution. *Discover Education*, 3, Article 135. <https://doi.org/10.1007/s44217-024-00235-2>
- Scherer, R., Siddiq, F., & Tondeur, J. (2019). The technology acceptance model (TAM): A meta-analytic structural equation modeling approach to explaining teachers' adoption of digital technology in education. *Computers & Education*, 128, 13–35. <https://doi.org/10.1016/j.compedu.2018.09.009>
- Selwyn, N. (2017). *Education and technology: Key issues and debates* (2nd ed.). Bloomsbury Academic. <https://doi.org/10.5040/9781474235952.0013>
- Selwyn, N. (2022). The future of AI and education: Some cautionary notes. *European Journal of Education*, 57(4), 620–631. <https://doi.org/10.1111/ejed.12532>
- Setren, E., Greenberg, K., Moore, O., & Yankovich, M. (2021). Effects of flipped classroom instruction: Evidence from a randomized trial. *Education Finance and Policy*, 16(3), 363–387. https://doi.org/10.1162/edfp_a_00314
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22(2), 63–75. <https://doi.org/10.3233/efi-2004-22201>
- Soares, A., Lerigo-Sampson, M., & Barker, J. (2024). Recontextualising the unified theory of acceptance and use of technology (UTAUT) framework to higher education online marking. *Journal of University Teaching & Learning Practice*, 21(8), 1–26. <https://doi.org/10.53761/7ft8x880>
- Suvendu, R., & Deb, P. S. (2024). AI-driven flipped classroom: Revolutionizing education through digital pedagogy. *British Journal of Education, Learning and Development Psychology*, 7(2), 169–179. <https://doi.org/10.52589/BJELDP-LTDJFLIH>
- Taber, K. S. (2019). Constructivism in education: Interpretations and criticisms from science education. In *Early childhood development: Concepts, methodologies, tools, and applications* (pp. 312–342). IGI Global. <https://doi.org/10.4018/978-1-5225-7507-8.ch015>
- UNESCO. (2024). *AI competency framework for teachers* (F. Miao & M. Cukurova). <https://doi.org/10.54675/ZJTE2084>

- Venkatesh, V., Morris, M. G., Davis, F. D., & Davis, G. B. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478. <https://doi.org/10.2307/30036540>
- Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 36(1), 157–178. <https://doi.org/10.2307/41410412>
- Verma, S., Tiwari, R. K., & Singh, L. (2021). Affordances of flipped classrooms: Unveiling the paradox of basics and key principles of flipped learning. *Asian Journal of Education and Social Studies*, 15(2), 10–20. <https://doi.org/10.9734/ajess/2021/v15i230374>
- Wang, C., & Yasir, M. M. (2023). The core value and implementation path of effectively integrating flipped classroom into physical education teaching. *International Journal of New Developments in Education*, 5(7), 22–27. <https://doi.org/10.25236/IJNDE.2023.050705>
- Wang, S., Wang, F., Zhu, Z., Wang, J., Tran, T., & Du, Z. (2024). Artificial intelligence in education: A systematic literature review. *Expert Systems with Applications*, 252, 124167. <https://doi.org/10.1016/j.eswa.2024.124167>
- Wu, W., Zhang, B., Li, S., & Liu, H. (2022). Exploring factors of the willingness to accept AI-assisted learning environments: An empirical investigation based on the UTAUT model and perceived risk theory. *Frontiers in Psychology*, 13, Article 870777. <https://doi.org/10.3389/fpsyg.2022.870777>
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE.
- Yusuf, A., Pervin, N., & Román-González, M. (2024). Generative AI and the future of higher education: A threat to academic integrity or reformation? Evidence from multicultural perspectives. *International Journal of Educational Technology in Higher Education*, 21, Article 21. <https://doi.org/10.1186/s41239-024-00453-6>
- Zajda, J. (2021). Constructivist learning theory and creating effective learning environments. In *Globalisation and education reforms* (pp. 35–50). https://doi.org/10.1007/978-3-030-71575-5_3
- Zhen, H., & Yahaya, W. A. J. W. (2024). Use of generative AI tools to facilitate personalized learning in the flipped classroom. In *Transforming education with generative AI: Prompt engineering and synthetic content creation* (pp. 327–349). <https://doi.org/10.4018/979-8-3693-1351-0.ch016>

Appendix 1: Data-collection Instrument – Interview Questions

DATA COLLECTION INSTRUMENT

Title: Artificial Intelligence and the Flipped Classroom: Lecturer perceptions in a South African private higher education institute.

