

Balancing Innovation and Integrity: Strategies for Managing Student Use of Generative AI in Higher Education

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Abstract

The rise of generative AI tools such as ChatGPT presents new challenges and opportunities in higher education, requiring innovative strategies to uphold academic integrity. To address these challenges, institutions must develop comprehensive approaches that balance the benefits of AI-enhanced learning with the need to maintain authentic, critical engagement in student work [1]. Drawing on strategies employed by academics at two higher-level institutions in Ireland, this paper explores a range of approaches to mitigate and manage the inappropriate use of AI in academic settings [2]. Key strategies include fostering education and awareness about the ethical implications of AI misuse and establishing clear academic policies that explicitly define acceptable AI use. The design of assessments plays a pivotal role: authentic tasks, such as personal reflections or context-specific assignments, combined with dynamic assessments like oral or real-time exams to minimise reliance on generative AI [2]. Regular monitoring and feedback through iterative drafting processes further ensure that student contributions are original and evolve meaningfully over time. Finally, institutions can employ technological restrictions to limit access to AI tools during critical periods, such as exams or in controlled environments [3][4]. By sharing practical insights and lessons from these two institutions, this presentation provides valuable guidance for educators and administrators seeking to navigate the interplay between AI advancements and academic ethics.

Keywords: Artificial Intelligence, Generative AI, Teaching, Higher level

1. Introduction

AI has emerged “as a powerful enabler of personalized learning” and as technology continues to advance, it is poised to “become more sophisticated and effective”, presenting educators to enhance their teaching [5]. Irish universities are acknowledging the growing role of generative AI in education but emphasize ethical and responsible use. Most institutions prohibit AI-generated content being submitted as original work, while encouraging students to engage with AI as a learning aid rather than a replacement for critical thinking. Policies are evolving, with universities focusing on academic integrity, transparency and the development of AI literacy to prepare students for ethical use in professional settings.

This paper draws on strategies employed by academics at two higher-level institutions in Ireland: University of Limerick (UL) and Technological University of the Shannon: Midlands (TUS: Midlands), with a focus on Technical Communication students (UL) and Business students (TUS: Midlands). It explores approaches undertaken by the academics in an effort to manage the use of AI.

Research carried out at University College Dublin [6] found that there is concern in particular in relation to the potential impact of AI in relation to online assessments, which have become more prevalent since the Covid-19 crisis. As a result of the findings from this research - which involved almost 2,000 students at the university completing a survey - the university is reviewing its approach to online assessment and consideration is given to changing assessment design and delivery [6].

In terms of global research, Altamimi [7] examined attitudes towards the use of Chat GPT in learning and found an overall positive approach among educators, administrators and students. Of a sample of 500, he found that 72% of students, 63% of teachers and 75% of administrators had a positive attitude

to ChatGPT, in sharp contrast to negative attitudes shown by students (10%), teachers (15%) and administrators (8%).

Freedman (2025) found, in the UK, that learners cited time-saving and an improvement in the quality of work among the main factors for using GenAI. Of more than 1,000 learners surveyed, 92% said they used AI in 2025, compared to 66% in the previous year. The main uses for GenAI included summarising articles, proposing research ideas and explaining concepts; however 18% of learners stated that they had used AI-generated text directly in their work [1].

2. Establishing clear academic policies that define acceptable AI use

The National Academic Integrity Network (NAIN) - which supports higher education institutions in Ireland promoting academic integrity - argues that a clear understanding of the offerings from AI, “to ensure an ethical basis” for their use is a key goal for learners, to avoid breaches of academic integrity [8]. It is imperative, according to NAIN, that learners recognise the ethical concerns from using AI tools.

TUS does not have its own specific policy on AI, but recommends that of NAIN as TUS is involved in NAIN. According to the TUS academic regulations [9,10], an academic infringement happens when AI is used to cheat “by completing, in whole or in part, any piece of work required of the student for their programme of study, unless the use of AI is specifically required and/or permitted as part of an assessment. Students who use AI, such as Chat GPT, or any other AI based tool should reference any externally sourced content that is presented in assessment item(s)”.

