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Generative artificial intelligence: University student awareness, experience, and confidence in use across disciplines

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Generative artificial intelligence: University student awareness, experience, and confidence in use across disciplines

Abstract

The global higher education sector has been significantly disrupted by the proliferation of generative artificial intelligence tools such as ChatGPT, especially in relation to its implications for assessment. However, few studies to date have explored student perspectives on these tools. This article reports on one of the first large-scale quantitative studies of student views on generative artificial intelligence at an Australian university (n = 1,135). When the survey was conducted, most students had low knowledge, experience, and confidence in using these tools. These results varied across disciplines and across some student sub-groups, such as mature-age students and international students. Confidence appeared to increase with experience, although the data also revealed a portion of students that have never used these tools yet still felt confident in using them. In exploring these results, this article aims to shed new light on this fast-evolving landscape and inform the future direction of supporting students to engage with generative artificial intelligence tools appropriately.

Practitioner Notes

1. Students need to be explicitly taught how to use generative artificial intelligence tools appropriately.
2. Learning activities that build student skills in using generative artificial intelligence should be embedded into curricula.
3. The ways in which students learn how to use generative artificial intelligence will need to vary based on the needs of each disciplinary area.
4. Student reports of self-confidence in using generative artificial intelligence may be overstated.
5. Assessment tasks need to be redesigned to reduce the academic integrity risks associated with using generative artificial intelligence.

Keywords

Generative artificial intelligence, ChatGPT, students, higher education

Introduction

The open-access release of generative artificial intelligence (GenAI) tools in late 2022 and early 2023 prompted a major disruption to the teaching and learning practices of universities worldwide. ChatGPT, and similar GenAI tools, create sophisticated bespoke content that can pass many traditional forms of university assessment. For example, U.S. company OpenAI's most advanced GenAI tool, GPT-4, has already comfortably passed some of the most challenging professional accreditation exams, including the Uniform Bar Exam for legal practice and the Certified Public Accountant Exam for accounting practice (Gaetano, 2023; Koetsier, 2023). Some academic responses to GenAI have been largely positive, noting these tools' capability to enhance student learning and accessibility (Lyerly, 2023; Sullivan et al., 2023). Others have correctly pointed out that GenAI tools also have several weaknesses, including the possibility of generating inaccurate information and fabricating references (Farrokhnia et al., 2023; Rudolph et al., 2023).

Universities worldwide, in turn, have also been varied in their responses to GenAI. These responses have ranged from completely banning the use of these tools to allowing use with appropriate acknowledgement (Sullivan et al., 2023). Increasingly, however, universities are starting to adopt policies that allow students to use GenAI in their studies (Xiao et al., 2023). In the Australian context, GenAI has been a catalyst for significant national discussion about the future of teaching, learning, and assessment in higher education institutions across the country. Peter Coaldrake, the Chief Commissioner for Australia's Tertiary Education and Quality Standards Agency (TEQSA), suggested that the rapid development of GenAI requires a "deep rethink" of how universities assess students. "This is a challenge facing the whole sector", Coaldrake said in a TEQSA webinar with Deakin University's Centre for Research in Assessment and Digital Learning in February 2023, noting that GenAI "presents significant opportunities to support learning" but must be balanced against the risks that it poses to academic integrity (TEQSA, 2023)

There is certainly an emerging exploration of the implications of GenAI for learning and assessment design. Academic staff views on GenAI tools on teaching, learning, research, and policy have already been collected from a range of multidisciplinary perspectives (Dwivedi et al, 2023), and it is highly likely that this body of scholarly literature will continue to expand. However, at the time of writing, there has been no equivalent study to date that explores student views and compares findings across disciplinary boundaries. Gaining an understanding of the student's perspective is crucial for effectively supporting their development in using GenAI tools and how to minimize academic integrity risks. To respond to this current gap in the literature, this article reports on a cross-disciplinary study conducted at an Australian university in March 2023 that surveyed 1,135 students about their views on GenAI tools. The data reveals a mix of relative awareness, experience, and confidence in using these tools across disciplines and sub-cohorts. Framed in this

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context, this article provides a new basis for advancing our broad understanding of how these tools will impact students as they study at university.

