Academic Integrity differences across faculties: A student survey

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Abstract

In this work, we report on an Academic Integrity-focussed survey conducted in late 2023 at Munster Technological University. We investigated possible correlations between respondents' discipline areas and their experiences of academic integrity. We found that more students of the university's Faculty of Engineering and Science report familiarity with relevant institutional policies than do their peers in Business and Humanities Faculty. Reported frequency of in-lecture discussions about academic integrity also differed, with more frequent discussions on aspects of academic integrity by lecturers in the former faculty than in the latter. While the kinds of academic misconduct engaged in and witnessed by students of both faculties also vary, the use of GenAI was the most frequently observed type of misconduct by students in both faculties. We also found a similar majority of students from both faculties would like a reporting mechanism, but would not report academic misconduct by another student.

Keywords: Academic integrity; Student survey; Generative AI.

1. Introduction

The present study was conducted at Munster Technological University (MTU) which spans six campuses across counties Cork and Kerry, Ireland. In 2023, in response to evolving sector-wide academic integrity concerns, a group of MTU staff initiated a project entitled "Academic Integrity: Supporting Staff-Student Courageous Conversations". The ultimate objective of the project is to support the embedding of the practice of "courageous conversations" (Murdoch & House, 2023) in the university. These are initial conversations between academics and students who may have breached academic integrity and are intended to act as a holistic precursor to or substitute for formal academic misconduct investigations.

An essential first step in our project was to establish students' perceptions of academic integrity and misconduct, as well as their understanding and use of GenAI. As such, a survey was designed and administered to selected student cohorts across MTU. In line with a range of historical studies of academic integrity and misconduct (e.g. Bowers, 1967), the first part of our survey took account of a range of demographic factors and aimed at weighing the impact of intrinsic and extrinsic influences on students' beliefs about and practice in relation to academic integrity. Like surveys administered by McCabe (2005) and Christensen Hughes & McCabe (2006), it took a broad view of academic integrity and investigated multiples modes of academic misconduct.

The possible reshaping of core academic functions including research, teaching, and administration in light of the increasing embeddedness of GenAI has been evaluated by Barros et al. (2023). However, an increasing body of research on the interface of GenAI and learning has raised questions regarding the ethics of GenAI in higher education. For instance, Healy (2023) has pointed to the social justice and equity implications of GenAI use by students to produce unoriginal work and by academics to detect this plagiarism (Healy, 2023). Conversely, Sullivan et al. (2023) underscore its potential to promote academic success among students from traditionally under-represented cohorts. GenAI, therefore, could be a decisive factor in fostering the culture of equity in academic and research integrity outlined by Eaton (2022). However, as Bearman et al. (2024) note, facilitating students to develop critical judgement in relation to GenAI-produced content will be essential.

This emerging research focus on student attitudes towards academic integrity and misconduct and towards the use of GenAI is a research priority to which we aim to contribute with this study. As noted above, it is hoped that by expanding understanding of higher education students' perceptions of integrity and its dialogue with GenAI, meaningful policy and pedagogical responses will be formulated. In this, we build on recent studies such as Johnston et al.'s (2023) survey at the University of Liverpool, to which 54.1% of student respondents indicated support for the use of tools such as Grammarly, whereas 70.4% expressed ambivalence about using generative tools such as ChatGPT to compose assessed writing. In another recent large-scale study, Malmström et al. (2023) surveyed almost 6,000 students from across Swedish universities about their use of and attitudes towards GenAI for learning purposes. Similarly to Johnston et al. (2023), they found most student respondents to hold positive views about the technology and its possible impact on their learning. Building upon the findings of these key papers, the second part of our survey sought to ascertain students' views of GenAI and possible links to academic misconduct.

This paper presents our findings regarding possible correlations between our respondents' field of study and their perceptions and experiences of academic integrity and academic misconduct. To elucidate these, we will focus on students' self-reported awareness of the university's academic integrity policies and the sources of this knowledge, where relevant; on their

knowledge of academic integrity breaches committed both by themselves and by peers; and on their personal stances on academic integrity. In all three cases, we aim to uncover any notable differences between or convergences of responses from students of two faculties: the Faculty of Business and Humanities and the Faculty of Engineering and Science.

2. Materials and Methods

2.1. Design and deployment of survey

This 22-question survey was designed and deployed during semester 1 of the academic year 2023-2024. Its purpose was to establish students' opinions of and familiarity with academic integrity, particularly with respect to the emergence of recent Artificial Intelligence (AI) tools. It was deployed across specific cohorts of students at the University and targeted students from a range of academic disciplines and stages. Overall, the survey was split into three sections: the first recorded specific background information from the students, the second section recorded general information regarding general familiarity with and experience of academic integrity, while the third section focused on Artificial Intelligence. The survey contained a variety of questions (both quantitative and qualitative) and was operated under approval from the university's Research Ethics Committee (MTU-HREC-MR-23-024-A).

