Generative AI in Multicultural Classrooms: A Narrative Inquiry into International Students' Experiences

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ABSTRACT: This study investigates generative artificial intelligence (GAI) use among international undergraduates in multicultural educational settings at a Thai university. Using narrative inquiry with 64 students from 10 countries, it explores students' discourses and practices around GAI. A deductive thematic analysis revealed key themes: Benefits in learning and efficiency, dependency risks, the need for balance between tool and crutch, and concerns about academic integrity. Students' uses of GAI included research, information gathering, writing assistance, brainstorming, and language translation, offering nuanced insights into GAI's role in multicultural higher education.

KEYWORDS: International students, multicultural education, generative artificial intelligence, Thai higher education

Artificial intelligence (AI), particularly its generative applications, is reshaping educational paradigms worldwide, redefining how knowledge is acquired, synthesized, and utilized in academic settings (Lodge et al., 2023; Yu, 2024). Although extensive research has demonstrated AI's advantages in facilitating personalized learning pathways (Li & Wong, 2023), broadening information accessibility (Dwivedi et al., 2023), and automating administrative tasks, much of this scholarship has concentrated on domestic student populations within culturally homogeneous educational systems (Chan & Hu, 2023; Li et al., 2022). Consequently, the unique and complex experiences of international students, particularly those studying in culturally distinct non-Western contexts, have largely remained unexamined. Such oversight limits a comprehensive understanding of AI's influence on diverse student populations and neglects the broader implications of technology integration across varied cultural landscapes. Given that international students are often positioned at the intersection of differing educational expectations and practices, examining their interactions with generative artificial intelligence (GAI) tools can yield invaluable insights into the complex ways in which AI reshapes academic experiences in multicultural settings.

Despite recognition that generative AI tools hold significant potential to support research, academic writing, and learning (Bedington et al., 2024; Morgan, 2023; Waluyo & Kusumastuti, 2024), limited inquiry has focused on international students' perspectives in non-Western educational environments, where distinct cultural and institutional dynamics may impact AI usage. Furthermore, AI tools pose challenges in equity and inclusivity, particularly concerning the identification and evaluation of AI-generated content, as Farrelly and Baker (2023) suggest, noting that inherent biases within AI models can lead to erroneous attributions or prejudicial assessments. Such concerns underscore the need for fair and culturally sensitive AI-driven evaluations, especially for international students who may already face barriers to equitable assessment. The present study seeks to address these critical gaps by examining the experiences of international undergraduates in Thailand, exploring how they perceive and incorporate generative AI tools within their academic routines, and identifying the challenges they encounter. By contributing a thorough, multicultural perspective on AI's role within global education, the study aspires to broaden current understandings of educational technology's reach and limitations, fostering a more inclusive approach to AI-enhanced learning.

Literature Review

The integration of generative artificial intelligence (GAI) tools in higher education has drawn increasing scholarly attention to students' perceptions and use of these technologies. Recent research explores how students engage with GAI for academic tasks, the perceived benefits and drawbacks, and the emerging ethical and cultural concerns. This review synthesizes current findings on student discourses and practices with GAI, particularly among international and multilingual learners, and situates the present study within this evolving area of inquiry.

Students' Discourses of Generative Artificial Intelligence (GAI)

Over the last five years, a series of empirical investigations have scrutinized university students' perceptions of generative artificial intelligence (GAI), spanning diverse educational levels, including both undergraduate and graduate studies. These studies have unveiled a substantial awareness and interest in content generation technologies among domestic students, particularly those who appreciate the quality of the content produced by such applications. This cohort of students posits that the integration of GAI into academic activities could not only foster creativity but also enhance employment opportunities. Furthermore, students recognize the advantages of AI in offering tailored learning support, aiding in writing and brainstorming tasks, and bolstering research and analytical skills. However, they have voiced concerns regarding the suitability of AI in managing

certain administrative functions like admissions, examinations, and job placements—a sentiment echoed by findings from research conducted in the Philippines (Obenza et al., 2024), Hong Kong (Chan & Hu, 2023), and India (Kumar & Raman, 2022).

In a distinct vein, Johnston et al. (2024) revealed that a vast majority (93%) of students in UK higher education are cognizant of GAI technologies, with more than half considering or already using them for academic purposes. Interestingly, while there is considerable support (54.1%) for the use of applications like Grammarly, a significant majority (70.4%) express opposition to employing ChatGPT for writing entire essays. This resistance is notably stronger among students who have confidence in their writing capabilities, suggesting a correlation between self-assessed proficiency and the acceptance of GAI tools. Conversely, studies involving international students, such as those by Chan and Lee (2023) and Kelly et al. (2023), depict a generally positive outlook towards GAI, underscoring its potential to significantly enhance productivity, efficiency, and personalization in learning. Despite some students' lack of direct experience with these technologies, there remains a pronounced confidence in their utility. These findings collectively accentuate the necessity of integrating GAI tools with conventional teaching methodologies, aiming to enrich the educational experience by leveraging the strengths of both innovative and traditional instructional approaches.

The perceptions held by university students about engaging with GAI applications align closely with scholarly research dedicated to exploring the advantages of such technologies. Specifically, text-to-text AI platforms, exemplified by ChatGPT, have been acknowledged for their significant contribution to academic writing support. They offer particularly valuable assistance to students facing challenges with English fluency by facilitating brainstorming sessions and providing constructive feedback on written assignments (Chan & Lee, 2023; Lo, 2023). Similarly, text-to-image AI generators, such as DALL-E and Stable Diffusion, have been demonstrated to be instrumental in conveying technical and artistic concepts within the disciplines of arts and design, thereby enriching the pedagogical toolkit available for educators in these fields (Wang et al., 2024). Furthermore, GAI tools extend their utility to the domain of research by aiding in the generation of innovative ideas, the synthesis of extensive information, and the meticulous analysis of data (Salah et al., 2023). This multifaceted support significantly enhances the efficiency and productivity of students in executing scholarly assignments and contributing to academic publications, evidencing the transformative potential of GAI across various aspects of academic endeavor (Dwivedi et al., 2023).