Literature

While the availability and degree of sophistication of GenAI is a relatively new phenomenon, researchers have been interested in the affordances of artificial intelligence in education for decades. Previous studies have shown how the use of artificial intelligence can be used in meaningful ways to improve assessment feedback and make administrative duties more efficient (Brown et al., 1978; Crompton & Bruke, 2023; Garito, 1991; Popenici & Kerr, 2017). Prior to the public release of ChatGPT and similar GenAI tools in late 2022, UNESCO also published recommendations on the ethical use of artificial intelligence. Key principles included maintaining safety, human oversight and transparency in use, ensuring fairness and non-discrimination, respecting a right to privacy and data protection, building awareness, and collaborating with stakeholders (UNESCO, 2022).

The reality of the current context, however, is much different than previous forms of artificial intelligence. The ability of GenAI to create complex bespoke content on demand is transforming multiple industries at a rapid pace (Forbes, 2023). It also prompted the Russell Group, a coalition of twenty-four leading universities in the United Kingdom, to recommend new principles on the use of GenAI in higher education. These principles mirrored some of the principles previously recommended by UNESCO but advocated specifically for building university staff and student GenAI literacy, adapting teaching learning and practices to incorporate ethical use, ensuring academic integrity is upheld, and encouraging best practice to be shared collaboratively across the tertiary sector (Russell Group, 2023). One recent study has even begun to consider the use of GenAI in marking student work (Kasneci et al 2023), though such use needs to be handled cautiously given student privacy implications and the propensity of these tools to generate incorrect information. This will undoubtedly have an impact on how students progress through tertiary studies and how well they are prepared to secure meaningful employment upon graduation. In turn, universities need to consider how they prepare students to use these tools ethically in their disciplinary contexts.

To that end, the most immediate concerns about GenAI explored in the current literature are the implications for assessment and supporting academic integrity. Studies to date reflect the need to rethink the typical types of university assessment tasks which could now easily be completed by GenAI tools (Cotton et al, 2023, Crawford et al 2023; Farrokhnia et al, 2023; Perkins 2023; Rudolph et al, 2023). These principally relate to summative written assessments such as essays and reports, though as Susnjak (2022) pointed out, the ubiquity of GenAI tools also calls into question the integrity of online exam tasks. Beyond text-based tasks, GPT-4 is also capable of producing outputs based on images (Bubeck et al., 2023). This capability limits the usefulness of using images to mitigate the risk of students using GenAI to complete assessment tasks. In short, articles published on this topic so far outline a very clear picture: the ways in which universities and their respective academic staff set assessment tasks needs to transform rapidly. Traditional university assessments have typically relied on students to produce artefacts to infer that learning has occurred. Now that GenAI tools such as ChatGPT can produce these artefacts to a

reasonable degree of quality, universities need to rethink the association between learning and performance (Lodge, 2023).

There has also been a positive discourse surrounding GenAI tools in university teaching and learning contexts, especially in relation to student support. These tools can demystify challenging academic concepts in simple language and improve inclusion with communication disabilities (Hemsley et al., 2023; Lyerly, 2023; Starcevic, 2023). With appropriately used inputs, they can also produce structures for written assessment tasks, give grammatical feedback, and develop sample practice quiz questions for test preparation (Sullivan et al., 2023). These affordances can make learning at university more accessible to diverse learners, especially for students from cultural and linguistic backgrounds that differ from the expected conventions of the university in which they are studying.

A key challenge with the use of GenAI is the need for strong critical thinking and digital literacy skills. For over two decades, there has been a contested scholarly debate about whether the current generations of students are “digital natives”, meaning that they have grown up using technology and are thereby well prepared to adapt to the use of emerging technologies (Evans & Robertson, 2020; Prensky, 2001). Many university students—especially those born in Western countries during the 21st century—fall into this category and may already have the requisite digital literacy tools to engage successfully with GenAI tools in such a way that will provide useful outputs and be able to critically evaluate them (Willems et al., 2019). To some degree, student experiences of learning remotely during the COVID-19 pandemic accelerated the use of learning technologies and the digital literacy skills required to engage with them (Butarbutar et al., 2021; Udeogalanya, 2022; Yu, 2022). However, it is important to note that growing up surrounded by technology and personal experiences of learning online during the COVID-19 pandemic does not necessarily mean that a student will be automatically prepared to adapt well to the use of emerging GenAI technologies in a formal learning environment. Even when students have good general digital literacy they may still feel limited in specific areas (Zhao et al., 2021) or follow rituals they have developed over time rather than thinking about new situations critically (Bhatt & MacKenzie, 2019). For example, early research on ChatGPT suggests that people underestimate how much the information influences their judgements (Krugal et al., 2023).