UL has published an interim statement on academic integrity and academic misconduct. This document serves as a provisional guide until the full Academic Integrity Policy and accompanying procedures for managing allegations of academic misconduct come into effect in September 2025. The statement outlines key definitions related to academic integrity and academic misconduct, which are essential for raising awareness of the topic and addressing concerns surrounding the misuse of AI. The definitions and framework for identifying academic misconduct adopted by the University of Limerick are aligned with those of the National Academic Integrity Network, a standard also used by TUS.

2.1. Assessment design

At UL, the module is assessed through two major assignments. Assignment 1 (50%) requires students to submit a proposal and storyboard for a digital learning resource, demonstrating their ability to apply design theories and accessibility principles. Students are encouraged to include rough work such as hand drawn workflow plans with their submissions. Assignment 2 (50%) involves the development of an interactive component from their proposal, assessing creativity, technical implementation, and user engagement. Additionally, a reflective practice interview (pass/fail) ensures students can explain their work, reinforcing academic integrity and deeper learning.

At TUS, the module is examined through three assessments, with a strong focus on authentic assessment. Assignment 1 (40%) requires learners to carry out research on a relevant topic based on a business brief provided to the class; prepare for an interview based on the research and also carry out the interview. Assignment 2 (20%) requires learners to design a questionnaire based on the same business scenario and taking into consideration key elements of questionnaire design. The final assignment (40%) requires learners, working in groups of 4, to carry out secondary research based on a specific scenario and write a report based on the research; the report should focus on research on various databases and also relevant recommendations. There is significant focus on research, critical engagement, academic writing and the provision of relevant recommendations, all relevant to real world scenarios.

2.2 Technological restrictions

The nature of AI-generated content often mirrors authentic student writing, making it exceedingly difficult to distinguish between work completed independently and work produced with technological assistance. It is essential that faculty members approach student work with caution, avoiding



automatic assumptions about the use of AI [2,11]. Premature accusations not only risk damaging the student-instructor relationship, but also raise concerns around fairness and due process. Faculty are now navigating an unprecedented and complex landscape regarding student use of AI tools, often without clear policies, training, or institutional support. Limited budgets at the higher education level further restrict our ability to implement sophisticated detection or investigation processes [12]. Given these constraints, we must err on the side of caution, prioritising careful evaluation and dialogue over punitive action. It is critical that our response to AI use remains measured, equitable, and informed by evolving best practices.

2.3 Students' perspectives

A total of twelve final year students attending TUS provided an insight on their views and experiences of AI when completing written tasks as part of graded coursework. Of the 12 participants, 10 expressed the view that AI is of value in their studies; one learner responded that it was not of value, while one other learner was undecided.

All of the 12 respondents stated that they used AI in their coursework; 8 used it for writing i.e. Grammarly; 3 used it for referencing and one learner used it to carry out research.

From the student perspective at UL, the reflective practice presentation provides an opportunity to articulate personal experiences of learning and engagement throughout the module. In these short presentations, students discuss their understanding of key concepts, the challenges they faced when completing assignments, and the skills they developed over the twelve-week period. Many students reflect on how their thinking evolved, how they approached the assignments, and which aspects of the module were most valuable or relevant to their broader academic or professional goals. Students also use the reflective session to express the strategies they used to manage their workload, including their research processes, collaboration with peers, or their efforts to maintain academic integrity.

The informal, pass-fail structure of the reflective practice presentation creates a relatively low-pressure environment that encourages honesty and openness. In knowing that they will need to speak about their work and their learning journey, students are subtly encouraged throughout the term to engage more deeply with the module material, rather than relying heavily on external tools like generative AI. As a result, the reflective practice presentation not only promotes authentic learning but also strengthens students' ability to self-assess and articulate their academic development.

3. Discussion

It is clear that AI has become an integral part of third level education and creating awareness and providing education on how to manage it effectively is a challenge. This research builds on previous research which clearly indicates that students are increasingly engaging with AI for their coursework [1], but it is essential that guidance in clear and written instructions is a priority.