2.2. Impact of field of study on students' knowledge of academic integrity

Feedback was sought from students across the two campuses in the University. The majority of respondents (547 out of 608) were from the faculties of Business and Humanities (Cork campus) and the Faculty of Engineering and Science (Cork campus), therefore in this paper we present only the results from these two faculties. Specific information such as age, study area, stage of award, gender, and competence in English was sought. Related information was then recorded regarding each student's familiarity with academic integrity, associated University policies and supports provided around assessment literacy. Finally, this related information was analysed from the perspective of study area to determine any associations and correlations.

2.3. Impact of field of study on students' knowledge of breaches of academic integrity

Subsequent responses were sought which set out to evaluate whether students in specific disciplines were more likely to witness or admit to breaches of academic integrity. Using a Likert scale, these questions specifically elicited information on students' experiences with plagiarism, inappropriate sharing, fabrication, falsification, contract cheating, and GenAI.

2.4. Impact of field of study on students' opinions on academic integrity

This part of the study set out to evaluate whether students in different disciplines had similar or conflicting views on the reporting of academic integrity breaches, whether reporting tools should be made available and what types of penalties should be in place for students found to be guilty of breaches.

3. Results

The survey was available to students for four weeks, between weeks 7 and 10 of semester 1. Since the university has a significant number of modules that are assessed continuously, the survey was released such that many students would already have completed at least some assessments at the time of taking the survey. The timing also increased the likelihood that even first-year students would have had a chance to experience aspects of academic integrity within the university before submitting their responses to the survey.

The details of the respondents' faculty affiliation are given in Table 1, with relatively similar gender and degree-stage breakdowns observed between faculties. Slight differences in terms of gender distribution are noted, however. The number of students in each faculty was approximately 2,000, giving a response rate of over 10%. We also note that 34% of Business and Humanities respondents would have had at least one Covid-19-affected semester, as would 27% of participants from Engineering and Science.

Table 1. Breakdown of respondents according to faculty.

Faculty	# Student Responses	%	Male – Female %	Stage of Award: 1/2/3/4/PG %
Business and Humanities	283	51.7	48– 51	45/19/13/21/02
Science and Engineering	264	48.3	62 – 36	38/25/16/11/09

3.1. Impact of field of study on students' knowledge of academic integrity

We first investigated students' awareness of academic integrity policies in the university. The results showed that there was a significant difference between Engineering and Science students and Business and Humanities students. 57% of the former stated they were informed of existing relevant academic integrity policies, compared to just 34% of the latter cohort.

Of the 163 Engineering and Science students who stated they were informed of academic integrity policies, nearly 75% indicated that lecturers were one of their sources of information,

compared to just over 60% for the 118 Business and Humanities students. On the other hand, more Business and Humanities students than Engineering and Science students used the university's online resources for information (45% vs 37%).

To interrogate the nature of the information provided by lecturers, we then asked students about the different aspects of academic integrity that were outlined in class when a lecturer discussed it, and about the frequency of such discussions across their lecturers. Boxplots of the results per category are given in Figures 1 (a) and (b) below for the two different faculties. A score of 5 for a category meant that the student felt it was discussed "*very often*" by their lecturers, while a score of 1 maps to "*never*". White dots indicate the average score, and thick black lines the median.

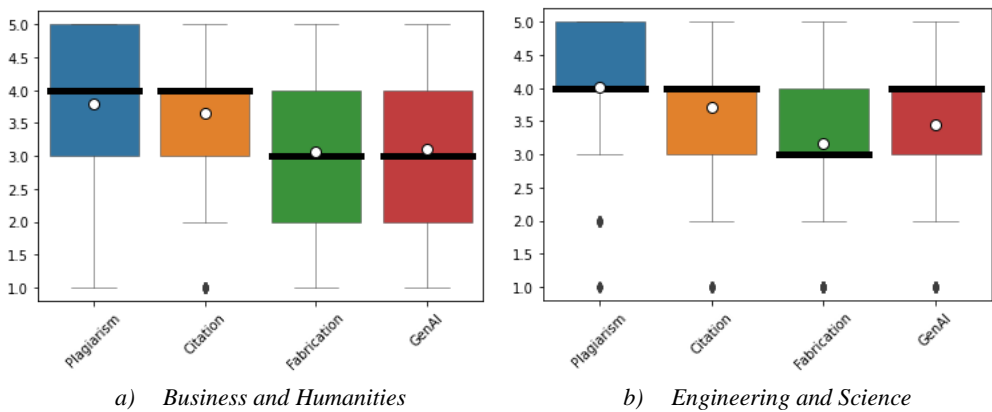a)   *Business and Humanities*   b)   *Engineering and Science*
Figure 1. Academic integrity categories discussed by lecturer.

Plagiarism was by far the most frequently discussed aspect by lecturers in both faculties, with an upper quartile of "*very often*", and a lower quartile of *"often"* in the faculty of Engineering and Science. It is interesting that the use of GenAI was discussed much less frequently, particularly in the Faculty of Business and Humanities. We also note that there was more frequent discussion of academic integrity in general by lecturers in the faculty of Engineering and Science, mirroring the previous findings.