Interview Protocol:

Greeting and Purpose

Informed Consent and Confidentiality – request or confirm that the consent form has been signed. Remind the participant of the nature of the study.

Ask for permission to record the session.

Ensure that the participant is aware that this is confidential, a safe space and that there are no right or wrong answers.

A. General – Opening Questions:

1. What modules do you teach? Are they practical or theory-based?
2. Could you describe your usual process for flipping your classroom?
3. Which elements of flipping your classroom have been most challenging and/or rewarding?
4. How do you integrate technology or media resources into your flipped sessions?
5. What do you understand about the relationship between AI and flipped learning?
6. Have you seen or used AI-driven tools to support your teaching or your flipped classroom? If so, what were the results?
7. Do you think AI could help students construct knowledge? If so, how?

B. Performance Expectancy

1. How relevant might AI be to your specific subject area or discipline?
2. Do you think AI could (or could not) improve your students' overall success?
3. Even though you have not yet used AI in your flipped classroom, what improvements could AI bring to your teaching practice?
4. Which teaching or learning outcomes do you hope AI might enhance?

C. Effort Expectancy

1. How comfortable are you with creating or managing digital resources in general (e.g., recording videos, designing online quizzes)?
2. Do you think you would need any additional skills (technical or other) if you were to integrate AI into your flipped classroom?

D. Social Influence

1. Are there colleagues or department heads whose opinions strongly influence your views on new teaching methods? If so, how might they affect your decision to try AI in the flipped classroom?
2. Have you had discussions with peers about AI, or is there any sense of encouragement (or hesitation) regarding AI-enhanced teaching?

E. Facilitating Conditions

1. What kinds of workshops, resources, or training do you believe the institution should provide to help lecturers use AI effectively, particularly for flipped classrooms?

F. Perceptions

1. Based on your current understanding, what do you see as the biggest benefits and most significant drawbacks of using AI in the flipped classroom?
2. Can you imagine any specific scenarios where AI might not be helpful or might even hinder the teaching process?
3. If you had access to adequate resources and support, how willing would you be to incorporate AI elements into your flipped classroom?

G. Closing Questions

1. Is there anything else you'd like to add about the conditions that would need to be in place for you to consider using AI in your flipped classroom?
2. Looking ahead, do you think AI in education will become mainstream, or do you have reservations about its widespread adoption?