Nonetheless, students that can analyse GenAI outputs critically will be in a more advantageous position to leverage the benefits of these tools and safeguard against its risks (Hess, 2023). Digital literacy (or digital competence) means that students should be able to use technology confidently and critically in their education and workplace (Zhao et al., 2021). Moving forward, universities will need to embed the teaching of using GenAI tools appropriately in student learning programs (García-Peñalvo, 2023). Specifically in relation to artificial intelligence literacy, appropriate use entails understanding broadly how GenAI works, evaluating outputs, effectively interacting with these tools to solve real-life problems (Kong et al., 2021), and communicating the results to others effectively (McCoy et al., 2020). Previous research on digital literacy shows that students rely heavily on the guidance of their lecturers when it comes to finding and using information (Bhatt & MacKenzie, 2019). This means that in order to foster meaningful use for everyday life, it is important that digital literacy is embedded in discipline-specific ways throughout all programs, and not as ad-hoc or optional activities (Smith & Storrs, 2023).

The current literature has not yet explored student perspectives on GenAI at-scale. Some student views have been explored in social media posts, though the current sample sizes are reasonably small and do not explore different perspectives across disciplines (Haensch, 2023; Tlili et al., 2023). Firat (2023) gathered a small number of student perspectives on the implications of ChatGPT for universities, though these responses were from postgraduate students enrolled in doctoral programs. Shoufan (2023) gathered student views from a computer engineering program—most respondents saw the benefits of ChatGPT but remained cautious about the inaccuracy of some of its outputs. Limna et al. (2023) also surveyed a small number of students (n = 15) and found a generally positive perception of GenAI tools, yet students also raised concerns about data privacy and storing of personal information. Overall, this limited exploration of student perspectives on GenAI tools by mid-2023 contributed to the need for the study reported in this article.

Method

Research Context and Scope

This student survey was undertaken in March 2023 at a mid-size Australian university with over 25,000 students enrolled from a diverse range of linguistic, cultural, and socioeconomic backgrounds. Participants were all students enrolled in on-campus or online study at the time of the survey. The survey was sent to all students to understand their awareness, perceptions, and use of GenAI. As part of the University's response to GenAI, students were allowed to use these tools but were expected to acknowledge their use if they did. The survey responses were sought to inform the University's response to integrating GenAI into curriculum, assessment, and teaching. The University's human research ethics office considered a waiver of explicit consent for the research and granted ethics approval (REMS number: 2023-04278). For the purposes of this article, only the quantitative results have been included; qualitative results will be published in a future article.

Survey Design

The project followed a mixed-methods approach using an anonymous student survey. The ten-item survey was designed with a mix of closed-ended questions, open-ended questions, and Likert questions clustered into five categories: demographics; knowledge, experience, confidence, and perceptions about GenAI. As Table 1 outlines, all demographic questions were closed-ended except for participants being able to add their discipline if it was not included in the list.

There were two knowledge-based questions. The first was a Likert question that quantified how much the participants had heard of GenAI. The second asked where the participant had first heard of GenAI; this was closed-ended but provided a text field for a different option. If the participant selected "nothing/negligible" to the first knowledge question, the survey skipped to the second knowledge question and the experience questions. Next, there were two specific questions about how much the participant had used GenAI, and then an open-ended question that asked the participant how they have used GenAI tools. Skip logic was used to skip the second experience question if the participant selected "not at all" to the first experience question. There was one

Likert question that quantified how confident each participant felt about using GenAI ethically for university study. Finally, there was one open-ended question about student perceptions of GenAI.

Table 1

Overview of the survey categories and its associated description

Category	Description
Demographics	Participants were asked questions related to relevant education information (discipline of study, level of study, international or domestic) and personal characteristics (age).
Knowledge of GenAI	Participants were asked how much they had heard of GenAI and where they had heard of it. Participants could choose multiple options on this question.
Use of GenAI	Participants were asked if they had used GenAI tools, with examples provided (ChatGPT, Dalle-E, Chatsonic, etc.) and how they had used the tools. Both were measured on five-point Likert scales, with options ranging from “not at all” ranging to “a lot (I have used Generative AI tools on a daily or weekly basis)”.
Confidence using GenAI	Participants were asked how confident they feel that they can use GenAI ethically in their university studies, on a five-point Likert scale from “Not at all confident” to “Very confident”, with an additional option of “Unable to judge”.
Perceptions about GenAI	Participants were asked to share their thoughts about GenAI.