Higher education institutions are progressively exploring the adoption of AI applications to enhance the efficiency of learning processes and provide tailored educational support to international students. The recognition of the myriad benefits AI can offer, including personalized learning experiences and support for language acquisition, drives this initiative. However, there is an acute awareness of the need to navigate substantial challenges, including privacy issues, cultural

and linguistic differences, and ethical considerations to optimize the academic experience for international students effectively (Wang et al., 2023). Given that international students predominantly engage in their studies through English Medium Instruction (EMI), a systematic review by Bannister et al. (2023) confirms the potential utility of GAI in diverse educational contexts. This includes facilitating language learning, aiding content creation, and enhancing institutional assessment processes. Yet, the literature reveals a paucity of research exploring international undergraduate students' perceptions of using GAI tools in academic settings. This gap highlights the urgency of investigating these views to inform the development of comprehensive academic policies. By understanding international students' perspectives on GAI usage, higher education institutions can formulate policies that not only leverage the benefits of AI but also address the specific needs and concerns of this diverse student population, ensuring an inclusive and effective implementation of AI technologies in educational environments.

Student Usage of GAI in Their University Studies

Recent investigations into the utilization of GAI within educational settings have predominantly employed theoretical frameworks such as the technology acceptance model (TAM) and the theory of planned behavior (TPB) to elucidate the factors influencing students' acceptance and use of GAI tools (Abdullah & Ward, 2016; Davis, 1989). These studies emphasize the critical roles of perceived usefulness (PU) and perceived ease of use (PEOU) in shaping students' attitudes toward AI technologies. For instance, research by Kim et al. (2020) on U.S. college students' perceptions of AI teaching assistants demonstrated a direct positive relationship between PU and PEOU and the intention to adopt such technologies, despite reservations about reduced human interaction and possible technical issues. Similarly, Hu (2022) confirmed that these factors significantly affect students' willingness to engage with AI-enhanced smart learning environments, suggesting a widespread recognition of their importance in promoting technology acceptance in education.

The equation of technology acceptance, however, becomes more complex with the addition of social influences and perceived expectations from others. For example, a study by Bonsu and Bafour-Koduah (2023) indicated that, despite Ghanaian students' openness to using ChatGPT—largely shaped by social media—this openness did not always translate into an intention to use the tool, suggesting the influence of other factors in decision-making. In different cultural contexts, research applying the Theory of Planned Behavior (TPB), such as Ivanov et al. (2024), found that when students perceived strong benefits and advantages of GAI, they not only developed more positive attitudes but also felt greater social approval and a stronger sense of control over their use of the technology. These factors collectively increased their likelihood of adopting GAI. This complexity is further illustrated by Maheshwari's (2024) findings in the Vietnamese context, where the intention to adopt ChatGPT was more strongly influenced by the

platform's user-friendliness than its perceived utility. Moreover, Chan and Zhou (2023), employing Expectancy-Value Theory (EVT) in Hong Kong, discovered a robust positive link between the perceived value of generative AI and the intention to use it, alongside a minor negative correlation with perceived cost. These insights highlight the imperative to rigorously assess the ethical considerations and potential wide-ranging effects of integrating GAI technologies in educational frameworks, emphasizing the need for mindful consideration of the long-term implications and ethical challenges associated with their widespread adoption. Nevertheless, these studies primarily speculate on the potential use of GAI by students.

The current study undertakes a qualitative inquiry into the deployment of GAI by international undergraduate students, particularly spotlighting the nascent research field within Asian academic contexts. Prior investigations, such as those by Duah and McGivern (2024), have noted students' employment of GAI to surmount educational hurdles, such as studying or completing their homework assignments, albeit raising debates around work authenticity. Baek et al. (2023) identified its frequent application in tasks and writing, especially among non-native English speakers, aiming to mitigate academic language barriers. Yet, this usage is not without its ethical, qualitative, and accessibility concerns, alongside apprehensions regarding the undermining of learning and job opportunities, with student perspectives divided between confidence in GAI usage and a preference for traditional writing methodologies. Further compounding this complexity, Yang et al. (2024) explored student interactions with GAI, revealing the emergence of student agency as a decisive factor across varied learning behaviors—receptive, resistive, resourceful, and reflective—underscoring the essence of nurturing student agency in leveraging GAI to augment educational outcomes and lifelong learning in a digitally evolving environment. Jaboob et al. (2024) corroborate these sentiments, highlighting a significant satisfaction level among students regarding GAI's impact on their behavioral and cognitive achievements, thus enriching our understanding of GAI's multifaceted role in contemporary education while acknowledging the critical need to address its inherent challenges.

Literature reviews reveal that international students might leverage AI applications to enhance their learning and research processes, offering a path to increased efficiency and tailored support while navigating challenges such as privacy issues and cultural disparities (Wang et al., 2023). A range of potential uses for these technologies by students have been identified, ranging from self-guided learning experiences and simulation scenarios to assistance with writing tasks (Preiksaitis & Rose, 2023). Additionally, some scholars have discussed the phenomenon where students might opt for AI over human assistance for tasks typically reserved for personal interactions with educational staff like librarians, professors, or student advisors, suggesting a shift towards AI for certain support functions (Crawford et al., 2024; O'Dea, 2024). Moreover, scholars are acknowledging the potential of GAI technologies in promoting students' autonomy in research and enhancing their comprehension of supervisors' feedback on research advancement, signifying a transformation in the student-supervisor dynamic (Cowling et al., 2023).

