

 Research Article

AI as a Personal Tutor: Enabling Students to Access Smart Tools

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Abstract

Generative Artificial Intelligence (GenAI) is increasingly used by university students, yet enabling/preparatory cohorts may require explicit guidance to realise learning benefits while maintaining academic integrity. This study explored GenAI tools as “personal tutors” within a leading Australian university preparatory context, focusing on how students actually used these tools, how institutional transparency requirements shaped practice, and what barriers remained. A blended descriptive methodology combined autoethnography of teaching practice with student-generated artefacts (Statements of AI Engagement and assessment extracts). Dataset 1 comprised the educator’s reflective journal notes, analysed using Reflexive Thematic Analysis. Dataset 2 comprised de-identified student artefacts, analysed using Inductive Thematic Analysis. To contextualise the qualitative findings, Statements of AI Engagement were also coded according to the institution’s four AI-engagement levels and to the tools and usage reported, and then summarised using descriptive frequencies/percentages. Participants were students (n=74) enrolled in two university preparatory courses (English Literacy and Research Design) during Semester 2, 2024. 72 Statements of AI Engagement were collected from 98 submitted assessments. Findings indicate broad acceptance of GenAI as supportive learning aids, most commonly for idea generation, rephrasing, summarisation, and basic editing/proofreading. ChatGPT was the most frequently acknowledged large language model, while AI-enabled search and writing-support tools were used more selectively. Although students generally positioned themselves as retaining authorial control, the study also identified persistent concerns regarding over-trust in automated outputs, cognitive load associated with evaluating and integrating AI suggestions, and an internalised stigma that reduced willingness to access both human and AI writing support. The findings suggest that structured, guidelines-based integration, including explicit verification instructions and reflective Statements of AI Engagement, can promote responsible, transparent GenAI use in enabling education.

Keywords: Generative AI in Education, AI Tutors, Enabling Education, Student Engagement, Ethical AI, Stigma

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1. INTRODUCTION

Imagine having a personal tutor who could answer any question about any assignment, on any topic, which is available 24 hours, seven days a week. Imagine that the tutor is also free of charge and accessible from home, on campus, or even at the local café, park, or beach. Now, imagine there are lots of them, all hovering around each and every student, just waiting to help. That is exactly what exists with Generative Artificial Intelligence (GenAI) tools. However, like any tool, they should be used correctly, and users need to be trained in how to use them.

The researchers are lecturers in a leading Australian university’s preparatory/enabling program, delivering units on university culture, academic writing, English literacy for university, and research design. Author 1 is also a post-doctoral researcher at the university’s school of education, and Author 2 is the preparatory program coordinator. Author 1 actively encouraged the preparatory student cohort to engage

with AI tools ethically, responsibly, and transparently, and personified the collective tools available to them as a singular entity.

The students had access to the AI-driven tool Studiosity Writing Feedback Plus (WF+) through the university's digital learning platform Canvas. They were also encouraged to engage with Grammarly and have access to personal, face-to-face, one-on-one support through the university's Writing Centre. In face-to-face classes, the lecturers have also given instructions on how to engage with GenAI, including ChatGPT, Copilot, ChatPDF, and many others. In the research unit, the students were also shown how to use GenAI tools, including Consensus and Scite as search engines. This paper discusses how the authors have actively encouraged the students to engage with these tools and their reflections on this process. Author 1 encouraged the students to consider the collective AI tools that are available to them as a single personified entity, which they can think of as a personal tutor.

2. LITERATURE REVIEW

Artificial Intelligence tools have become commonplace in the day-to-day lives of modern Western society. This is not a new phenomenon; these tools are increasingly being employed in education spaces (Biagini, 2025; Garzón et al., 2025). Eight years ago, Luckin et al. (2016) claimed AI is a “powerful tool to open up what is sometimes called the ‘black box of learning’” (p. 18, parenthesis theirs). Since then, there have been some very significant developments in AI that have had various direct influences on education. Perhaps the most significant has been the release of Large Language Model (LLM) chatbots, including OpenAI's ChatGPT. University students have been observed to be using these chatbots to assist them in their academic writing (Firat, 2023; Ngo, 2023). Strzelecki (2023) identified key predictors of adoption and use of ChatGPT among Higher Education (HE) students:

1. Habit: Habit was found to be the best predictor of behavioural intention towards ChatGPT.
2. Performance Expectancy: The perceived performance benefits of using ChatGPT.
3. Hedonic Motivation: The pleasure or enjoyment derived from using ChatGPT.
4. Behavioural Intention: The intention to use ChatGPT was a dominant determinant of actual use behaviour.
5. Personal Innovativeness: The individual's willingness to try new technologies.

Strzelecki claimed these predictors play a “crucial role” (p. 4) in shaping students' attitudes and behaviours towards adopting and using ChatGPT in HE.

The COVID-19 quarantines enforced a sudden transition to online learning and engaging with digital technologies. There was a diverse and complex milieu of approaches to this adaptation. Observed challenges include female educators in particular struggling to differentiate between work and home zones (Syzykbayeva et al., 2021), a lack of appropriate infrastructure in many institutions, particularly those located in rural and underdeveloped areas (Motwani & Gupta, 2022), and the pedagogical barrier of digital inequity (Kozlov et al., 2022). The pandemic contributed to an increased awareness and a more active implementation of technologies, including AI tools, in HE (Abdelouahed et al., 2025; Gebregziabher Hagos et al., 2025).