Survey Distribution

Qualtrics was used as the platform to design and administer the survey. An email was sent from the Deputy Vice-Chancellor (Education) to all undergraduate and postgraduate students (26,686) in week two of Semester One 2023 (2 March). Within twenty-four hours, 7,574 students had opened the email (28.4%) and 56 (0.21%) students had accessed the survey. After six days, 9,100 students had opened the email (34.1%) and 77 (0.29%) had accessed the survey. A follow-up SMS was sent to all students on 16 March prompting completion of the survey. Within twenty-four hours of the SMS being sent, just over 1,000 students had responded to the survey. The survey closed on 23 March, with 1,135 total responses gathered.

Data Analysis

The quantitative data was analysed in SPSS (version 29). Non-parametric statistics were used since the data was primarily nominal and ordinal (Pallant, 2016). For group comparisons on Likert scales, the Mann-Whitney U test was used when comparing international and domestic student responses. All other groups were analysed with the Kruskal-Wallis test, and the Dunn-Bonferroni approach was applied for pairwise comparisons. For confidence compared to use, students who answered they knew “nothing” about GenAI were combined in a group with those who said they had not used it, and a correlation analysis was conducted using Spearman’s rho. Comparisons between sources of information were performed using Chi-squared tests. International students and sources of information are presented with a Yate’s Correction for Continuity and the phi

coefficient, while schools and sources of information are reported with Cramer's V to account for the larger table (Pallant, 2016).

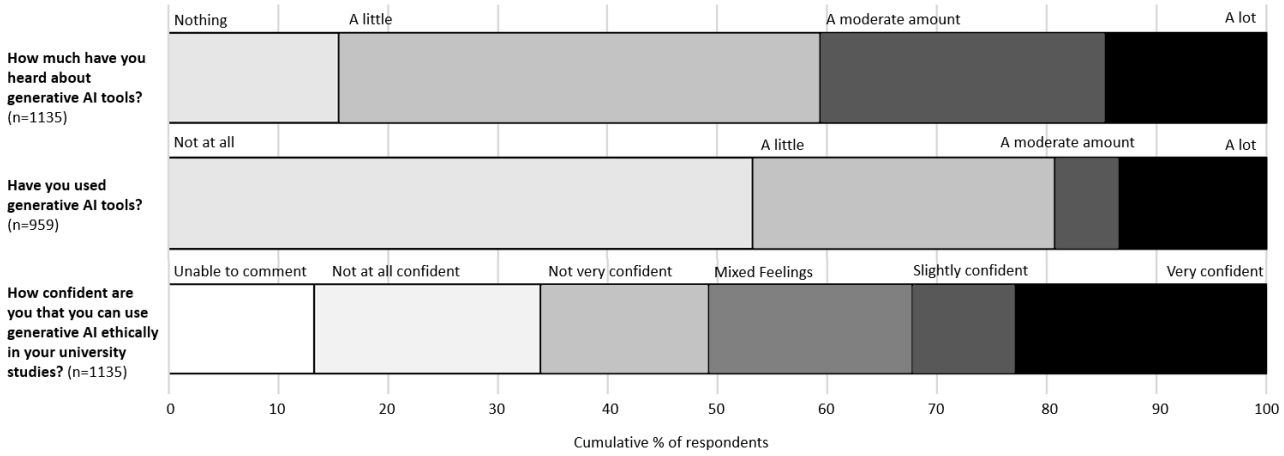
Unfinished and incomplete responses were excluded from the data analysis (n = 450). Students were slightly more likely to fail to finish the survey if they answered the first question as they know "nothing" about GenAI (p = .048). For the analysis of discipline-based data, the University's Preparation Course (n = 37) and the School of Performing Arts (n = 28) were excluded from the analysis due to low sample size. The University Preparation course students were also excluded from the analysis of course level. Written responses for course enrollment and where students had heard about GenAI were manually checked and reassigned to the correct category where appropriate, for example, if a student had written "blog" into the "other" response for where they heard about GenAI, it was reassigned to social media.

Results

At the time of administering the survey, most students had either heard nothing (13%) or very little (28%) about ChatGPT and other GenAI tools. For students that had heard of it, even fewer had used GenAI (see Figure 1). Of the 959 respondents who had heard about GenAI, most of them (64%) had found out about it through social media, followed by news media (41%), other students (32%), and work (20%). Students were able to provide other sources of information, in which they mostly listed university staff and communications (n = 78), friends and family (n = 53), or unspecified (n = 34).