A Narrative Inquiry Study

The qualitative research methodology known as narrative inquiry focuses on exploring individuals' lived experiences through the analysis of their stories or narratives. Connelly and Clandinin (1990) rooted this approach in the epistemological stance that the art of storytelling subjectively constructs knowledge, acknowledging the complexity and contextual nature of human experiences. This theory is based on the idea that people make sense of their lives and find meaning through stories. It uses data from things like interviews, participant observations, and personal stories to find themes, patterns, and the deeper meanings hidden in these stories (Murray, 2009). Although narrative inquiry offers deep insights into complex issues such as identity formation and social interactions, it is often criticized for its reliance on subjective interpretation. The process of analyzing personal stories can introduce researcher bias and the open-ended nature of data collection may affect consistency and reliability. Additionally, ensuring participants' privacy and maintaining their trust can be challenging, given the personal and detailed nature of the narratives collected (Clandinin & Caine, 2013).

Considering the unique advantages offered by narrative inquiry, this study employs the method to examine the discourse and utilization of GAI among international undergraduates in Thailand. The following research questions are addressed:

1. What are international undergraduates' discourses on the utilization of generative AI applications in university studies?
2. How do international undergraduate students incorporate generative AI applications into their university studies?

Methodology

This study employed a qualitative narrative inquiry approach to examine how international undergraduate students experience and use generative AI in their university studies. Narrative inquiry was chosen to capture the diverse perspectives and personal stories of participants, enabling a deeper understanding of their engagement with GAI tools. The approach allowed for the collection and thematic analysis of rich, contextualized data, supporting the study's aim to highlight student voices within a multicultural academic environment.

Research Context and Participants

Following approval from the Ethics Committee for Human Research at the author's institution (Reference No. 416710036), the study employed convenience

sampling within an international program at a university in Bangkok, Thailand. The university, known for employing foreign English lecturers and adopting a communicative language teaching approach with active learning and digital technology integration, provided a diverse participant pool. A total of 64 international undergraduate students participated, a notably large sample for narrative design, thereby extending the typical qualitative sampling boundaries. To enhance accessibility and facilitate a clearer understanding of the sample characteristics, Table 1 summarizes the demographic information, including gender distribution (34.4% male, 59.4% female, and 6.2% undisclosed), mean age (20 years), academic year, major, and nationality. Most participants were first-year students (53.1%), with additional representation from second year (34.4%), third year (6.2%), and fourth year (6.2%) cohorts. Participants specialized in a range of disciplines, such as Business English (23.4%), Entrepreneurship (20.3%), Marketing (9.4%), and Digital Media (10.9%). Nationalities varied widely, with students from Myanmar (21.9%), Japan (10.9%), Cambodia (6.3%), China (7.8%), and several others, including Russia, India, Vietnam, the Philippines, Korea, and the United States, contributing to the sample's international diversity.

Table 1

Demographic Characteristics of International Student Participants

Characteristic	Category	Frequency (n)	Percentage (%)
Gender	Male	22	34.4
	Female	38	59.4
	Not disclosed	4	6.2
Age	Mean age	20 years	-
Academic Year	First year	34	53.1
	Second year	22	34.4
	Third year	4	6.2
	Fourth year	4	6.2
Major	Business English	15	23.4
	Entrepreneurship	13	20.3
	Marketing	6	9.4
	Digital Media	7	10.9
	Communication Strategies	4	6.3
	International Tourism	3	4.7
	Creative Communication	2	3.1
	Hospitality	1	1.6
Nationality	Myanmar	14	21.9
	Japan	7	10.9
	China	5	7.8

Characteristic	Category	Frequency (n)	Percentage (%)
	Cambodia	4	6.3
	Others (Russia, India, Vietnam, Philippines, Korea, U.S.)	34	53.1

In this study, the participants, all of whom were studying in Thailand, reported a broad variety of study durations. Their time spent studying ranged from a few weeks to more than ten years, with specific durations mentioned including "2 months," "almost a year," "3 years," "half a year," and "10 years." Some provided precise periods like "4 and a half year," "about 6 months," and "maybe 6 or 7 months." A few were in their inaugural year of studies, and others were engaging with Thai education for the first time, with the shortest study periods noted as "2 weeks," "1 month," "1 week," and "4 days." This variability illustrates the diverse experiences of participants within the Thai educational system. In terms of English proficiency assessment, the participants had undergone various tests, including the TOEFL, IELTS, Duolingo English Test, Cambridge English tests, TOEIC, PTE, university placement tests, and other unspecified English tests. Some mentioned taking multiple tests, such as "IELTS, Duolingo," while others referred to tests administered by institutions like the British Council or the university's English test, showcasing a wide array of English proficiency testing experiences. Participants also self-assessed their English proficiency, with 18.8% rating themselves as "very good," 34.4% as "good," 31.3% as "average," 9.4% as "poor," and 6.3% as "very poor." Notably, 65.6% of participants considered their English proficiency to be either "good" or "average." The distribution of proficiency levels highlights a general self-perception of competence among the majority. In terms of generative AI application usage, the participants cited employing tools such as ChatGPT, Grammarly, Quillbot, Bard, Notion, and Bing Chat for various academic tasks, with some utilizing multiple tools concurrently—for instance, ChatGPT alongside Grammarly and Quillbot. The most frequently mentioned tool was ChatGPT, indicating its prominence among the tools used, followed by Grammarly and Quillbot, with specific functionalities like grammar checking and paraphrasing noted. This response pattern highlights the participants' diverse engagement with generative AI tools in their academic activities, reflecting a broad adoption of these technologies.