There now exists a growing acceptance and utilization of AI in HE, indicating its central role in the intellectualization of society and the simultaneous development of the education system (Chugh & Jain, 2026; Syzykbayeva et al., 2021). Student-AI Collaboration (SAC) can significantly positively influence creativity and expressivity (Kim & Lee, 2023); however, the effects are varied based on students' attitudes toward AI and their creative skill levels. The use of AI in adaptive learning indicates a shift towards more personalized and efficient educational practices (Syzykbayeva et al., 2021). Personalized learning caters to each individual student's particular needs, learning styles, and abilities, and provides real-time feedback (Alam, 2023). AI-powered personalized learning assistants can provide tailored content and offer individualized instructional strategies (Chawla, 2024). AI-powered personalized tutors adapt to students' individual learning needs, improving academic performance and subject mastery. The purpose of personalized learning is to enable each student to achieve optimal educational outcomes (Kaswan et al., 2024).

Nevertheless, users may find it challenging to use new and unfamiliar technologies to their full potential (Liu & Ma, 2024; Rizvi, 2023). Lai et al. (2023) found intrinsic motivation was the strongest motivator for ChatGPT use among their undergraduate cohort. While AI tutors can augment human teachers' roles, monitoring students' rapport with their AI tutor is essential (Hatcher & Campbell, 2024). AI as a personal tutor holds promise for enhancing student learning experiences. As we continue to explore its potential, understanding the effects on academic performance, self-beliefs, and socialization is essential for effective educational AI design.

3. RESEARCH METHODOLOGY

The study was conducted as a blended quantitative and qualitative descriptive study combining an autoethnography of the primary researcher's teaching practice with analysis of student-generated artefacts to support triangulation of perspectives. Participatory research, in the form of autoethnographies, disseminates real-world experiences and observations without the need for invasive research methods. The reflective practice of autoethnographies is designed to reveal hard truths that require opportunities to process observations for the purpose of improving practice (Koopman et al., 2020). Autoethnographies are a valid and "transformative methodology for understanding and enacting higher education" (Pithouse-Morgan et al., 2021, p. 215). Autoethnographic practices have been successfully applied to research in preparatory, enabling, and introductory HE (Gilbert, 2013; Johnston, 2021; Matthews, 2020; Steiner, 2018). Mao et al. (2023) claim, "There is a need for autoethnography research in our field to reveal voices hidden in mainstream educational technology research" (p. 1).

Student-generated artefacts, including Statements of Acknowledgment of Engagement with AI (SofAs) and assessment extracts, were treated as naturally occurring qualitative data that captured students' authentic practices and reflections within the learning context. Artefact-based data are well established in qualitative descriptive research as a means of accessing participant meaning-making while minimizing researcher intrusion and supporting methodological rigour through data triangulation (Villamin et al., 2024; Jones & Worrall, 2024). To complement the qualitative analysis, descriptive quantitative statistics were used to summarize patterns of AI engagement across the cohort, providing contextual grounding for the thematic findings rather than inferential claims. The integration of low-inference descriptive statistics within predominantly qualitative designs is recognized as an appropriate blended approach for enhancing transparency, credibility, and analytic depth in educational research (Clark & Creswell, 2008; Greene et al., 1989).

3.1. Research design

In keeping with standard autoethnographic practice, the primary researcher kept a journal of observations of how students did, or did not, engage with and use AI tools as directed, instructed, and encouraged during the lectures and tutorials. The project was granted ethical approval (H-2024-024), and data were collected during the second semester of 2024. A second data set was collected after the completion of the semester in the form of extracts from students' assignments. Throughout the semester, the students were informed and reminded of the university guidelines (Appendix 1) regarding the use of AI for each assessment. The guidelines listed four levels of engagement with AI:

1. No AI: The entire assessment must be completed without the use of AI.
2. AI-Assisted editing: AI can be used as an editor to make improvements to the clarity or quality of work.
3. AI-Assisted ideas: AI can be used in the assessment for brainstorming, creating structures, and generating ideas for improving work, including feedback on content and methods.
4. AI-Assisted creation, human evaluation: AI is used to complete certain elements of the task, and students provide discussion or commentary on the AI-generated content.

A requirement of the university's policy was that students were expected to include a Statement of Acknowledgment of Engagement with AI (SofA) in the appendix for each assignment. These statements were collected, de-identified, and compiled into dataset two.

To ensure academic rigor and validity of the study, the qualitative data were analysed by strictly adhering to the established protocols of Reflexive Thematic Analysis (Braun et al., 2022) for dataset 1 and Inductive Thematic Analysis (Braun & Clarke, 2006; Proudfoot, 2023) for dataset 2. For quantitative descriptive statistics, as depicted in Figures 3 to 5, the SofAs were reviewed, and each statement was coded to the relevant institutional AI engagement level, the AI tools, and usage mentioned. Coded responses were then tallied and converted to frequencies/percentages to produce descriptive summary charts.

3.2. Participants

There were 33 students enrolled in English Literacy for University (EDUC1009) and 41 students enrolled in University Research (EDUC1013) at the beginning of Semester 2, 2024, making a total of 74 students. It is typical for this course to experience a large percentage of non-completers. At the end of the semester, 14 students had completed EDUC1009 and 22 completed EDUC1013. This non-completion rate of 52% is in line with long-term national trends in enabling education (Davis, 2023; Hodges et al., 2013). As this is a blended qualitative study combining autoethnography with analysis of student-generated artefacts, the sample size is adequate (Hughes & Noblit, 2017; Keleş, 2022a, 2022b), and the project would have been equally effective with a much smaller or much larger sample. Guetterman's (2015) meta-analysis of ethnographies in education found a mean sample size of 80 participants and a minimum sample size of one. This study, therefore, complies with standard ethnographic and qualitative practice in education.