Figure 1

Student Awareness and Use of GenAI Tools

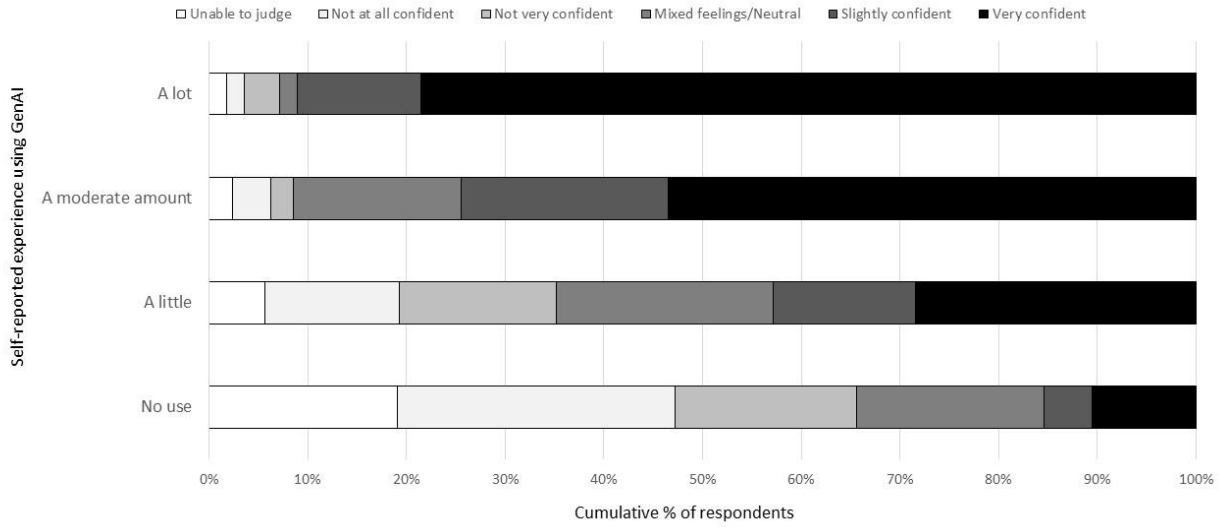


Use and Confidence

Participants' confidence in their ability to use GenAI ethically increased with experience using GenAI (p = .001, *rho* = .494, Figure 2). About 15% of students who had not used GenAI (n = 686) rated themselves as "slightly confident" or "very confident", compared to 91% of students who had used GenAI "a lot" (n = 56).