3.2. Impact of field of study on students' knowledge of breaches of academic integrity

Students were asked about their participation in different aspects of academic misconduct. In particular, they were asked if they had copied from a source without acknowledgement; assisted another student with a submission; worked jointly on an assignment without permission; used an essay mill (contract cheating); cheated in an invigilated exam; or submitted someone else's work as their own. Respondents were then asked about their experience of witnessing academic

misconduct by other students, including payment to someone else for doing an assignment, and the use of GenAI for assignments.

Boxplots of the Likert score are given in Figure 2, with (a) giving results for cases where students stated the frequency with which they participated in a form of academic misconduct, and (b) giving results for cases where students stated the frequency with which they observed others participating in academic misconduct (with again 1 mapping to "*never*", and 5 mapping to "*very often*".

In terms of participation, we note that there was more frequent participation in the final three categories (use of contract cheating, invigilated exams, submitting others' work) in the Faculty of Business and Humanities. Interestingly, in terms of observed behavior (Fig 2. (b)), this is somewhat contradicted with payment and invigilated exam both having more similar score distributions for the two faculties. Notwithstanding that, the greater participation in contract cheating and misconduct in invigilated exams may also speak to differences in appropriate assessment strategies between the two faculties.
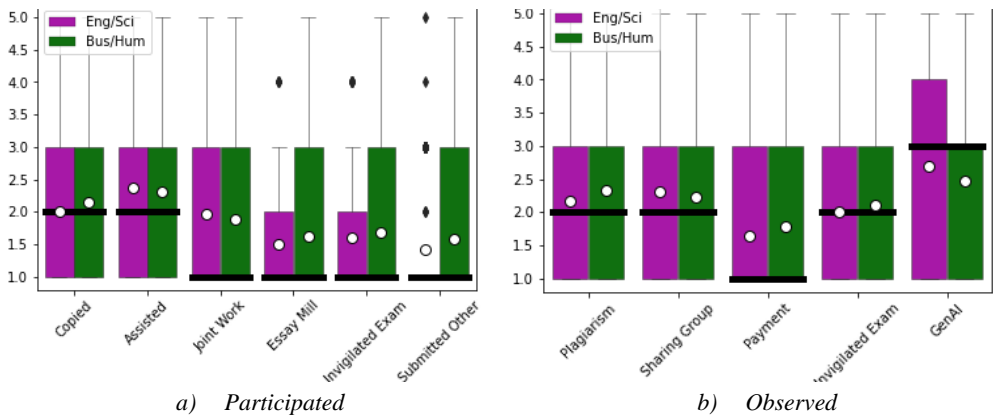

a)   Participated   b)   Observed

Figure 2. Academic misconduct: Participation and observation

The main takeaway is that GenAI is, as expected, the largest observed category of academic misconduct in both faculties, albeit that it is somewhat more frequently observed in the Faculty of Engineering and Science. This finding is of particular interest given that GenAI was one of the aspects of academic integrity least discussed by lecturers as shown previously in Figure 1.

3.3. Impact of field of study on students' opinions on academic integrity

Students in different disciplines had nearly identical views across the three questions on reporting academic integrity breaches, and penalties for such breaches. Just over 10% of students said that they would report a fellow student for cheating, compared to nearly 60%

saying there should be a reporting tool. This suggests that the majority of students are not happy about other students cheating, but at the same time do not wish to report breaches themselves.

4. Discussion and Conclusions

While the self-reported student responses suggest that students in the faculty of Engineering and Science were more informed about the university's academic integrity policies than their peers in the Business and Humanities Faculty, this gap could potentially be a function of different assessment strategies in the two faculties. For instance, where modules are preponderantly assessed by invigilated examination, in-lecture discussion of plagiarism and academic integrity may occur less frequently. Conversely, modules which are assessed through project-based assignments may prove more obvious venues for discussions of academic integrity and of the university's policies regarding, for example, plagiarism. It should be noted, however, that slight differences in the gender profiles of respondents from each faculty may have some impact on this difference, as might, for instance, the higher proportion of first-year undergraduate respondents from Business and Humanities and the higher proportion of postgraduate respondents from the Engineering and Science faculty.

However, notwithstanding the above possibility, we note that GenAI was the category with largest score for frequency of observation in both faculties. This may result from the ubiquity of the technology or from its potential application to tasks outside of formal, summative assessment. Furthermore, while plagiarism was the aspect of academic integrity most frequently discussed by lecturers in the faculties, GenAI was the most frequently observed type of breach of academic integrity by fellow students. This clearly suggests that lecturers need to focus more on acceptable and unacceptable uses of GenAI within assessment work.

Our findings suggest that there is scope for further research on possible correlations between disciplinary cultures, typical disciplinary assessment strategies, and instances of academic misconduct. It also highlights potential for the embedding of academic integrity resources and supports within module delivery, perhaps especially those requiring students to produce work independently over extended periods. It points to the importance of further investigation of students' beliefs about the learning opportunities presented by AI but also of the best means by which students and staff can address and manage dissatisfaction caused by increasing use of AI in assignment completion.

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