After ethics clearance was granted by the university faculty's low-risk human research ethics committee, participants were informed of the research via an announcement on the learning platform and invited to participate by Author 2, the course coordinator. During the project planning phase, an opt-out approach was preferred and included in the research design. The opt-out approach was initially preferred as it has been found to offer a less skewed or biased sample in a large variety of studies (de Man et al., 2023; Kerr et al., 2019; Sakshaug et al., 2016; Strugnell et al., 2018). The opt-in approach to participant recruitment, increasingly required by ethics committees, may result in lower response rates and a biased sample. We propose that the opt-out approach should be the default recruitment strategy for future studies with low risk to participants (Junghans et al., 2005, p. 1). Herein, students are identified using pseudonyms when directly quoted. Collection of metadata was restricted by the Ethics Committee; however, all participants were 18 years old or older, and the cohort of students from which the participants were recruited had a balance of male (45%) and female (55%) students typical of the broader University student cohort.

3.3. AI Agents

To introduce the students to the concept of personifying the collective AI tools at their disposal into a single AI agent, narrative videos were created, which introduced the concept of the collective AI agents as characters. For the English literacy course, a Science Fiction genre was used for the narrative. In the research unit, a Fantasy genre was employed. Scripts were generated by ChatGPT. Extracts of the scripts were submitted to getting.ai as prompts to generate pictures (Figures 1 and 2). The scripts were entered into IIIElevenlabs.io to generate voice-over narrations. Background music was created by Udio beta. These four AI-sourced components were collated to create a video using Microsoft PowerPoint. At the start of the lectures in the third week of the semester, these videos were played to the students.

The videos served two purposes by presenting the concept of AI as an agent that can perform the role of a personal tutor, while simultaneously demonstrating the collective variety of creative outputs of free GenAI tools that the students could readily access. Narrative videos have been shown to have the potential to support learning in constructivist learning environments (Abrar, 2024; Robin, 2016; Smeda et al., 2014). In the science fiction-themed video for the English literacy course, the collective AI personification was presented as Astra Nexus (Figure 1). For the research unit, the fantasy-themed personification Cogito (Figure 2) was generated.



Figure 1. AI Personification – Astra Nexus



Figure 2. AI Personification – Cogito

For the first English Literacy assignment, the students were given the task to write an essay draft and submit it to Turnitin and reflect on the Turnitin report by answering seven prescribed reflective questions. This semester, they were also offered a second option in which they could submit their draft to Studiosity WF+ and reflect on the AI-derived feedback report. The second assessment task was a language point portfolio, and the third assessment was an oral presentation.

For the research unit, the students engaged in a single autonomous research project during the semester, and all assignments related to this single project. The first assessment was a research portfolio demonstrating their approach to beginning their project. The second assessment was an oral presentation on the mid-semester progress, and the final assessment was a 2000-word research report disseminating their research findings.

For each assessment task, the students were encouraged to explore the use of AI at level three, AI-assisted ideas (Appendix 1), according to the university's guidelines. For the oral presentations, the students were instructed that they were also allowed to employ GenAI to create visual content for the PowerPoint slides.

Inclusion of a Statement of Acknowledgment of Engagement with AI (SofA) was added to the rubrics for each assignment. For the first assignment in the Research unit, it was allocated 5% on the rubric. For the first assignment in English Literacy, it was not given any point value in the rubric; it was listed as a hurdle requirement for the assignment. If the statement was not present, the submission would not be

marked, and the student was sent a request to resubmit with the statement added. For other assignments, it was included in the rubric criterion for appropriate referencing and included in the points percentage allocated to that criterion.

4. RESULTS

Throughout the tutorials, the lecturers frequently prompted the students to engage with AI tools to assist in a variety of tasks. This was also demonstrated when they used Copilot as a search engine for the in-class research project and often used ChatGPT to generate ideas during class discussions. During the tutorials, ChatPDF was sometimes employed to summarise the weekly course reading(s) and supply questions for class discussions. Students were also encouraged to use this tool to assist in critiquing sources they had found for their research projects and portfolios. Only a few students mentioned that they had engaged with ChatPDF to assist with the weekly readings outside the tutorials.

Students have, in general, responded well to the concept of engaging with AI as a tool. They often used ChatGPT to help with idea generation, clarifying terms, brainstorming, and improving their language skills. Often, the students were engaging with GenAI during the tutorials. However, there was no evidence of any positive attitude toward personifying the collective AI tools into a single personal tutor-like figure. During one tutorial, the AI Agent Astra Nexus was mentioned. One student, who was in the lecture where the video was presented, commented: “*Who is Astra Nexus?*”. She had clearly forgotten and not engaged with the concept. Students did not see the need to personify the collective AI tools. They already viewed ChatGPT as personified, and the AI-driven search tools they perceived as machine-like.

Students acknowledged that the spelling and grammar checking integrated into Microsoft Word is AI-driven. They are aware of AI integration in their daily lives, with its strong presence in marketing, recommendations on entertainment through suppliers like Netflix and YouTube, and AI integration in apps like Google Maps. Students acknowledged that they understand search engines are driven by AI algorithms and how this influenced their research.

The student cohort typically responded well to the approach of including a SofA in the appendix of each assessment. One student stated he really enjoyed writing the statements as he felt it helped reflect on how he used AI and its role in his work. Many other students, however, begrudgingly complied with this request, and across the cohort of students, from the multiple assessment tasks, a total of 72 SofAs were submitted: a response rate of 73.5%. (This figure takes into account students who withdrew mid-semester; a total of 98 assignments were submitted).

Only two SofAs explicitly claimed that there was no use of AI, and a further three explicitly stated minimal or minor use. Three statements explicitly indicated Level 4. Figure 3 illustrates the distribution of levels (according to the university’s guidelines) of engagement stated.