Closing Remarks

Appendix 2: Code Book for Identifying Categories

First-Cycle Category	Short Description	Supporting Quote
Participant A		
Skepticism toward AI in Creative Fields	AI seen as threat to artistic originality	"Why would you choose to sit behind a machine... when you have emotions and blood flow?"
Pedagogical Adaptation without AI	Uses peer-sharing, contextual videos, live tasks to promote engagement	"Bring an example and let's discuss... students debate the principles of ethical design."
AI as a Research Shortcut	Uses Google-AI summary tools personally, discreetly	"It helps when you want to get a very broad sense of a concept."
Fear of Homogenized AI Output	Concern AI generates repetitive, unoriginal student work	"Your answers are gonna be the same... where's your thinking?"
Ethical Ambivalence	Mixed feelings on AI helping vs replacing cognitive effort	"AI can help with reading... but it makes people lazy."
Generational Tech Friction	Older lecturers and creatives show resistance to AI use	"I grew up in the 80s where AI took over the world and ruined life for everyone."
Colleague Pressure	Feels pressured by colleagues pushing ChatGPT narrowly	"It irritates me... they think ChatGPT is the only AI."
Curriculum Integration Needs	Belief AI must be built into curriculum structure to be legitimate	"People are going to adopt it if it's worked into the curricula correctly."
Digital Inequity in Class	Notes major disparities in student access	"Some students don't even have a laptop... some always have ChatGPT open."
AI as Learning Support	Potential to help simplify complex concepts	"I don't understand why I must read 24 pages to understand one concept."
Loss of Human Voice	Strong dislike for AI-generated communication	"The sincerity is lost... you can immediately see when it's not generated by a person."
Participant B		
Skill-before-AI Approach	Teach manual methods before introducing AI-assisted workflows	"I first put them through the gruelling manual process... then introduce the faster method."
AI as Consultant/Co-Pilot	Lecturer uses AI for lesson planning and idea testing	"I basically use it as somewhat of an advisor... bounce ideas off of it"
Ideation Support through AI	AI used in early creative phases (e.g., game pitches, concept sketches)	"AI helps me to just put a bit of color on that white canvas..."
Dependence Risk	Concern that students might become too reliant on AI	"If you're unable to make your models without using AI, then you're not an animator."
Responsible AI Use Philosophy	Emphasis on teaching proper, ethical use of AI tools	"You need to teach students how to use AI responsibly... like a hammer."
Critical Gap in Trust	Concern that students might trust AI over their educators	"If the students trusted what the AI said over their teacher's experience..."
Accessible Infrastructure Required	Need for integrated AI licenses or seamless access	"Like how students have Adobe licenses... maybe for ChatGPT too."
AI as Timesaver in Animation	Animation is labor-intensive; AI can streamline non-core work	"Time saving is definitely a big benefit... you can save a lot of time."
AI = Industry Trend & Taboo	Sees AI as inevitable, but still socially taboo in creative industries	"Almost like the Industrial Revolution... adapt or get left behind."
Colleague Silence but Openness	Limited peer conversation, but general openness to AI use	"Seems to be relatively positive and open..."
Influence of Past Educators	Values input from former professors who embrace AI	"My previous professors... are even more open to using it than I am."
Participant C		
Flipped with Debate & Research	Students research and present, often taking opposing sides	"Each has to present... then debate and use research to support their side."
Confidence Building Through Practice	Activities aim to overcome fear and boost student confidence	"Some aren't vocal... but they eventually argue the point and get the 'aha' moment."
AI Comparative Task Design	Students compare their work with AI-generated content and revise	"They do the task, then AI does it, then they revise the AI's version."
Personalised AI Integration	AI tools customised to class dynamics (creative vs shy groups)	"My entrepreneurship class is outspoken... my digital marketing class is shy."

AI for Class Summaries (Merlin)	AI tool records and summarises classes for both student and lecturer use	"Merlin records your classes... shows what content was covered and off-topic."
Industry-aligned Realism	AI is seen as necessary for future job-readiness	"If you don't know how to use it, you'll be replaced."
Educator AI Use	Participant uses Gamma, Copilot, ChatGPT for planning, slides, content	"I use Gamma for presentations and Copilot to generate ideas."
Revision-Based AI Pedagogy	Students are expected to refine and critique AI content	"They must revise what AI gives them... show sources, tweaks, and reasoning."
Concerns over Academic Integrity	AI misuse, copy-paste cheating, and undetectable plagiarism	"Turnitin didn't pick it up... how will we safeguard learning?"
Need for Ethical Frameworks	Students should declare responsible use; institutional policy needed	"They should sign an AI declaration — misuse could withhold degrees."
Digital Skills Gaps Among Lecturers	Colleagues struggle with basic tools, limiting AI integration	"Some struggle with the new LMS — training is needed."
Social Division over AI	Colleagues resist AI due to fear of devaluing degrees	"They think it makes people dumb... or cheapens the qualification."
AI as Democratiser of Learning	AI can help rural/underserved learners access education	"In townships, you could use AI to give knowledge people otherwise couldn't get."
Participant D		
Flipped Classroom with Peer Feedback	Use of student-to-student marking, redlining, and critique	"We do peer marking... students redline drawings and give marks."
Theory–Practice Integration	Desire to connect abstract content with application	"I like to connect the dots between theory and applied theory."
AI as Lesson Planning Aid	Regular use of AI tools to create wireframes and lesson structures	"I use Gemini to create the structure for the lessons."
Stimulating Content with AI	Using AI to make dense theory more engaging	"Gamma makes presentations more stimulating for students."
Cognitive Offloading via AI	AI helps overcome creative fatigue and time constraints	"I run out of ideas, and that's when I use AI to generate a lesson plan."
Digital Attention Span Challenges	Students disengage from long content and video	"They fall off the bandwagon after two and a half minutes."
Barriers to Prompting Skills	Difficulty crafting effective AI prompts	"The prompts are still a little bit of a challenge."
Interest in Peer-Led Resource Sharing	Desire for a central hub of AI teaching strategies	"Like a brain trust... 2–3 min videos showing what others are doing."
AI as Double-Edged Sword	Access to ideas vs. risk of digital detachment	"The drawback is... students don't experience things, just screens."
Human Connection as Core	AI must not replace teacher–student relational depth	"It would be a problem if AI excludes the human factor."
Support for Personalised Learning AI	Strong openness to student-specific AI support	"I would use any tech that makes learning more experiential."
Frustration with AI Marketplace	Time-consuming to find useful, free or relevant tools	"The only barrier... is finding the right application for what I want."
Balanced View of AI in Industry	Acknowledges possible AI disruption in design, but not alarmed	"A little bit of worry... but not that much for our industry."
Participant F		
Split Flipped Strategy	Theory and activity split across sessions	"I have two sessions... first is theory, second is an activity."
AI as Common but Unacknowledged Tool	Students use AI without referencing it	"Out of 56 students, 4 referenced AI... but everyone used it."
Guilt Over Promoting AI	Lecturer feels conflicted encouraging AI use	"I do tell them to use it, but I feel a bit guilty."
AI as Thought-Starter	AI used to unblock or inspire student ideas	"Let's get some thought starters... and then we go and put whatever the issue is."
Loss of Thinking Autonomy	Concern that students over-rely on AI	"Is it not allowing them to think for themselves?"
Institutional Peer Learning	Ideas sourced from internal WhatsApp groups and T&L specialists	"I might send my colleague a note... How would you do this?"
Generational Divide in AI Ethics	Older educators feel conflict, students embrace AI guilt-free	"The next generation... won't feel guilty like we do."
Desire for AI Integration Training	Calls for practical workshops to improve AI use	"There is definitely a need for support... workshops would be great."