Figure 2

Student Confidence in their Ability to Use GenAI Ethically



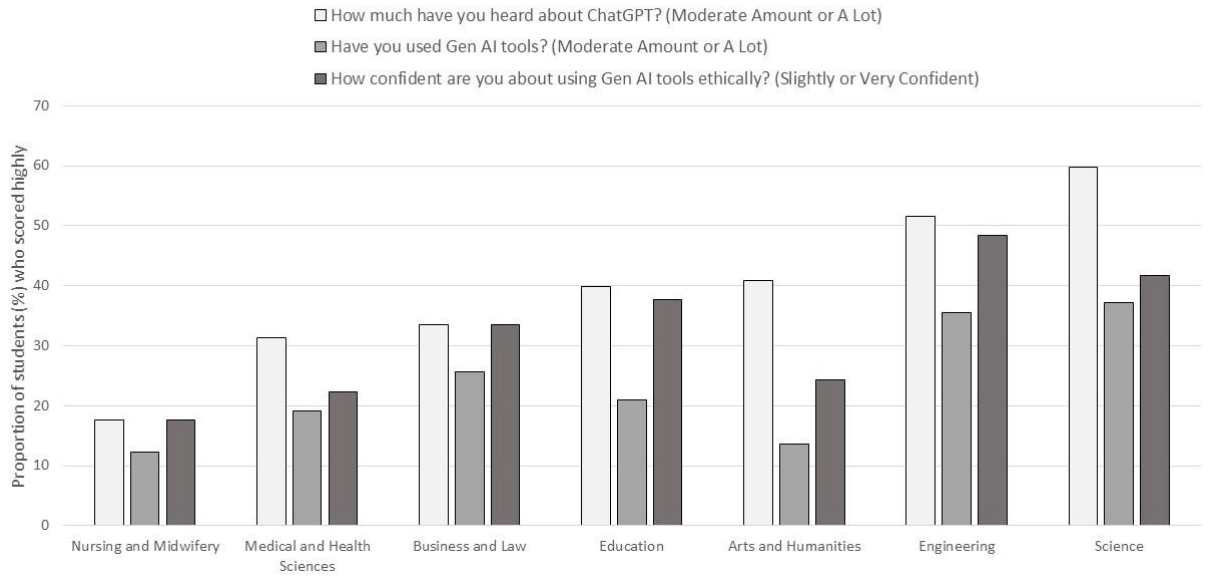
Disciplinary Area

Figure 3 shows significant differences between disciplines in how much their students had heard about GenAI (p = .001). These have been grouped into each of the University's Schools. Pairwise comparisons revealed that Nursing students (n = 113) had heard about GenAI significantly less than students in all other disciplinary areas (p > .05) except Medical and Health Sciences (n = 121, p = .347). Science students (n = 199) had heard more about GenAI than Medical and Health Sciences (p < .000), Business and Law (n = 167, p = .001), and Arts and Humanities (n = 201, p = .005).

There were also differences between disciplines in use of GenAI (p = .001). Engineering (n = 91) was also significantly higher than Nursing (p = .004), Medical and Health (p = .011) and Arts (p = .003). Science was higher than Nursing (p < .000), Medical and Health (p < .000), Arts (p < .000), Business and Law (p = .004) and Education (p = .003). Differences in confidence in using AI ethically (p = .001) were similar. Engineering was higher than Nursing (p = .001) Medical and Health (p = .005), and Arts (p = .006); while Science was significantly higher than Nursing (p < .000), Medical and Health (p = .001), and Arts (p = .001).

Figure 3

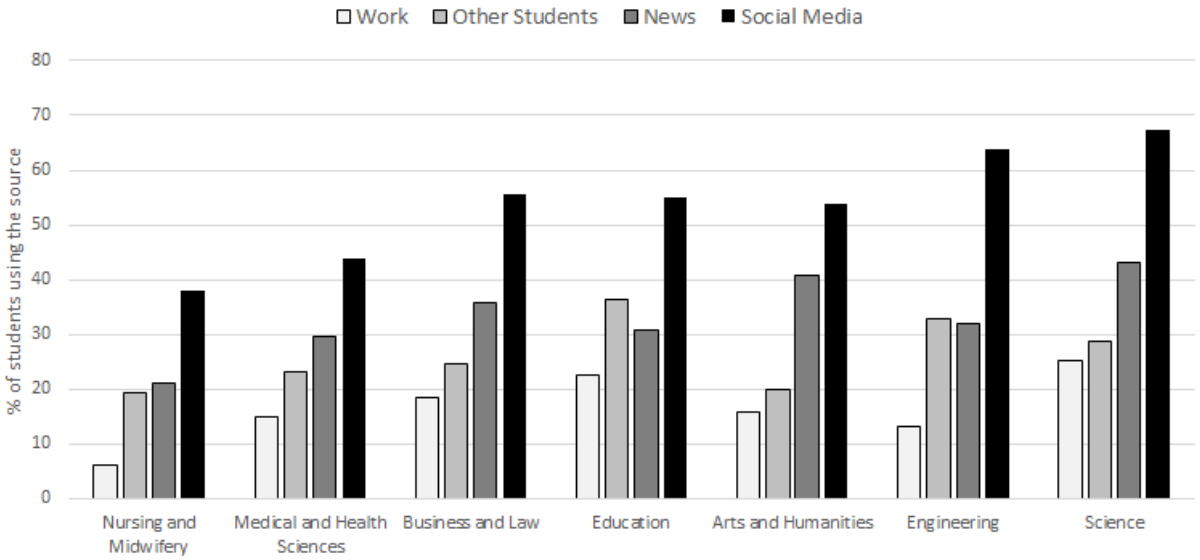
Proportion of students who stated that they had a moderate or high level of awareness, use and confidence with GenAI by disciplinary area (School)



Students from different Schools had significantly different sources of information about GenAI for all sources, such as social media (p = .001, Cramer's V = .179), news (p = .001, Cramer's V = .142), other students (p = .003, Cramer's V = .137), and work (p = .001, Cramer's V = .147). As seen in Figure 4, Nursing students used all information sources less than students enrolled in other Schools.