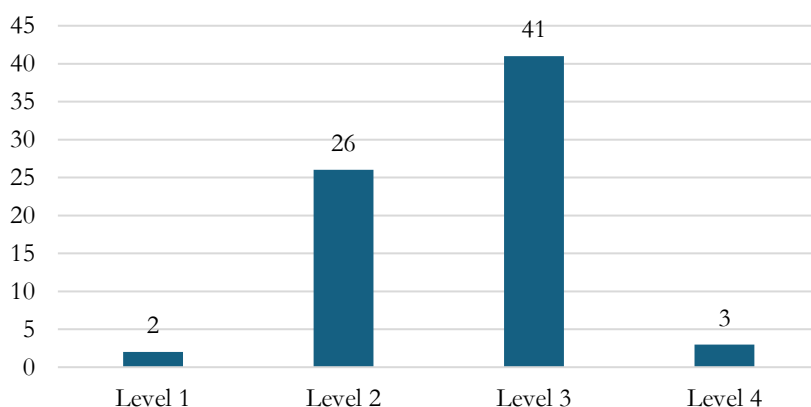


Figure 3. Student Engagement in Accordance with AI Guidelines

Qualitative thematic analysis of the data corpus identified five themes:

4.1. Theme 1: Use of AI for Basic Editing and Proofreading

Students were generally accepting of AI's role in Microsoft Word's integral spelling and grammar checkers. One student chose to disable these functions as she felt they inhibited her learning. Twenty-six SofAs acknowledged Level 2 AI engagement using AI tools like Microsoft Word's spell check, grammar check, and other AI writing assistance tools, exemplified by this statement: *"My engagement with AI when creating this essay was a level 2. This was due to using the spelling and grammar checker on Microsoft Word, to aid with editing"* (Student 3). One student used an AI speech-to-text tool to write their assignment.

Grammarly and similar tools were widely used for spelling, grammar, and writing structure improvement. Studiosity WF+ was also used for final proofreading and suggesting improvements: *"I have used Studiosity to help proofread this document"* (Student 1). However, despite much encouragement and many reminders that the students were given free access due to the pilot program, only nine SofAs acknowledged engaging with Studiosity. Many students view AI spelling and grammar checking tools as necessary support for refining academic language, with minimal impact on original content creation. They view these tools as integral to ensuring polished final drafts, providing a layer of confidence in submission quality. However, this was not unanimous, and some exhibited negative feelings towards these tools.

4.2. Theme 2: AI for Research and Information Gathering

Students frequently used AI-powered search engines to find relevant information and sources. They acknowledged that Google, Google Scholar, and academic databases use AI-driven algorithms in the search process. Eight SofAs acknowledged the use of Scite.ai to assist in locating relevant sources: *"I acknowledge the use of scite.ai to generate links to external academic articles to use for researching to help guide this assignment"* (Student 6). Other uses of Google listed in the SofAs include clarifying terms, finding images, and identifying databases.

This level of engagement with AI was most typically labelled as Level 2 by the cohort. They saw that this type of AI algorithm-driven search is limited to facilitating access to resources without altering the content of their assessments. Students expressed that search engines are essential for building a research foundation, particularly in locating reputable and relevant academic resources efficiently: *"Uses of AI include search engine functions for finding relevant sources"* (Student 2). Demonstrating the use of GenAI for information gathering, Student 5 acknowledged using ChatGPT to *"help clarify the different types of research paradigms"*. Student 4 used Copilot to rephrase their research question to see if it could derive some potentially improved alternatives. However, they found *"the outcome did not give a distinctly different form to inspire change and was discarded."*

4.3. Theme 3: AI for Idea Generation and Content Organization

Typically acknowledged as Level 3 AI engagement due to the AI's role in content enhancement, common uses of GenAI were to generate ideas, draft questions, and organize content. LLMs, including ChatGPT (n=34), Copilot (n=3), and Claude (n=1), were identified as useful tools for these tasks. Other tasks assigned to ChatGPT included brainstorming topics, generating research questions, and suggesting structural organization for assignments. Students used AI for specific academic tasks, including generating questions for a game they included in their Oral Presentation: *"I used ChatGPT to write questions for a Kahoot"* (Student 1), and to generate synonyms to help with broadening their initial search terms: *"I used ChatGPT to help find synonyms then give me a list of related terms"* (Student 7). Other specific cases of using ChatGPT included formatting reference lists and summarizing academic articles and TED Talk videos. One student used ChatGPT to suggest which Boolean operators to use in their searches to improve finding relevant articles.

An optional task in one of the assessments was for the students to generate a learning resource. One student chose to generate a quiz and used ChatGPT to assist: *"I used ChatGPT to give ideas of questions I could use in my quiz, although I wrote my own"* (Student 1). A similar task was to generate hypothetical questions for the question-and-answer section required at the end of their oral presentation: *"...generate ideas and material for producing Q and A questions to be given out"* (Student 5). Students appreciated GenAI's ability to provide

quick, structured responses, helping them clarify ideas and refine academic language, yet they typically felt they retained control over anything that could be described as content creation.

4.4. Theme 4: AI for Enhancing Presentation and Design

Students were given permission to engage with AI at Level 4, according to the guidelines, for the generation of visual content in their PowerPoint slides for the oral presentation assessments. Three students acknowledged that level four engagement AI tools were used to enhance the visual aspects of presentations. Not all students considered using AI for this, or similar purposes, to be Level 4: “*The internal design feature of PowerPoint presented layout variations of the chosen theme; one variation was selected for some slides. Under the University of Adelaide guidelines, I would declare Level 3 AI engagement*” (Student 2), and “*The opening image was proposed (possibly pre-generated) by PowerPoint; one variation was selected. I declare Level 3 AI engagement*” (Student 4). One use of AI connected to this theme, yet one that did not directly produce content included in the assessments, was Student 7’s innovative idea to assist with their understanding of the assessment task: “*Make a layout of the features in the assignment to help visualise it*”.

