


## Exploring How Students Utilize and Perceive Artificial Intelligence in Academic Writing: A Qualitative Study

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### ABSTRACT

The development of Artificial Intelligence (AI) has driven substantial transformations in educational methodologies in higher education, particularly in Student Academic Writing. This study seeks to examine students' use of AI in academic writing assignments and to identify related opportunities and constraints. The study employed a descriptive qualitative methodology, involving five students from the English Language Education Research Program selected using a purposive sampling strategy. Data were obtained through semi-structured interviews and evaluated thematically, concentrating on two main themes: the uses and potential of AI, and concerns and barriers related to its implementation. The findings indicate that students use AI as a pedagogical aid for brainstorming ideas, understanding complex topics, and organizing academic writing, without replacing critical thinking processes. Students also believe that AI can foster a mind-safe learning environment and help people learn faster. The study also raises concerns about the authenticity of information, the possibility of plagiarism, and students' over-reliance on AI, which may undermine their ability to think independently and independently. Therefore, this study demonstrates that AI has significant potential in improving students' academic writing when used critically, ethically, and thoughtfully, complemented by digital literacy and appropriate pedagogical supervision to maintain academic integrity.

**Keywords:** *Artificial Intelligence (AI), Academic Writing, Higher Education, Student Perception, Digital Literacy*

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## INTRODUCTION

Digital technology is rapidly transforming many aspects of life today. The emergence of artificial intelligence (AI) is one recent development that has become a major concern for many people, especially students and teachers. AI technology in education is having a significant impact, particularly on the way people learn. Traditional teaching methods, which were largely instructor-driven, are increasingly shifting to a more technology-focused approach. AI helps students find a wealth of online learning materials, gives them more freedom to plan their learning time, and helps them become more independent learners. Artificial intelligence also helps teachers personalize learning and tailor it to each student's needs and characteristics. Harry (2023) stated that AI will transform the way people learn and teach by making it more individualized, engaging, and effective. However, there should be no limits to how AI can be used in education. To remain aligned with educational goals and maintain academic integrity, this technology must be used in a balanced manner with appropriate regulation and oversight. In this context, Zhai et al. (2021) emphasize that teachers need to explore currently available AI tools and find ways to use them to enhance learning. Educators must use AI responsibly, understanding its strengths and weaknesses, so that it can be a useful tool for learning without diminishing the importance of human roles and academic ideals in the learning process.

In recent years, the use of AI in higher education has grown rapidly, especially to assist students with schoolwork. ChatGBT is a common technology in the form of an AI-based chatbot that helps with various schoolwork. Students use AI to search for information,

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generate new ideas, and help build automated grading systems that allow students to get grades quickly and fairly. Deep, P. D., and Chen, Y. (2025) stated that AI-based writing aids can help students in many ways, such as providing explanations, making direct corrections, and suggesting ways to improve their writing skills. This conclusion is in line with research conducted by William, F. K. A. (2024), which shows that the use of AI in academic writing is increasingly widespread because of its ability to increase productivity, improve writing quality, save time, and uphold academic integrity. However, the use of AI also raises many concerns about how it will affect students' creativity, morale, and critical thinking skills.

Previous research has shown that artificial intelligence (AI) has been widely used in higher education to assist students with various academic tasks (Ge et al., 2025). Along with the rapid development of technology such as (AI) has provided benefits, especially in the world of education, the use of AI in academic writing is utilized as an aid in developing ideas, correcting grammar and improving the quality of writing. This is supported by Grassini (2023) who emphasized that artificial intelligence technology has potential in the world of education, especially in academic writing, which has emerged as an important resource that can improve the effective learning process and pedagogical experience. These results are consistent with the study of Kengam (2020), which showed that AI-generated learning materials are considered valuable, especially if the instructions used in their creation are well-designed. This suggests that people view AI as a good way to help students learn difficult academic subjects better. Although previous research has validated the effectiveness of AI in educational contexts, the increasing integration of AI into academic activities is closely associated with problems and dangers that can disrupt the quality of the learning experience if used excessively and unwisely. Joseph and Uzundu (2024) emphasized that the use of AI in education faces several obstacles, particularly ethical dilemmas such as prejudice. Grassini (2023) further emphasized that the unrestricted use of AI can lead to students and teachers being less likely to communicate with each other and become dependent on technology, which can make it difficult for students to think critically.