Figure 4

Source of information used to learn about GenAI by disciplinary area (School)



International and Domestic Status

International students (n = 239) had less awareness of GenAI (p = <.001, U = 88148, z = 4.573, r = .135), with 72% of international students saying that they had heard “nothing” or “a little” about GenAI compared to 56% of domestic students. However, there were no significant differences in their use (p = .08) or confidence (p = .113).

The difference in awareness of GenAI may be related to where students are sourcing information. International students were equally likely to find out about GenAI from social media (p = .178) and other students (p = .418), but less likely to use news media (p = .001, phi = .197; 39% of domestic students compared to 16% of international students) or work (p = .001, phi = .146; 20% of domestic students compared to 7% of international students).

Study Level

There was no difference in how much students had heard about GenAI based on their level of study (p = .391). However, there were small differences in whether they had used GenAI (p = .007), with 67% of higher degree by research student respondents using GenAI (n = 53) compared to 41% of postgraduate students (n = 296, p = .007) and nearly significant compared to 48% of undergraduates (n = 746, p = .55). When it came to confidence, postgraduate students were more confident than undergraduates (p = .033).

Age

There was no difference between age groups in having heard about GenAI (p = .443). However, there was a difference in who had used GenAI (p = .004), with pairwise comparisons showing that over 40s (n = 228, 31% used) were less likely to have used GenAI than under 25s (p = .002, 44% used). This trend was more pronounced in confidence using GenAI (p = .001), with only 21% of over 40s being slightly or very confident compared to 37% of under 25s (n = 489, p = .001) and 36% of 25-29s (n = 156, p = .012).

Discussion

A key finding from this study was that students had relatively low knowledge, experience, and confidence with using GenAI. Given the rapid pace at which these tools became available in late 2022 and early 2023, it is understandable why so many students were unfamiliar with them at the time. This timeline limited opportunities for academic teaching staff to consider deeply the emerging challenges and risks associated with GenAI and how to incorporate these tools into their respective teaching and learning practices. The researchers suspect that future studies that explore student perspectives will find an increased level of awareness of these tools, especially as they start to become integrated into other commonly used student platforms such as the Microsoft suite and Grammarly (Spataro, 2023). The future degree of experience and confidence, however, is less clear, as exposure to using these tools appropriately in a university setting will largely be shaped by the policy positions, education initiatives, and assessment applications adopted by each institution.

The results suggested that student confidence in using GenAI ethically increased with experience. This, again, was another logical and predictable outcome, although it should be noted that

exposure to technology does not necessarily lead to understanding (Murray & Perez, 2014). However, an interesting finding was a proportion of students (15%) that indicated they had never used GenAI tools but nonetheless still felt confident in their use. There may be several explanations for this finding. Firstly, as the survey was conducted during the early weeks of the first semester that GenAI tools had been widely available, many students may have heard much about the tools but had not yet had opportunities to engage with these tools for the purposes of learning and assessment. Another possible explanation is that these specific student responses were typical examples of Prensky's (2001) "digital native" students, insofar as they had grown up using technology and consequently felt confident to use new ones successfully even if they had not directly used them yet. However, students are known to overrate their abilities in multiple areas of digital literacy (Smith & Storrs, 2023), and results may also be a manifestation of the Dunning-Kruger effect (Dunning, 2011). Bhatt and Mackenzie (2019) argue that most students are relatively passive consumers of online content, and do not truly understand how online information is curated, especially in new platforms that are not transparent or accountable in their design architecture. Students with low GenAI experience, in short, may be overestimating their abilities to adapt successfully to this new form of technology.

There were noticeable variations in student responses across disciplines. As Figure 3 highlights, students from science and engineering disciplines generally reported higher awareness, experience, and confidence in using GenAI, whereas the healthcare disciplines generally reported the lowest rates. To some extent, this trend may be connected to relative interests in the use of technologies for different disciplines. Despite the possibility of occasionally producing incorrect information, GenAI's ability to produce code, solve mathematical equations, and design scientific experiments may seem more directly practical for students in those disciplines. Conversely, students studying in disciplines that focus on human care may not draw the same immediate connections as to how tools such as ChatGPT may be applied in healthcare settings (Cascella et al., 2023). Student levels of awareness and use may also have been shaped by the extent to which each disciplinary area specifically discussed GenAI tools directly with students. This is similar to a study by Smith and Storrs (2023), which found that students in communications and health science disciplines had higher digital literacy when using social media because it was integrated into their professional standards curricula.