4.5. Theme 5: AI in Summarization and Content Analysis

ChatGPT and AI transcription tools were used to summarize TED Talks and academic articles, and assist with digesting complex academic content: “*I also used an AI to transcribe the TED Talk Brain Hacks: 6 secrets to learning faster. I found this useful to be able to read through information and highlight points*” (Student 1). One student used ChatGPT to simplify the content of academic journal articles that they found hard to understand. Another asked it to summarize a TED talk and then indicate a strength and a weakness of the talk. It is apparent that students value AI’s summarization capability as a learning aid, especially when reviewing dense academic material.

These five themes highlight the diverse ways in which the students engaged with AI tools to support their academic work, ranging from basic editing to advanced research and content generation. Within the SofAs, there is a clear emphasis on transparency, with students explicitly detailing how AI was used, highlighting a conscientious approach toward academic honesty. The 72 SofAs comprised a word count of 3469 words, averaging 48.2 words for each Sofa. The longest statement was 137 words, and the shortest was 16: “*I acknowledge the use of Microsoft Word Spelling and Grammar Checker to help edit this assignment*” (Student 3). Many statements acknowledging Level 3 or 4 also included acknowledgment of Level 2, as exemplified by Student 6:

I acknowledge the use of Microsoft Word Spelling and Grammar Checker to help format this report. I acknowledge the use of scite.ai [https://scite.ai] to generate links to external academic articles to use for this assignment. The following prompts were inserted into scite.ai on the 11th of August 2024: Find me an academic article looking at mental health management among first-year university students.

There were two cases of suspected academic integrity breaches. In both cases, the student declared level 3; they had clearly used AI for content generation (Level 4). One case was handled internally; issues, including moving home, had caused the student to feel they needed to cut corners. The student was reminded of the guidelines and given the opportunity to resubmit. The other case was a re-offender, and his case was sent to the university’s academic integrity board. Two assignments returned very high AI content detection reports (91% and 86%) that were false positives. The lecturer had watched the students’ projects develop, so was familiar with their work; they used Grammarly, and in one case, Google Translate, to assist with the writing. They acknowledged AI as a writing assistant, so no follow-up action was needed.

4.6. The Writing Centre

The manager of the Writing Centre visited the cohort during a lecture at the start of the year and gave a short (approximately five-minute) presentation on what the Writing Centre does and offers, and how to book a session. Despite the free, one-on-one, face-to-face service with a personal learning advisor offered to the students, very few took up the offer. The few that did invariably gave positive reviews of the service.

During tutorial discussions, some students expressed a sense of stigma was attached to engaging with the Writing Centre.

4.7. Grammarly

The most common reported experience from the students regarding Grammarly was that after trying it a few times, they stopped using it. Those who had made much use of Grammarly in their schooling years reported that other tools have now superseded its role and most often referred to the Editor tool embedded in Microsoft Word. References to Grammarly appeared in only five SofAs.

4.8. Studiosity

During the period of data collection, the university was trialing Studiosity's AI agent Writing Feedback Plus (WF+). After some advocacy, the preparatory cohort was included in this trial. This allowed them free, unlimited access to this new and developing tool. A pilot program appraisal was conducted simultaneously with this project (Lee, 2024). Despite much positive verbal feedback from those students who chose to engage with this service, references to Studiosity WF+ only appeared in nine SofAs. The majority of students' written work would definitely have improved with greater engagement with the service. During in-class discussions, students explained the sense of stigma they felt regarding engaging with the writing centre, which extended to engaging with the digital online service provided by Studiosity.

One student in the research class described Studiosity WF+ as "Amazing" for his essay writing. In the pilot evaluation, it was observed that some students did not consider WF+ effective, as it lacked a human element and did not know the rubric for each assignment. Students feel real human feedback "tends to be more nuanced and personalized" (Lee, 2024, p. 4) and less mechanical. They also noted that Studiosity WF+'s feedback lacked encouragement or motivation. These elements are important for building students' confidence and fostering positive learning experiences (Adarkwah, 2021; Karaman, 2021; Morris et al., 2021).

Figure 4 shows the most frequent AI tools acknowledged by the students in their SofAs. The numbers in the chart correspond to the number of SofAs mentioning each tool. Consistent with other research (Chan & Hu, 2023; Schei et al., 2024; Zhang & Yang, 2024), ChatGPT is the most frequently used LLM AI chatbot by students in this cohort. When acknowledging the use of ChatGPT, 17 (50%) SofAs included the prompts used. Other tools that received only one mention include Genie, Claude, and Elicit.