Data Collection and Analysis

The researcher collected data for this study using a two-pronged approach: a demographic survey and reflective narrative frames. The demographic survey queried participants on various attributes, including their gender, academic majors, countries of origin, experiences with learning English, levels of English proficiency, and the specific GAI applications they had employed, as detailed in the preceding section. We then invited participants to complete narrative frames, a structured

storytelling method that arranges narratives around central themes or topics, facilitating a thematic grouping of events and experiences (Clandinin & Caine, 2013). Participants shared their personal stories and lived experiences concerning their viewpoints on GAI usage in university studies, how they integrate GAI into their educational activities, and the obstacles they encounter while utilizing GAI tools in an academic context. An expert in English language teaching and educational technology, with a substantial publication record in highly-ranked journals and a Scopus h-index of 9, reviewed the narrative instructions to ensure their relevance and clarity.

Braun and Clarke (2019) established the protocol for the subsequent qualitative data analysis, which employed deductive thematic analysis. This involved an immersive review of the narrative data to generate initial codes and subsequently identify significant themes through a systematic and iterative process of refinement. This meticulous approach facilitated the unveiling of nuanced insights into the students' learning experiences while adhering to ethical standards and anonymizing all data. Such measures not only safeguarded participant confidentiality but also encouraged an in-depth exploration of the narratives shared. The analysis provided a deeper understanding of the students' educational narratives by revealing the intricate details of how they used GAI technologies in their studies.

Findings

The findings from this study disclose the diverse ways international students perceive and use generative AI applications in their university studies. Thematic analysis of their responses showed that students view AI as a valuable tool for improving learning efficiency and creativity, while also expressing concerns about dependency, ethical issues, and academic integrity. Students reported using AI for research, writing assistance, idea generation, and language learning, with each area offering both benefits and challenges.

International Students' Discourses on Using AI Apps in University Studies

Table 2 presents the thematic analysis of students' discourses concerning the utilization of AI applications in their university studies. The four dominant themes—Enhancing Learning and Efficiency, Risk of Dependency and Laziness, Balancing Tool and Crutch, and Ethical and Academic Integrity Concerns—were derived through a systematic process in which the researcher manually coded the qualitative responses, continuously refined the initial codes, and iteratively organized them into broader thematic categories to ensure internal consistency, analytical depth, and alignment with the research objectives.

Table 2
Students' Views on Using AI Apps in University Studies

Theme	Keywords	Reference
Enhancement of Learning and Efficiency	Efficiency, Support, Time-saver, Enhance Learning	35 students
Risk of Dependency and Laziness	Dependency, Lazy, Rely, Overusing	15 students
Balancing Tool and Crutch	Acceptance, Support, Usefulness	12 students
Ethical and Academic Integrity Concerns	Plagiarism, Integrity, Copy, Academic Honesty	8 students

Theme 1: Enhancement of Learning and Efficiency

The students (n = 35) widely recognized AI as a significant enhancer of learning efficiency and personalization, valuing its support in grammar correction, idea generation, and research tasks, which ultimately led to improved academic performance and a deeper understanding of subjects. Despite these advantages, several students voiced concerns about the potential for AI to promote superficial knowledge acquisition and undermine critical thinking and problem-solving skills. The challenge, therefore, lies in integrating AI in ways that complement rather than replace traditional educational methods, ensuring that students engage meaningfully with academic material for genuine understanding, rather than relying on quick, AI-generated solutions. Reflecting this viewpoint, S7 from China commented, "In my opinion, AI could help students understand some topics easier and give some ideas for them. If we use it in the right way, it's a helpful tool." Similarly, S14 from Myanmar noted, "It helps us a lot when we don't understand what the teachers say. However, in my opinion, AI gives us only one piece of information or the same information in alternative ways." Another participant, S50 from Myanmar, elaborated,

> Students using generative AI applications in their university studies can be beneficial. These tools can help them generate content, brainstorm ideas, and enhance creativity. However, students should use them responsibly, ensuring their understanding of the material and avoiding copying. It's a valuable aid, but not a replacement for genuine learning.

These narratives show an awareness among students that, while AI offers considerable benefits in enhancing learning processes, its use must be tempered by critical engagement to avoid compromising deeper academic skills.

Theme 2: Risk of Dependency and Laziness

Concerns have emerged among students about the potential for dependency on AI applications, particularly fears that such reliance might encourage laziness and deter meaningful engagement with learning tasks. The students (n = 15) observed that some of their peers might use AI to complete assignments with minimal effort, thereby risking the erosion of critical thinking abilities and compromising academic integrity. S1 from Japan reflected, "It's good and bad at the same time because it gives more opportunities and ideas through AI, but students might be lazy and just rely on it as well." Relatedly, S41 from Russia emphasized the risks, stating,

> I believe that using AI is a good idea because it allows you to study more efficiently. By studying efficiently, you can have more time and lead an elegant life. However, if we rely too much on AI, our ability to think for ourselves will decline. To avoid such a situation, it is important to live in good coexistence with AI.

These apprehensions mirror broader anxieties about diminishing intellectual rigor and highlight that dependency on AI transcends mere convenience. It challenges core educational values such as curiosity, inquiry, and diligent knowledge pursuit. As AI tools become increasingly sophisticated, the temptation to bypass traditional academic practices, including research and critical analysis, grows stronger. Thus, the crucial educational challenge lies in cultivating learning environments where AI acts as an impetus for deeper investigation rather than a shortcut that weakens students' essential cognitive and creative faculties.

Theme 3: Balancing Tool and Crutch

The students (n = 12) stressed the necessity of maintaining a balanced approach in utilizing AI applications for academic purposes. While AI can greatly enhance learning opportunities by providing support and scaffolding, it should not supplant the effort, critical thinking, and comprehension required of learners. Participants emphasized the importance of recognizing AI as a tool that assists, but does not replace, essential academic practices. S55 from Sweden pointed out the limitations, stating, "Useful in certain cases, like figuring out a format to write, getting better vocabulary, or creating great ideas. But it is not reliable in many cases as it hasn't got a rational mind." Echoing this sentiment, S15 from Cambodia remarked,

> I think it is very useful and time-efficient when students use it for research. However, for those who use it to fully write their reports for them, I am not a big fan of it. AI is AI after all, so it cannot replace humans, and students need to be scored based on their understanding and not AI's understanding.