Student Disengagement & Panic	Many students fall behind, then rely on AI to catch up	"They haven't attended lectures... and they panic before deadlines."
Public Speaking as an Anti-AI Strategy	Oral explanation used to encourage authentic expression	"Maybe public speaking forces them to explain in their own words."
AI = Productivity Tool	Lecturer uses AI for lesson planning, admin, creative titles	"I use it when I'm tired... to think of a catchy title."
AI is Inevitable	View that AI will become standard	"AI is not going anywhere... so let's use it properly."
Difficulty Crafting Prompts	Prompts still seen as a barrier to effective use	"The prompts are still a little bit of a challenge."
Participant H		
Discussion–Demonstration–Practice Model	Preferred over flipped models for technical subjects	"I would rather use the method of discussion, demonstration, and practice."
Selective Flipped Opportunities	Flipping used in targeted topics like web development	"For HTML, CSS, and JavaScript... I can ask them to prepare something and present."
AI as Coding Assistant	Students encouraged to use AI to generate, test, and refine code	"Get code they understand... test it... present how it worked."
Built-in AI Tool Familiarity	Exposes students to AI inside Adobe Suite (Photoshop, Illustrator, InDesign)	"I definitely show them things like generative fill."
AI as Time-Saving Planning Aid	Uses ChatGPT to brainstorm lesson structures and curate content	"Instead of Googling, I'll go into ChatGPT... and curate the bullet points."
Misuse in Written Tasks	Concern over students using AI for essays and conceptual explanation	"They're just basically copying and pasting it in."
AI as Creativity Blocker	Resistance to generative image tools like Midjourney	"You're handing your brain over to AI... it's tragic."
Value of Manual Craft and Developmental Skills	Advocates for foundational design skills before AI	"They need to learn tools... spatial judgment, visual alignment..."
Public Speaking as Verification Tool	Encourages students to orally explain AI-assisted outputs	"Maybe public speaking forces them to explain in their own words."
Coding as Safe AI Space	Embraces AI in technical syntax refinement and JS functionality	"Ask AI to break it into logical parts... not full web pages."
Divided Peer Opinions	Campus split between AI optimists and cautious skeptics	"You're either an AI zombie or you're old-fashioned."
Cultural and Developmental Caution	AI risks skipping crucial learning phases	"Like self-driving cars... you miss critical development."
Institutional Readiness Exists	Believes infrastructure is in place but curriculum must adapt	"Modules need to be redeveloped with AI in mind, but carefully."
Participant I		
AI-Structured Flipped Learning	Reading + AI + Canva + presentation strategy	"You use AI to understand it. Then you use Canva to design it, and then you present."
Engagement through Design Tasks	Students transform content into creative visual outputs	"I don't care how they design it, as long as they work with it to the point of understanding."
AI-Facilitated Inclusion	Shy and low-confidence students participate more	"Even the shy students are feeling comfortable... AI is making it simple."
Online Implementation Failure	Online attempts led to disengagement and inequity	"Some students fall asleep... they kind of lose interest."
Critical Revision Loop	Revising AI output deepens understanding	"They do the task... then AI does it... then they revise the AI's version."
Student Misuse and Pretending	Copy-paste AI submissions with no comprehension	"They looked at me blankly, like I have no idea what you're talking about."
Emotional Empowerment through AI	AI boosts academic self-confidence and identity	"It's emotionally, mentally empowering... flip, I got it!"
Cognitive Offloading & Processing Gaps	Lack of mental processing leads to hollow work	"If you don't have that bridge... they have the ability to pretend."
Lecturer Efficiency and Relief	AI reduces workload and saves prep time	"It changed my world for the better... my life was easier."
AI in Marking and Admin	Uses AI for marking comments, referencing, feedback	"I use AI all day long for my marking comments."
Frustration with Institutional Pressure	Unrealistic innovation demands vs. lack of support	"Why are you not making more cartoons... meanwhile, we are not making deadlines."