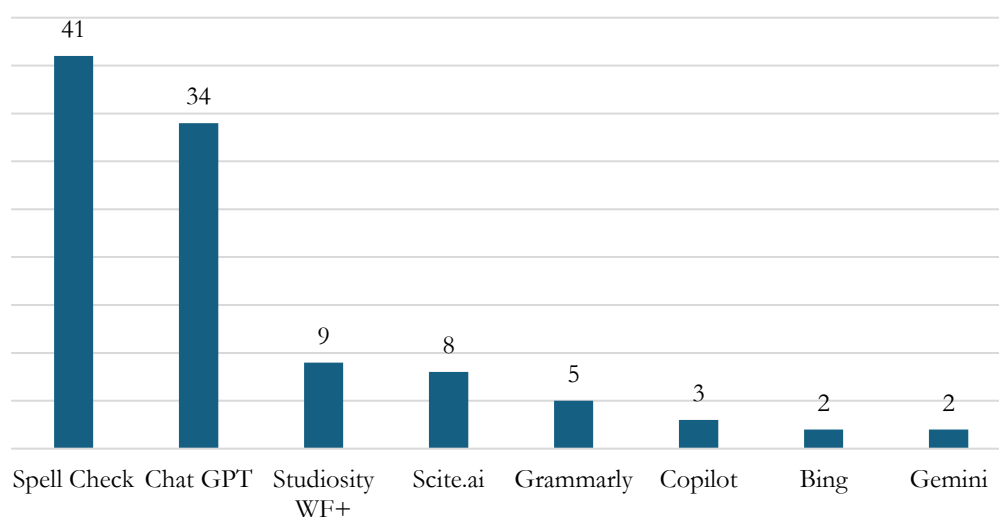


Figure 4. The Most Frequent AI Tools Acknowledged by the Students

Figure 5 shows the most common reasons/usage for AI expressed in the SofAs. The numbers in the chart correspond to the number of times each use type was mentioned in the SofAs.

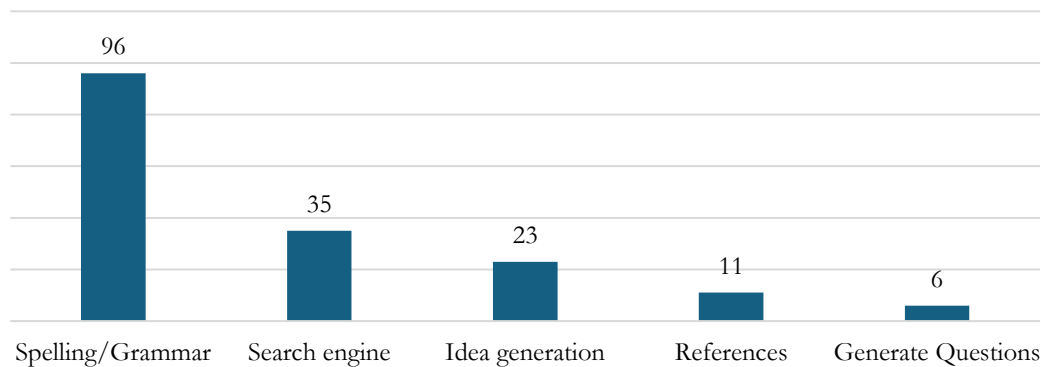


Figure 5. Most Common Reasons/Usage for AI

5. DISCUSSION

GenAI is a powerful tool that is now readily available to students. Some preparatory students are keen and ready to engage with it successfully, while others may be fearful, unsure, or not willing to try. Normalising the use of the tools may help preparatory students engage purposefully; teaching them the responsible use of the tools will help them engage ethically, and humanising the tools will help them engage comfortably.

AI chatbots can be used as a research tool. Students were encouraged to experiment with using AI as a search engine. Microsoft's Co-Pilot was found to be more reliable than ChatGPT as it more frequently provided links to peer-reviewed articles that do exist, rather than hallucinations. The default format for chatbots when drafting a literature review is something that more closely resembles an annotated bibliography. Students found the AI agent outputs were typically structured by article rather than by topic into a thematic synthesis. Furthermore, when asked for at least five peer-reviewed articles, both ChatGPT and Copilot frequently only included four publications, many of which were not peer-reviewed, often blog posts.

There is little evidence in the academic literature supporting the ability of chatbots to reduce students' cognitive load when producing assessment artefacts. Prior to the current generation of Large Language Models (LLMs), Brachten et al. (2020) found that language-based assistants are more suitable to reduce cognitive load; however, there are also claims to the contrary. Huang et al. (2022) observed that lower-achieving students were burdened with extraneous cognitive load when engaging with chatbots, which may, therefore, be a barrier to students' learning. Rostami and Mehdi Abadi (2023) found that chatbots, in the context of education, can have "complex and varying effects on students' cognitive abilities" (p. 64). However, the positive observations they report are a reduction in cognitive load by taking over routine or repetitive tasks, which can significantly help prevent cognitive fatigue.

Students who attempted to use ChatGPT to assist with their assignments typically found the outputs unreliable or unsuitable, requiring much human-in-the-loop interjection. In this manner, it did not reduce cognitive load. However, when students were stuck for ideas or came to the realisation they needed help, engaging with ChatGPT and other AI tools often produced some positive results. Some students who employed AI tools for proofreading overly trusted the tool. This may have reduced cognitive load, however, at the cost of other outcomes (Iqbal et al., 2025; Jose et al., 2025). This was most evident in reference lists. Other students employed AI agents for one stage of a more comprehensive approach to proofreading. In these cases, the reduction in cognitive load is questionable, as they found the AI agent sometimes did not understand the narrative or the rubric, and these students found the agent did not streamline the proofreading process. This notion of contextual importance of Chatbots' abilities to reduce cognitive loads is supported in the literature (Hsu et al., 2023).

5.1. Stigma

In academic environments (face-to-face, online, and blended), students often face various challenges that require external support, such as assistance from a university writing centre. However, a significant barrier to seeking this help is the associated stigma (Kim et al., 2025; Maringe & Jenkins, 2015; Ruihua et al., 2025). Students have confessed they feel this sense of stigma also extends to seeking help from AI tools such as Grammarly and Studiosity WF+. Engaging with AI tools as a form of third-person proofreading is an entirely private matter, so this sense of stigma is purely internal. This phenomenon should be understood if educators are to encourage students to gain the best value from the tools available to them.

Stigma is the internalized sense of shame or self-embarrassment that individuals feel when considering seeking help, whether from human resources, like a writing centre, or technological aids, like AI. Unlike public stigma, which involves societal judgment, or self-stigma, which involves internalizing societal views about oneself, this form of internal stigma is rooted in personal beliefs and attitudes about the act of seeking help itself.