Their reflections reveal an acute awareness that, while AI can support academic tasks, it cannot replace core human capacities such as creativity, empathy, and ethical judgment. Students' insights suggest that conversations around AI in education should not merely focus on technological innovation but must also prioritize the preservation of humanistic values. Encouraging digital literacy and ethical guidelines for AI use becomes critical in ensuring that students remain critical users, capable of harnessing technology while upholding the intellectual rigor and moral responsibilities of academic life.

Theme 4: Ethical and Academic Integrity Concerns

Concerns regarding ethical practice and academic integrity emerged strongly among students (n = 8) who voiced apprehensions about the misuse of AI and the potential for plagiarism. They observed that some students might directly integrate AI-generated content into their work without sufficient modification or critical engagement, thereby compromising originality and violating academic standards. S18 from Myanmar emphasized this risk, stating, "It can be plagiarism if they copy everything, but it can be very useful for idea generation." In a related reflection, S50 from India pointed out, "Students using generative AI applications can be beneficial. These tools can help them generate content, brainstorm ideas, and enhance creativity. However, students should use them responsibly, ensuring their understanding of the material and avoiding copying." The students' concerns accentuate the need for clear institutional guidelines and ethical standards concerning AI usage in academic contexts. As AI's role within higher education expands, distinguishing between legitimate assistance and academic dishonesty becomes increasingly complex. These complexities necessitate a broader reevaluation of academic norms, including notions of authorship, originality, and the purpose of learning itself. Addressing these ethical challenges demands a concerted effort from educators, students, and policymakers to cultivate a culture of academic integrity that acknowledges the potential of AI while upholding the fundamental values of intellectual honesty and genuine scholarship.

International Students' Use of GAI Apps in University Studies

Table 3 shows the thematic analysis results of students' use of AI apps in university studies. The four emerging themes include Research and Information Gathering, Writing Assistance, Idea Generation and Brainstorming, and Language Learning and Translation.

Table 3
Analysis Results of Students' Use of AI Apps in University Studies

Theme	Keywords	Reference
Research and Information Gathering	Research, Information Gathering, Data, Statistics, Summarize, Literature Review	18 students
Writing Assistance	Writing, Grammar, Paraphrasing, Vocabulary, Correction, Fluency	25 students
Idea Generation and Brainstorming	Ideas, Brainstorming, Creativity, Inspiration, Conceptualization	16 students
Language Learning and Translation	Language Learning, Translation, English Proficiency, Communication, Multilingual	12 students

Theme 1: Research and Information Gathering

The use of AI for research and information gathering emerged as a key theme, with 18 students employing AI to swiftly access, sift through, and comprehend extensive datasets. This application of AI was celebrated for its capacity to augment academic research by offering in-depth insights, summarizing vast amounts of information, and aiding in literature reviews. The widespread adoption of AI for these tasks reflects a strategic shift towards a more efficient and discerning approach to academic material. However, some students voiced concerns about an over-reliance on AI-generated data, which could potentially limit research breadth and overlook valuable insights traditionally discovered through manual research. For example, S5 from Myanmar shared, "I usually use it to support my research. First, it can research more than I can, providing more details to finish my work." Correspondingly, S11 from Vietnam explained, "With overwhelming information from Google, students cannot perceive it optimally. ChatGPT or specific other applications will filter the information for students, saving them time." These voices suggest that, while AI can significantly streamline research processes, it also raises important questions about the critical evaluation of sources and the synthesis of information without AI intervention. As AI becomes more integrated into academic practices, it is crucial for students to maintain the skills necessary for independent analysis and source critique.

Theme 2: Writing Assistance

The students (n = 25) frequently utilized AI for various writing tasks such as grammar correction, paraphrasing, vocabulary improvement, and fluency enhancement. This extensive reliance on AI for writing assistance highlights its role in elevating the quality of writing and supporting non-native English speakers

in refining their language proficiency. However, the use of AI tools raised concerns about the potential erosion of individual writing styles and the homogenization of academic expression. S13 from Myanmar commented, "I use Grammarly a lot... I use it as an auto-correct mode to avoid spelling and grammar mistakes." Likewise, S10 from Cambodia explained, "We all need to do research reports from the Internet, but we can't copy the whole article, so we need to paraphrase to avoid plagiarism." These reflections display a tension between the desire to produce polished, error-free academic writing and the risk of losing personal voice and creativity in the process. The extensive reliance on AI tools also raises ethical concerns regarding the originality of work and adherence to academic integrity standards. This situation calls for an ongoing discussion within academic communities on how to balance linguistic perfection with the preservation of diverse voices and individual creativity, while also ensuring that students uphold academic honesty.

Theme 3: Idea Generation and Brainstorming

Sixteen students employed AI to aid in idea generation, brainstorming sessions, and overcoming creative blocks. This theme underscores AI's potential to stimulate creativity, introduce fresh perspectives, and assist in the early stages of academic work. The integration of AI into these creative processes represents a broader movement towards utilizing technology to support and enhance the ideation phase in academic endeavors. AI's ability to generate ideas and alleviate creative impasses was recognized as particularly useful in collaborative settings and individual research projects, alike. S7 from China shared, "When I have some parts I don't understand, I can just use it to find and explain them to myself." Similarly, S16 from Vietnam noted, "I usually use AI applications to do group work with my groups, brainstorming ideas such as asking about the current trends." Although students acknowledged AI's ability to inspire and generate ideas, they also raised important questions about the impact of easy access to AI-generated content on the development of their own creative abilities. The challenge, as identified by students, is to use AI as a springboard for creativity without relying on it to replace the critical thinking and independent thought that are essential to the creative process. The key lies in fostering an academic environment that encourages students to engage with AI tools in ways that enhance rather than diminish their inherent creative capacities.