Peer Division and Cynicism	Faculty either overhypes or ignores AI	"There's an extreme... one faculty hammers us, the other is silent."
Mainstreaming and Declaration Need	AI use is ubiquitous but undeclared	"If you haven't declared, please declare... I think everybody is using it."
Need for Processing Bridge	Students must digest AI content into understanding	"There must be something in the middle... that says put it in your brain and bring it out."
Participant J		
Blended Flipped Sequencing	Theory in session one, practical in session two	"My first lecture is theory... second session is practical work based on that theory."
Adaptability from Experience	Confidence in adjusting when students don't prepare	"Because I'm quite tenured... I shift around and navigate better."
AI as Contemporary Library	AI seen as modern version of past research habits	"It's no different from going to the library... we just photocopied before."
Critical Use of AI Prompts	Effective use requires precise prompting	"If you prompt it well, it gives you a clearer description... not just 'please design me a kettle.'"
Emotional Excitement and Engagement	AI elicits emotional and motivational spikes	"The students... flabbergasted... it elevates their want and their drive."
Fear of AI Addiction or Dopamine Effect	AI may cause over-reliance on quick results	"It's like a drug... once you've done that, you want the next hit."
Student Apprehension from Mixed Messaging	Institutional vagueness causes confusion	"They're a little reluctant... some lecturers say yes, some say no."
Policing vs. Productive Use	Concern that assessments focus on AI detection, not learning	"We're just looking at whether they've used AI... not what they've learned."
Willingness to Integrate AI	Strong openness to using AI in class	"Very willing, I mean very... I'm 100% in."
AI as Inevitability and Evolution	Sees AI as an unstoppable part of educational future	"It's not a fad... it will continue in education."
Need for Institutional AI Literacy Training	Requests for expert-led workshops to improve AI integration	"We need an expert to run workshops so we can play with the tools."
Balanced View of AI's Identity	Philosophical curiosity about the meaning of 'artificial'	"How artificial is it really? It's intelligent, yet not emotional."
Participant K		
Multiple-Choice Flipping Model	Students answer and explain MCQs before class	"They ask multiple choice questions ahead of the class... and explain all the other options."
AI as Research Assistant	Students encouraged to use AI to prepare and investigate	"Use it as a good research assistant... cross-check facts."
Critical Thinking through Comparison	AI vs academic sources; students compare outputs	"I split the classroom—half do AI, half use academic sources... then we compare."
AI-Generated Content with Human Oversight	Participant uses AI to generate quizzes, then audits them	"All my MCQs are developed by AI, and obviously I audit it myself."
Judicious Use Philosophy	Emphasis on deliberate, cross-checked, and cautious AI use	"Use it judiciously... don't let it replace thinking."
Anxiety Over Paraphrasing Skills	AI seen as disrupting students' paraphrasing ability	"They find it absolutely impossible to paraphrase... I think I'm teaching them to cheat."
Fact-Checking and Verification Focus	Both student and educator use AI with rigorous oversight	"You must fact check. You must moderate very carefully."
Institutional Resistance and Resignation	Peer attitudes vary from resistance to passive acceptance	"Quite a lot of resistance... and some resignation... ho hum, it's happening."
Lack of Formal Policy and Tech Guidance	Frustration over tool overload and lack of direction	"Which tools are credible? Someone should be telling us."
Time-Saving and Planning Efficiency	AI saves significant prep time, especially in content creation	"It's saving me days... I use it a lot for developing case studies."
Concern Over AI Encouraging Laziness	Ease of AI may tempt avoidance of deeper work	"It's getting more and more accurate... it may motivate laziness."
Desire for Debate-Based Tasks	Advocates human interaction and original thought in class	"I want people to think for themselves... to debate."
Instructor as Tech Role Model	Sees self as surprising model for other less tech-savvy peers	"People ask me for tech advice... because they think if she can do it, we can too."