Therefore, although previous studies have discussed the potential and challenges of artificial intelligence such as AI as a tool for creating academic writing in higher education, students' perceptions of AI as an assistive tool still require further research. This study aims to explore the use of AI in students' academic writing by highlighting two main themes: the utilization and potential of AI (*utilization and potential*) as well as various concerns and challenges that arise (*concerns and challenges*). To achieve this goal, this study uses interviews as the primary data source to gain an in-depth overview based on students' experiences.

## Literature Review

### *AI in Education*

Artificial intelligence (AI) has the potential to transform the way people learn and teach, making it a powerful force in education. AI-based adaptive learning systems can change the content and pace of each student's learning based on their individual needs. This makes the learning experience more tailored and effective. Beck, Stern, and Haugsjaa (1996) emphasized that AI can improve student engagement and educational achievement by providing more focused instructional support. AI systems in education consist of several components that work together to help students learn. These components include student models, pedagogical models, knowledge modules, communication modules, and expert models. Yang (2021) also emphasized that the goal of using AI in education is to make learning environments more responsive so that they can provide additional support to students experiencing learning difficulties. AI in education also encourages collaborative learning between students and technology by making interactions more dynamic. In addition to helping deliver learning materials, AI can also help teachers monitor student performance (Holmes, Bialik, & Fadel, 2019). This makes it easier for teachers to make appropriate assessments and provide appropriate teaching methods based on more accurate information. AI-based solutions can also provide students with rapid feedback that helps them correct their own mistakes, encouraging them to learn independently (Chen, Xie, & Hwang, 2020). Thus, AI plays a crucial role in building a flexible and student-focused education system.

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*AI in Language Learning*

Artificial intelligence (AI) plays a significant role in language acquisition by providing direct responses and interactions tailored to technological needs. AI provides interactive learning and language input through chatbots and automated communication systems covering multiple languages. Furthermore, Belda-Medina & Calvo-Ferrer (2022) state that AI has limitations in understanding cultural context, inconsistencies, and how people convey their feelings when interacting with one another. This suggests that artificial intelligence is unable to fully understand human relationships, especially in the context of language acquisition, which enhances social awareness.

Therefore, AI should be used by students as a tool, not a substitute for educators (De la Vall & Araya, 2023). Furthermore, technological advances such as AI as a learning tool are now widely used in mobile applications and online platforms that provide interactive activities. Language analysis based on AI artificial intelligence helps people learn language structures and learn things better (Li & Jeong, 2020). This makes students more interested in learning because they can do it anytime and anywhere. However, education still needs to explore how AI can be used to maintain healthy communication between humans. So, instructors and AI need to work together to make language learning effective and balanced (Yin & Wang, 2022).

*AI in Higher Education*

Artificial Intelligence (AI) in higher education has now provided more precise lessons by optimizing tutoring, providing real-time responses, and more accurately assessing student abilities. This allows teachers to tailor learning materials to suit each student's needs and learning style, enabling them to learn independently and at their own pace (Almulhim, 2023). AI also helps students create data-driven learning strategies, which aids teachers in making better decisions. AI also makes learning more accessible through inclusive online platforms and virtual support systems, such as text-to-speech for students with special needs (Li & Lalani, 2020). However, the implementation of AI in universities faces challenges related to data ethics, privacy, educator digital readiness, institutional infrastructure, and potential dependency on the technology. Therefore, AI integration must be carried out responsibly and fairly, accompanied by strategic planning and human resource readiness, to maintain a balance between technology and human roles in education (Afolayan & Obielodan, 2022; Zawacki-Richter et al., 2019).