Several factors may be contributing to the development of stigma, including cultural expectations, fear of judgment, perfectionism, and lack of awareness. In many cultures, there is a strong emphasis on self-reliance and independence. Seeking help can be perceived as a sign of weakness or incompetence (Kim et al., 2025; Ntumi et al., 2025; Pasupuleti, 2013). Students may fear being judged by their peers or instructors for needing assistance, leading to feelings of inadequacy. Internal stigma expressed by students in this cohort implies a sense of self-judgment. This may be exacerbated in racial and ethnic minorities (Cheng et al., 2013). High achievers often set unrealistic standards for themselves and may view seeking help, even in the form of using a spelling checker, as a failure to meet these standards (Dickinson & Dickinson, 2015). There may be a lack of understanding about the benefits of seeking help, engaging with AI assistance, and the resources available, leading to misconceptions and internal stigma.

Stigma can have several detrimental effects on students, including academic performance, mental health, and skill development. Avoiding help can lead to poorer academic outcomes, as students struggle to meet expectations without the necessary support (Chen et al., 2025; Kim et al., 2025). Assignments were submitted that would have been noticeably improved with some proofreading assistance. Tools like Grammarly and Studiosity WF+ could improve students' grades quickly and easily. The stress and anxiety associated with not seeking help can exacerbate mental health issues, leading to a vicious cycle of avoidance and distress (Zeng et al., 2023). Students expressed that they feel that engaging with these tools may cause them to miss out on opportunities to develop essential skills, such as writing and critical thinking, which are crucial for their academic and professional futures.

To combat this sense of stigma, it is essential to create an environment that normalizes and encourages seeking help. Some potential strategies include promoting awareness, personifying the AI Tools, normalizing help-seeking, providing supportive environments, and encouraging peer and mentor support. It is important to educate students about the benefits of using available resources and the importance of seeking help when needed, and to encourage the students to think of all the collective tools available to them as a personal mentor or tutor.

It may also help to share success stories of students who have benefited from seeking help and highlight that it is a common and accepted practice. Another potentially useful strategy may be to ensure that writing centres and AI tools are welcoming and non-judgmental spaces where students should feel comfortable seeking assistance. Fostering a culture of peer support where students can encourage and assist each other in seeking help may also be beneficial. Offering mentor support and encouraging students to make the most of the tools available to them in ethically and academically integral ways will also help reduce stigma.

Stigma is a significant barrier that prevents students from accessing the AI-automated support available to them, which they may need to succeed academically and personally. By understanding and addressing this phenomenon, educators and institutions can create a more supportive and inclusive environment that empowers students to seek the help they need without fear of judgment or shame or experiencing a sense of intrinsic stigma.

5.2. Practical Implications

The findings of this study imply several practical actions for enabling and preparatory programs seeking to incorporate GenAI as a learning support while maintaining academic integrity. First, educators can explicitly position GenAI tools as a supportive tool, akin to a personal tutor for clarification, exemplars, planning, and language support, while also emphasizing that students remain accountable for disciplinary understanding, evidencing, and final authorial decisions. Normalising this framing in class demonstrations and learning materials may reduce anxiety among hesitant students and help students distinguish acceptable assistance (e.g., editing, idea generation) from inappropriate substitution of assessed work.

Second, because students in this cohort commonly use GenAI for brainstorming, rephrasing, and summarization, practical teaching should focus on verification and critical use. In-class activities can model how to (a) triangulate chatbot outputs with credible sources, (b) check claims and quotations, (c) interrogate references for authenticity, and (d) use prompting strategies that require students to justify, compare, and refine ideas rather than accept first-pass outputs. This approach supports academic literacies and may mitigate over-trust in tools used for proofreading, referencing, and research synthesis.

Third, the internal stigma identified in relation to both human and AI-supported writing assistance indicates a need for institutions to make help-seeking visible, routine, and low-stakes. Programs can embed short, structured “support checkpoints” for tasks such as draft submissions and feedback plans, and provide exemplars showing that effective students routinely use multiple supports, including peer revision, accessing the writing centre, and engaging with AI tools, without this implying deficit. Where possible, messaging from teaching staff and support services should consistently reinforce that assistance-seeking is an expected academic behaviour, particularly in enabling and preparatory contexts.

Fourth, the Statements of Acknowledgment of Engagement with AI (SofAs) functioned as both a transparency mechanism and a reflective learning artefact. Practically, educators may strengthen this benefit by providing a brief template which could include spaces for tools used, purpose, key prompts or actions, what was accepted/rejected and why, and how sources were verified. Marking the SofA lightly for completeness and reflection may further promote honest disclosure while helping students develop metacognitive awareness of their learning processes.

Finally, alignment between assessment design, rubrics, and AI guidance remains essential. If AI use is permitted for particular stages, including idea generation or language editing, rubrics can explicitly value the human elements that remain assessable, for example, argument quality, evidence selection, synthesis, reflection, and discipline-specific conventions. For oral presentations and multimodal tasks where generative tools may be used to create visuals, educators can require brief captions or process notes explaining how generated materials were evaluated and adapted, thereby maintaining transparency and encouraging critical design decisions.

5.3. Limitations and Future Research

Several limitations should be considered when interpreting the findings of this study. First, the study was conducted within a single Australian university preparatory context and with one semester cohort; as such, the patterns of GenAI use and the salience of themes may not transfer directly to other disciplines, institutions, or student populations. Second, the artefact dataset relied on students’ SofAs, which are self-reported and shaped by students’ interpretation of institutional categories and by their confidence in disclosing AI use. Although SofAs support transparency, they may under-report or simplify complex workflows. The descriptive quantitative summaries, therefore, represent reported engagement rather than verified tool telemetry or full process traces.