Theme 4: Language Learning and Translation

Twelve students turned to AI to support language learning and translation, particularly to improve their proficiency in English and navigate multilingual communication challenges. AI's role in facilitating language acquisition and breaking down communication barriers was seen as a significant advantage in a

globalized educational environment. Students highlighted AI's potential to provide immediate translation and language learning support, helping them to improve their linguistic skills and engage more effectively in cross-cultural interactions. S26 from Cambodia noted, "AI and ChatGPT can revolutionize academic research by processing and analyzing large amounts of data quickly, uncovering new discoveries, generating hypotheses, and conducting literature reviews faster than traditional methods." Also, S62 from Vietnam shared,

> As for me, I mostly use ChatGPT to understand ideas and concepts. For instance, I would type down the article that my professor taught on that day, and I would take my understanding of the concepts and ideas that I was taught in class to another level. I also think that's a very smart way to study using AI. Some would think that using ChatGPT is what they would rather call cheating, but I think if you use it in the right way, it will make you a smart student.

The students' use of AI for language learning reflects both the tool's efficiency in improving language proficiency and the broader opportunities for global communication it offers. Nonetheless, as with other uses of AI, there are concerns that an over-reliance on translation and language tools might impact students' motivation for deeper engagement with language study and their ability to appreciate the nuances of cultural contexts. These concerns suggest the need for educational frameworks that encourage responsible and balanced use of AI, ensuring that it serves as a supplement rather than a substitute for genuine language acquisition.

Discussion and Implications

This study aimed to provide empirical insights into the narratives of international undergraduates regarding their experiences and use of generative AI applications in multicultural educational contexts. The findings enrich and extend current literature on educational technology, revealing nuanced themes such as enhanced learning efficiency, the risks of dependency, the necessity of a balanced approach to AI, and concerns over academic integrity. These findings mirror themes documented in previous studies from the Philippines (Obenza et al., 2024), Hong Kong (Chan & Hu, 2023), and India (Kumar & Raman, 2022), underscoring the dual-edged role of AI in education. Participants in this study acknowledged AI's capacity to personalize and enrich their learning experiences, corroborating earlier research on AI's ability to support academic success through tailored interventions (Kim et al., 2020; Murray, 2009). However, the study also brings forward more complex concerns, such as the potential for AI to foster superficial engagement and diminish critical thinking—issues that resonate with broader debates about technology's impact on cognitive engagement and intellectual rigor (Clandinin & Caine, 2013; Waluyo & Tuan, 2021). This exploration situates the study within multicultural education by highlighting how generative AI, while supporting diverse

student needs, also poses risks to key educational values, such as curiosity and deep learning.

The study's findings suggest that the risks associated with dependency on AI extend beyond convenience, prompting a critical examination of how AI may challenge core educational principles, including the cultivation of intellectual curiosity and the intrinsic pursuit of knowledge. Insights into the necessity of balancing AI as a beneficial tool with cautious avoidance of over-reliance contribute to ongoing discussions about the role of technology in education, emphasizing the importance of fostering humanistic values and critical engagement (Cowling et al., 2023; Dwivedi et al., 2023; Waluyo, 2020). Additionally, concerns over academic integrity and ethical AI use align with recent calls in the literature for a reassessment of academic norms in the digital age (Yang et al., 2024). As AI increasingly becomes an integral part of academic life, this study stresses the need for institutional guidelines and a culture of integrity that respects both the capabilities of AI and the foundational principles of scholarship. All these findings emphasize the imperative for a balanced, ethically grounded integration of AI in higher education, contributing to a broader understanding of technology's role in supporting both academic success and ethical standards.

Further, this study sheds light on the complex dynamics of AI applications in academic settings, particularly among international students utilizing these technologies for research, writing, idea generation, and language learning. Grounded in theoretical frameworks such as the technology acceptance model (TAM) and the theory of planned behavior (TPB), which typically focus on perceived usefulness (PU) and perceived ease of use (PEOU) as primary adoption factors (Abdullah & Ward, 2016; Davis, 1989; Simatupang & Supri, 2024), this study extends these models by examining the tangible impacts of generative AI on students' academic practices. Even though previous research has often focused on AI's theoretical potential (Kim et al., 2020; Hu, 2022), the current study highlights the concrete effects of generative AI use, including its tendency to homogenize academic writing and introduce ethical challenges in AI-assisted research. Echoing concerns about the ethical, qualitative, and accessibility challenges AI brings to university contexts (Baek et al., 2023; Yang et al., 2024; Zaim et al., 2024), this study provides specific examples of AI reshaping academic practices among international students. By bridging theoretical models of technology acceptance with real-world applications, this research advocates for a balanced approach to integrating AI within academia, emphasizing the importance of preserving academic integrity, creativity, and diversity in educational environments that embrace multicultural values and the potential of generative AI.

Conclusion, Limitations, and Recommendations

This study concludes that while the integration of generative AI (GAI) applications in university studies offers substantial benefits in terms of personalized learning and efficiency, it also poses significant challenges, notably

in fostering dependency, risking academic integrity, and potentially diminishing critical thinking and creativity among international undergraduates. These findings illuminate the complex, dual-edged impact of GAI in educational settings, echoing and expanding upon existing literature that grapples with the balance between technological convenience and the preservation of fundamental educational values. The implications of this study are profound, suggesting the need for a nuanced, critically informed approach to integrating GAI into higher education. Educators and institutions are called upon to develop clear guidelines and foster a culture that emphasizes ethical use, maintains academic integrity, and encourages a balanced use of AI tools to enhance learning without compromising the development of students' critical and creative capacities. Nonetheless, the study's limitations, including its focus on international undergraduates and its reliance on self-reported data, suggest caution in generalizing these findings. Further research is needed to explore the diverse impacts of GAI across different academic cultures and disciplines, as well as to investigate the long-term effects of GAI integration on educational outcomes and student development.