Similarly, there were some demographic differences across different student cohorts. International students, for example, reported lower awareness of GenAI and were less likely than domestic students to learn about GenAI through work or the news. There are several likely factors that influence this difference. For instance, international students in Australia have reported challenges in building local social connections upon arrival (Khanal & Gaulee, 2019), which may limit the possibilities to learn about GenAI through friends or student peers. Another variation was between age groups; students forty years old and over, for example, reported they were less likely to have used GenAI and were less confident about using it ethically compared with younger students. This cohort had generally less opportunities to engage with technology growing up and in previous study than younger generations (Prenksy, 2001), which may contribute to the explanation as to why experience and confidence rates were lower in this cohort. However, most students lacked confidence with GenAI regardless of age and the differences were not as large

as those between Schools, confirming Smith and Storrs' (2020) argument that digital literacy should focus on professional disciplinary competencies rather than age stereotypes.

A final reflection from these results are the various ways in which students are learning about GenAI. Ideally, students would learn about GenAI in appropriate and ethical ways via their institution, both within and outside the curriculum. However, the results of this study suggested that students were more likely to learn about GenAI through social media. There are some studies that have begun to explore social media data on GenAI (Haensch, 2023; Tlili et al 2023), and the ways in which these tools are socialized in social media platforms will be important to investigate further. For instance, social norms can impact the likelihood of student cheating (Hutton, 2006), so universities and its respective teaching staff must do all they can to communicate clearly the ways in which GenAI can be used appropriately, including outlining the academic integrity risks if its use is not acknowledged or referenced properly.

Limitations and Future Research

There are some limitations to this research that need to be acknowledged. While this study is one of the first published that explores student perspectives on GenAI, the student sample was drawn from only one Australian university and focused only on the quantitative results. Student awareness and use of GenAI is likely to vary considerably depending on how much their university, local news media, and social circles have engaged with the technology.

Not all students that started the survey completed it, and students who indicated that they knew nothing about GenAI were less likely to complete the survey. This limits the student insights that can be drawn from those that may be the most unprepared for the impact of GenAI on their respective university studies. Similarly, students across all disciplinary areas did not respond at equal rates. This may also skew the results towards disciplinary groups that completed the survey at higher rates than those that did not.

The methodology used a conservative method of calculating significance for pairwise comparisons, which may mean that differences between small groups (e.g., higher degree by research students) and small differences between large groups may be underestimated. The survey also did not explicitly seek close-ended responses from students about whether teaching staff, friends or family were the sources of learning about GenAI tools, which means the data on these may also be underestimated. Finally, the authors acknowledge the general limitations of online surveys with respect to self-selection bias and potentially limited internet access of target participants during the time in which the survey was conducted (Bethlehem, 2010).

Some of the limitations in this study, however, also pave the way for future research to build upon its findings. Future research could explore student perspectives on GenAI in other international contexts and track how awareness and usage changes over time, especially across different disciplines. Focus groups and semi-structured interviews are other ways in which qualitative data on GenAI could be gathered in more detail, including practical examples of how these tools have been used by students for learning and assessment. Gathering more student perspectives on GenAI and its academic integrity implications would add significant value to the current literature.

Conclusion

GenAI tools have significantly disrupted teaching and learning practices in universities worldwide. While there are reported positive benefits for GenAI tools in enhancing student learning and accessibility, the lack of research into student perspectives of these tools to date limits the conclusions that can be drawn about how students will engage in practice. By shedding light on student perspectives, this study contributes to our broad understanding of how GenAI tools will impact students during their university studies. As this research has explored, most students surveyed in March 2023 had low knowledge, experience, and confidence with GenAI. Student confidence increased with experience, although these rates also vary across disciplines and across some student sub-groups.

As universities navigate this new landscape, it is crucial to consider both the potential benefits and limitations of GenAI tools, ensuring that they are used ethically and appropriately to support student learning and academic integrity. Continuous monitoring, evaluation, and adaptation of teaching and assessment practices will be necessary to integrate GenAI tools effectively into educational contexts while addressing the concerns raised by students and academic staff alike.

Conflict of Interest

The authors disclose that they have no actual or perceived conflicts of interest and have not received any funding for this manuscript. They have also produced this manuscript without artificial intelligence support.

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