Third, the cohort experienced a substantial non-completion rate typical of enabling programs; consequently, the dataset may over-represent students who persisted and complied with assessment requirements. In addition, the ethics conditions precluded the collection of participant metadata, limiting analysis of how AI use may differ across sub-groups and constraining equity-related interpretations. Finally, the autoethnographic component necessarily reflects the primary researcher’s positionality as educator, including interpretive judgments about in-class observations and suspected integrity breaches; while

triangulation with student artefacts enhances credibility, future studies could benefit from independent coding teams and/or member-checking approaches where feasible.

Future research should extend this work in several directions. Replication across multiple institutions, disciplines, and delivery modes would help establish whether the observed engagement patterns and stigma dynamics are context-specific or broadly generalisable. Longitudinal designs that follow students beyond a single semester could examine whether guided GenAI use contributes to sustained improvements in academic literacies and whether reliance decreases or becomes more strategic over time. Experimental or quasi-experimental studies could evaluate the effects of specific pedagogical interventions, such as explicit verification instruction, structured prompting workshops, or alternative SofA templates, on both learning outcomes and disclosure quality.

Methodologically, richer data sources could strengthen future analyses, including voluntary prompt logs, screen-capture elicitation, or think-aloud protocols to better capture iterative human–AI collaboration and to differentiate editing, ideation, and generation practices. Given the rapid evolution of GenAI tools and shifting institutional policies, ongoing research should also document how changes in platform affordances, access, and detection/assurance technologies shape student behaviour. Finally, targeted investigations into internal stigma are warranted, including interventions that integrate writing-centre support with AI-enabled drafting and feedback, and evaluation of whether normalising multi-modal support reduces avoidance and improves both confidence and writing quality in enabling education cohorts.

6. CONCLUSION

The integration of GenAI tools into the educational landscape presents a transformative opportunity for enhancing preparatory student learning experiences. AI can serve as a valuable personal tutor, providing students with immediate access to information, feedback, and support tailored to their individual needs. By fostering an environment where students are encouraged to engage with these tools ethically and responsibly, educators can empower them to take ownership of their learning journey. However, the approach to personification of collective AI agents has, in this study, proved more novel than valuable. Further research will investigate alternative approaches. Clear guidelines and instructions helped the students know how to engage with AI and encouraged them to do so meaningfully and responsibly. Moreover, the acknowledgment of AI engagement in assignments not only promotes transparency but also encourages students to reflect on their learning processes.

The project revealed the presence of internal stigma regarding students' willingness to engage with AI. To combat this stigma, it is essential for educators to create a supportive environment that normalizes help-seeking behaviours. By promoting awareness of the benefits of AI tools and encouraging students to view them as integral components of their learning process, educators can help alleviate the fears and shame associated with seeking assistance. Initiatives that personify AI tools as friendly, approachable entities can further diminish the stigma, allowing students to engage with these resources without fear of judgment.

It is crucial for educational institutions to continue exploring the potential of AI technologies while addressing the challenges and ethical considerations that accompany their use. By doing so, a more inclusive and supportive learning environment that harnesses the power of AI to enrich student outcomes and prepare them for the complexities of the modern world can evolve. Ultimately, the journey of integrating AI into education is just beginning, and ongoing research and collaboration will be essential in shaping its future. As advancements in these technologies continue, educators and institutions must remain committed to fostering a culture of innovation, critical thinking, and ethical responsibility.

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Appendix 1. Extract from University of Adelaide A

	AI Use Type	What this means:
1	NO AI	The entire assessment must be completed without the use of AI. AI must not be used at any point during the assessment, including for translation, editing, generating content or ideas.
2	AI-ASSISTED EDITING	AI can be used as an editor to make improvements to the clarity or quality of your work. This includes: • spelling and grammar checking and rewriting for style and conciseness • feedback on language, grammar structure • using AI for data cleaning • (add as appropriate for discipline) You are accountable for the quality and appropriateness of the language and writing, as well as all other aspects of the assignment. AI can be used to improve your work, but it should not be used to generate new ideas, answers or content (this is Level 3: AI-Assisted Ideas).
3	AI-ASSISTED IDEAS	AI can be used in the assessment for brainstorming, creating structures, and generating ideas for improving work, including feedback on content and methods. You should clearly <u>acknowledge how AI was used</u> in preparing the assessment. AI can be used as a source of information. You are accountable for validating and verifying the information. Any AI-generated content should be <u>cited as a source</u> (i.e. quoted or sufficiently paraphrased <u>and</u> source cited).
4	AI-ASSISTED CREATION, HUMAN EVALUATION	AI is used to complete certain elements of the task, and you will provide discussion or commentary on the AI-generated content. This assessment explicitly requires critical engagement with AI-generated content and the evaluation of its output. You will use AI to complete specified tasks in your assessment. Any AI-generated content <u>must be cited</u> . You are expected to fully understand and be able to discuss every aspect of the AI-generated content.
Confidentiality and copyright: You should not upload or input any information into AI that you do not own yourself, i.e. content that might be subject to copyright. You must not input any confidential information into AI, for example patient case notes.		
Academic integrity: These guidelines are provided to help you understand the expected and permitted use of AI in each assignment. If you have questions about appropriate use, you must check with your tutor or course coordinator before using AI in your assessment. Inappropriate use of AI may lead to an academic integrity report. You are expected to fully understand and be able to discuss every aspect of your assessment. Whatever level of AI use is permitted, if there is a concern about the use of AI tools exceeding the assessment guidelines, you may be asked to discuss the assignment with the tutor before the mark is finalised.		