References

Abdullah, F., & Ward, R. (2016). Developing a general extended technology acceptance model for e-learning (GETAMEL) by analysing commonly used external factors. *Computers in Human Behavior, 56*, 238–256. https://doi.org/10.1016/j.chb.2015.11.036

Baek, C., Tate, T., & Warschauer, M. (2024). "ChatGPT seems too good to be true": College students' use and perceptions of generative AI. *Computers and Education: Artificial Intelligence*, *7*, 1-9. https://doi.org/10.1016/j.caeai.2024.100294

Bannister, P., Urbieta, A. S., & Peñalver, E. A. (2023). A systematic review of generative AI and (English medium instruction) higher education. *Aula Abierta*, *52*(4), 401-409. https://doi.org/10.17811/rifie.52.4.2023.401-409

Bedington, A., Halcomb, E. F., McKee, H. A., Sargent, T., & Smith, A. (2024). Writing with generative AI and human-machine teaming: Insights and recommendations from faculty and students. *Computers and Composition*, *71*, 1-13. https://doi.org/10.1016/j.compcom.2024.102833

Bonsu, E. M., & Baffour-Koduah, D. (2023). From the consumers' side: Determining students' perception and intention to use ChatGPT in Ghanaian higher education. *Journal of Education, Society & Multiculturalism*, *4*(1), 1-29. https://doi.org/10.2478/jesm-PEBOPR2023-0001

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative research in sport, exercise and health*, *11*(4), 589-597. https://doi.org/10.1080/2159676X.2019.1628806

Chan, C. K. Y., & Hu, W. (2023). Students' voices on generative AI: Perceptions, benefits, and challenges in higher education. *International Journal of Educational Technology in Higher Education*, *20*(1), 1-18. https://doi.org/10.1186/s41239-023-00411-8

Chan, C. K. Y., & Lee, K. K. (2023). The AI generation gap: Are Gen Z students more interested in adopting generative AI such as ChatGPT in teaching and learning than their Gen X and millennial generation teachers? *Smart Learning Environments*, *10*(1), 1-23. https://doi.org/10.1186/s40561-023-00269-3

Chan, C. K. Y., & Zhou, W. (2023). An expectancy value theory (EVT) based instrument for measuring student perceptions of generative AI. *Smart Learning Environments*, *10*(1), 1-22. https://doi.org/10.1186/s40561-023-00284-4

Clandinin, D. J., & Caine, V. (2013). Narrative inquiry. In *Reviewing qualitative research in the social sciences* (pp. 166-179). Routledge. http://dx.doi.org/10.4135/9781412963909.n275

Connelly, F. M., & Clandinin, D. J. (1990). Stories of experience and narrative inquiry. *Educational Researcher*, *19*(5), 2-14. https://doi.org/10.3102/0013189X019005002

Crawford, J., Allen, K. A., Pani, B., & Cowling, M. (2024). When artificial intelligence substitutes humans in higher education: The cost of loneliness, student success, and retention. *Studies in Higher Education*, 1-15. https://doi.org/10.1080/03075079.2024.2326956

Cowling, M., Crawford, J., Allen, K. A., & Wehmeyer, M. (2023). Using leadership to leverage ChatGPT and artificial intelligence for undergraduate and postgraduate research supervision. *Australasian Journal of Educational Technology*, *39*(4), 89-103. https://doi.org/10.14742/ajet.8598

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–340. https://doi.org/10.2307/249008

Duah, J. E., & McGivern, P. (2024). How generative artificial intelligence has blurred notions of authorial identity and academic norms in higher education, necessitating clear university usage policies. *The International Journal of Information and Learning Technology, 14*(2), 180-193. https://doi.org/10.1108/IJILT-11-2023-0213

Dwivedi, Y. K., Kshetri, N., Hughes, L., Slade, E. L., Jeyaraj, A., Kar, A. K., ... & Wright, R. (2023). "So what if ChatGPT wrote it?" Multidisciplinary perspectives on opportunities, challenges and implications of generative conversational AI for research, practice and policy. *International Journal of Information Management*, *71*, 1-63. https://doi.org/10.1016/j.ijinfomgt.2023.102642

Farrelly, T., & Baker, N. (2023). Generative artificial intelligence: Implications and considerations for higher education practice. *Education Sciences*, *13*(11), 1-14. https://doi.org/10.3390/educsci13111109

Hu, Y. H. (2022). Effects and acceptance of precision education in an AI-supported smart learning environment. *Education and Information Technologies, 27*(2), 2013–2037. https://doi.org/10.1007/s10639-021-10664-3

Ivanov, S., Soliman, M., Tuomi, A., Alkathiri, N. A., & Al-Alawi, A. N. (2024). Drivers of generative AI adoption in higher education through the lens of the theory of planned behaviour. *Technology in Society*, 1-14. https://doi.org/10.1016/j.techsoc.2024.102521

Jaboob, M., Hazaimeh, M., & Al-Ansi, A. M. (2024). Integration of generative AI techniques and applications in student behavior and cognitive achievement in Arab higher education. *International Journal of Human–Computer Interaction*, 1-14. https://doi.org/10.1080/10447318.2023.2300016

Johnston, H., Wells, R. F., Shanks, E. M., Boey, T., & Parsons, B. N. (2024). Student perspectives on the use of generative artificial intelligence technologies in higher education. *International Journal for Educational Integrity*, *20*(1), 1-21. https://doi.org/10.1007/s40979-024-00149-4

Kelly, A., Sullivan, M., & Strampel, K. (2023). Generative artificial intelligence: University student awareness, experience, and confidence in use across disciplines. *Journal of University Teaching & Learning Practice, 20*(6), 1-19. https://doi.org/10.53761/1.20.6.12