AI is the Future – Embrace It	Strong belief in AI's inevitability and potential	"I think AI is the future. Let's not quibble about that."
Participant L		
Context-Based Flipped Structure	Begins with topic framing, discussion, then student-led exploration	"I give them context... then we stop, reflect, and see what everyone has come up with."
Student Autonomy and Creative Exploration	Encourages mistake-making, open-ended problem-solving	"Allow them to make mistakes... come up with their own ideas."
AI as Brainstorming Tool	Used in early ideation phases and research prep	"They use it as an ideation tool... bouncing ideas back and forth."
AI for Presentation & Confidence	Used in lieu of student video recordings	"They use AI video generators to help present... some are intimidated by being on camera."
AI as Filtered Search Assistant	Helps summarise dense theory and reduce overload	"It filters information so they can take it in smaller chunks."
Prompting Skills as a Bottleneck	Poor prompting leads to confusion and unproductive outputs	"They get stuck... what are you asking it to give you?"
AI as Discipline-Relevant Tool	Strong fit for creative industries (video, image, ideation)	"We must learn to use these tools... or we'll be left behind."
Teacher Vulnerability & Shared Learning	Expresses need to learn alongside students	"Teaching is about learning... let's explore it together."
Educator Anxiety and Fear of Obsolescence	References historical analogies and job displacement fears	"Like when the camera came along... artists who didn't evolve faded away."
Balanced View of AI's Role	Embraces AI, but insists on human creativity at the core	"Don't be a button-pusher... the real asset is your mind."
Desire for Tool Curation & Training	Wants institutional support to filter tools and create training hubs	"We need a hub of specific AI tools... not fiddling with everything."
Institutional Divide Over AI	Faculty divided by disciplinary norms and attitudes	"Some theory lecturers are annoyed... some creatives are excited."
Time Constraints as Structural Barrier	Time limits exploration and integration	"Time is the number one enemy."
Participant M		
Flipped Adaptation with Realism	Flipped classroom principles applied, but adapted due to low student preparation	"They don't do that... So it's just setting myself up for frustration."
AI as Ideation & Brainstorming Tool	AI framed as a thinking partner to generate ideas	"It's there to help ideate and brainstorm... it's a mentor, not an impostor."
AI for Synthesising Student Feedback	Uses AI to code open-text data and share results with students	"I took those post-it notes... got AI to correlate the findings and develop themes."
AI-Enhanced Research Presentation	Students explore raw data and can choose AI or manual methods to present findings	"You can give it to AI or go through it yourself... just present it back to me like I'm the client."
Lecturer Workload Relief via AI	AI assists with summarising texts, building slides, creating scenarios	"I would not have coped without AI... it helped me summarise, build slides, suggest tasks."
Customised Prompting for Disciplinary Fit	Tailors AI outputs to subject-specific context	"It gives beautiful examples... but I still have to adapt it to my class."
Mixed Emotional Response to AI	Expresses joy and guilt — AI helps teaching, but students misuse it	"For me personally, I love it. For the students, I hate it."
Student AI Misuse and Academic Shortcutting	Students treat AI answers as final outputs, skipping cognitive work	"They just don't see how to take it beyond the AI response."
Responsible AI Use Instruction	Teaches students when and how to use AI in assignment stages	"I aligned the IIE's four steps with when AI is acceptable or not."
Institutional Support Gaps	Peers often don't know how to use AI or what tools are useful	"It's like Excel... you know how to use it until someone shows you a trick."
Peer Learning and Encouragement	Actively shares AI techniques with hesitant colleagues	"A few weeks later she was using it all over... because I showed her."
Emphasis on Human Oversight and Drafting	Reinforces that students must still write, evaluate, and critique	"Drafting must be done by you... AI can't do that step."
Normalisation of AI Among Students	Belief that most students are already using AI	"It's already mainstream... we'd be naive to think otherwise."