The approach at University College Dublin [6] is excellent; assessment design and delivery - particularly for online assessments - is being reviewed, in an effort to address challenges in this evolving area. Regular monitoring is key, as is a focus on raising awareness among learners about the implications of use of AI in course work.

At UL, the assessments require a deep understanding of Technical Communication, Interactive Media Design and Accessibility Principles, making them difficult to complete with a few AI prompts. The proposal and storyboard (Assignment 1) demand structured, theory-backed design decisions and team role allocation, which go beyond simple AI generation. The digital learning resource (Assignment 2) requires students to develop an interactive component, such as a quiz, video, or simulation. This assessment demonstrates creativity, user engagement, and technical skills that AI alone cannot produce. Additionally, the reflective practice interview ensures students can articulate their design choices, reinforcing genuine learning over AI reliance. At UL, the lecturer maintains regular check-ins with students throughout the module, providing guidance and ensuring steady progress.

Additionally, students may be asked to present work-in-progress updates at various stages, allowing for feedback and verification of their original contributions. These measures help track development over time and reduce the risk of AI misuse. This regular check-in also enables students to get timely feedback and refine their ideas, improve their work quality, and stay on track throughout the module. It provides opportunities for early intervention, allowing them to address weaknesses before final

submission. Continuous feedback also enhances learning by reinforcing key concepts, boosting confidence, and encouraging a more iterative and reflective approach to their work.

For postgraduate students, implementing regular meetings throughout the term alongside a reflective practice presentation, assessed on a pass/fail basis, represents a strong and proactive strategy to mitigate the misuse of AI in academic work. Regular meetings promote consistent engagement between students and academic staff, fostering accountability and providing ongoing opportunities to discuss academic progress, challenges, and ethical expectations. The reflective practice presentation encourages students to critically examine their own learning processes, decision-making, and use of tools such as AI [13].

This reflective component supports the development of academic self-awareness and may help to identify misunderstandings or potential misconduct at an early stage. Furthermore, the low-stakes nature of a pass/fail assessment reduces pressure on students, enabling a more honest and meaningful engagement with the task. An approach that focuses on the learning process, and how present the student is, rather than solely on final outputs, serves as an effective deterrent against academic misconduct and supports a culture of integrity within postgraduate study [14].

The assessments at TUS also prioritise authentic examination. In their first assessment (40%), learners are tasked with carrying out independent research and conducting an interview. As part of this, they are required to provide a table outlining the specific sources, with reference to the relevance of the specific sections of each source selected for inclusion in the research. Marks are allocated for the inclusion of relevant sources, and justification for each source is a key element of this. Marks are also awarded for the interview which is done face-to-face, under the supervision of the lecturer. In the second assessment (20%), learners are tasked with application of the elements of questionnaire design which are taught during the module. What is important here is that the questionnaire must be designed to a specific business brief which is covered in class. So, not only is attendance and engagement in class important, but the focus on a specific brief is a key element of the assignment, rather than a generic questionnaire. Therefore, the questionnaire is unique and created by the individual student who is following a specific brief, rather than a questionnaire that could be generated through AI.

Then, in the third assignment (40%), students work in a group of 4 to carry out secondary research based on a specific scenario and they also write a research report based on their work. Similar to assignment one, the students are required to justify their selections and provide a table outlining rationale for each of the sources selected, with reference to the specific elements of the sources. The focus on critical engagement provides students with the opportunity to show how they engaged with the course work and assignments.

3. Conclusion and Recommendations

Implementing face-to-face assessments, such as reflective presentations or oral examinations, enhances academic integrity by fostering personal accountability. When students anticipate direct interactions with lecturers to discuss their work, they are more likely to engage authentically with their learning process. Fostering open dialogue and transparency about AI usage within the classroom can further support academic honesty. The experiences of the faculty at TUS and UL suggest that clear guidelines and discussions regarding AI tools can help students understand appropriate applications, thereby reducing reliance on AI for completing coursework. Integrating personal interactions and reflective practices into assessment strategies can serve as an effective deterrent against academic misconduct, promoting a culture of integrity within higher education.

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