Kim, J., Merrill, K., Xu, K., & Sellnow, D. D. (2020). My teacher is a machine: Understanding students' perceptions of AI teaching assistants in online education. *International Journal of Human-Computer Interaction*, 36(20), 1902–1911. https://doi.org/10.1080/10447318.2020.1801227

Kumar, V. R., & Raman, R. (2022, March). Student Perceptions on Artificial Intelligence (AI) in higher education. In *2022 IEEE Integrated STEM Education Conference (ISEC)* (pp. 450-454). IEEE. https://doi.org/10.1109/ISEC54952.2022.10025165

Li, K. C., & Wong, B. T. M. (2023). Artificial intelligence in personalised learning: A bibliometric analysis. *Interactive Technology and Smart Education*, *20*(3), 422-445. https://doi.org/10.1108/ITSE-01-2023-0007

Li, X., Jiang, M. Y. C., Jong, M. S. Y., Zhang, X., & Chai, C. S. (2022). Understanding medical students' perceptions of and behavioral intentions toward learning artificial intelligence: A survey study. *International Journal of Environmental Research and Public Health*, *19*(14), 1-17. https://doi.org/10.3390/ijerph19148733

Lo, C. K. (2023). What is the impact of ChatGPT on education? A rapid review of the literature. *Education Sciences*, *13*(4), 1-15. https://doi.org/10.3390/educsci13040410

Lodge, J. M., de Barba, P., & Broadbent, J. (2023). Learning with generative artificial intelligence within a network of co-regulation. *Journal of University Teaching and Learning Practice*, *20*(7), 1-10. https://doi.org/10.53761/1.20.7.02

Maheshwari, G. (2024). Factors influencing students' intention to adopt and use ChatGPT in higher education: A study in the Vietnamese context. *Education and Information Technologies*, 1-29. https://doi.org/10.1007/s10639-023-12333-z

Morgan, D. L. (2023). Exploring the use of artificial intelligence for qualitative data analysis: The case of ChatGPT. *International Journal of Qualitative Methods*, *22*, 1-10. https://doi.org/10.1177/16094069231211248

Murray, G. (2009). Narrative inquiry. In J. Heigham & R. A. Croker (Eds.), *Qualitative research in applied linguistics: A practical introduction* (pp. 45–65). Palgrave Macmillan.

Obenza, B., Salvahan, A., Rios, A. N., Solo, A., Alburo, R. A., & Gabila, R. J. (2024). University students' perception and use of ChatGPT: Generative artificial intelligence (AI) in higher education. *International Journal of Human Computing Studies*, *5*(12), 5-18. https://ssrn.com/abstract=4724968

O'Dea, X. (2024). Generative AI: Is it a paradigm shift for higher education? *Studies in Higher Education*, *49*(1), 1-6. https://doi.org/10.1080/03075079.2024.2332944

Preiksaitis, C., & Rose, C. (2023). Opportunities, challenges, and future directions of generative artificial intelligence in medical education: scoping review. *JMIR Medical Education*, *9*, 1-37. https://doi.org/10.2196/48785

Salah, M., Al Halbusi, H., & Abdelfattah, F. (2023). May the force of text data analysis be with you: Unleashing the power of generative AI for social psychology research. *Computers in Human Behavior: Artificial Humans*, *1*(2),1-6. https://doi.org/10.1016/j.chbah.2023.100006

Simatupang, E. C., & Supri, I. Z. (2024). Fusing translanguaging with speaking technology in the hospitality industry: Improving English communicative competence. *Social Sciences & Humanities Open*, *10*, 101166. https://doi.org/10.1016/j.ssaho.2024.101166

Waluyo, B. (2020). Thai EFL learners' WTC in English: Effects of ICT support, learning orientation, and cultural perception. *Humanities, Arts and Social Sciences Studies*, *20*(2), 477–514. https://doi.org/10.14456/hasss.2020.18

Waluyo, B., & Kusumastuti, S. (2024). Generative AI in student English learning in Thai higher education: More engagement, better outcomes? *Social Sciences & Humanities Open*, *10*, 101146. https://doi.org/10.1016/j.ssaho.2024.101146

Waluyo, B., & Tuan, D. T. (2021). Understanding help-seeking avoidance among EFL students and the social climate of EFL classrooms in Thailand. *Journal*

of Asia TEFL, *18*(3), 800-815. http://dx.doi.org/10.18823/asiatefl.2021.18.3.4.800

Wang, T., Lund, B. D., Marengo, A., Pagano, A., Mannuru, N. R., Teel, Z. A., & Pange, J. (2023). Exploring the potential impact of artificial intelligence (AI) on international students in higher education: Generative AI, chatbots, analytics, and international student success. *Applied Sciences*, *13*(11), 1-15. https://doi.org/10.3390/app13116716

Wang, Y., Wang, L., & Siau, K. L. (2024). Human-centered interaction in virtual worlds: A new era of generative artificial intelligence and metaverse. *International Journal of Human–Computer Interaction*, 1-43. https://doi.org/10.1080/10447318.2024.2316376

Yang, Y., Luo, J., Yang, M., Yang, R., & Chen, J. (2024). From surface to deep learning approaches with Generative AI in higher education: an analytical framework of student agency. *Studies in Higher Education*, 1-14. https://doi.org/10.1080/03075079.2024.2327003

Yu, H. (2024). The application and challenges of ChatGPT in educational transformation: New demands for teachers' roles. *Heliyon*, 1-15. https://doi.org/10.1016/j.heliyon.2024.e24289

Zaim, M., Arsyad, S., Waluyo, B., Ardi, H., Al Hafizh, M., Zakiyah, M., ... & Hardiah, M. (2024). AI-powered EFL pedagogy: Integrating generative AI into university teaching preparation through UTAUT and activity theory. *Computers and Education: Artificial Intelligence*, *7*, 100335. https://doi.org/10.1016/j.caeai.2024.100335

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