## METHOD

This study used a descriptive qualitative approach to explore students' perceptions of the use of artificial intelligence (AI) in academic learning because it allows for an in-depth understanding of the perspectives, experiences, and meanings constructed by the participants (Creswell, 2014). The study subjects consisted of five students from the English Language Education Study Program, who were purposefully selected based on their use of AI in academic activities. Data collection was conducted using semi-structured interviews to thoroughly explore the participants' experiences and perspectives. We analyzed the data by grouping responses into groups based on key themes that emerged. These topics included how AI is used and what it might do, as well as issues and concerns that arise when AI is used. This study helped us identify important trends and insights into how students use AI technology. The findings of this study are expected to provide a comprehensive picture of how students perceive the role of AI in assisting with schoolwork.

## FINDINGS AND DISCUSSION

### Utilization & Potential

*"I use AI as a tool, not as a substitute for thinking. I avoid asking AI to write complete assignments." (Participant 3)*

*"I feel safe asking questions without fear of being wrong." (Participant 4)*

*"AI regulates the flow of writing and improves the structure of argumentation." (Participant 5)*

The findings indicate that students use Artificial Intelligence (AI) as a learning aid, not as a substitute for cognitive engagement. All parties involved in this study emphasized the need for clear boundaries on how AI can be used, particularly in schoolwork, so that the learning process still requires mental effort and critical thinking. AI was presented as a tool to help understand complex concepts, develop and organize ideas, and improve the quality of academic writing, while still placing students as the primary agents in cognitive processes and decision-making. This pattern of use indicates that academics understand that AI should be used as a tool to assist people in learning, not as a way to avoid hard work. These findings align with research by Luckin et al. (2016), which shows that AI in education enhances human intelligence by facilitating learners' introspective, analytical, and metacognitive processes without replacing human cognition. Kasneci et al. (2023) also emphasized that generative AI should be used in higher education as a supporting tool that encourages critical thinking, creativity, and academic responsibility among students. In this way, AI can help improve the quality of academic writing and learning without completely taking over the intellectual work.

*"I use AI to brainstorm material or understand a concept. Students should use AI wisely – assignments shouldn't be 100% AI-generated. AI should only help develop ideas." (Participant 1)*

*"AI provides simple, step-by-step explanations and concrete examples. AI breaks down complex concepts into key points." (Participant 2)*

Students also reported that artificial intelligence (AI) significantly helped them brainstorm and understand difficult subjects. AI is considered capable of providing better, more organized, and structured explanations, as well as different perspectives that help students. Artificial intelligence helps students with difficult ideas. When students are confused or have difficulty understanding something, they tend to turn to AI for clearer and more accurate answers. This makes the learning process more effective and precise. Furthermore, artificial intelligence is seen as a way for students to search for information, ask questions, and develop concepts or ideas accurately without fear of being judged or making mistakes, which are often problematic. This reduces barriers to normal learning. This situation increases student confidence, comfort in learning, and active participation in the educational process. These results support research by Zawacki-Richter et al. (2019), which states that the use of AI in higher education can explain complex concepts and provide personalized learning support to meet individual needs. A study by Yang and Evans (2023) also showed that AI as a learning assistant can make the classroom a safe place for students to learn, making them more likely to ask questions, think more deeply, and use their minds without feeling too much social pressure.

### **Concerns & Challenges**

In academia, the use of Artificial Intelligence (AI) has its pros and cons. AI can help students learn, but it can also complicate the learning process. One major issue frequently raised is that AI does not always provide information that is completely true, accurate, or relevant to the academic context. This is why a more sophisticated verification process that uses credible scientific sources such as academic journals and books is needed. Plagiarism is also a major concern in the use of AI, as its use without adequate controls can lead to academic work that lacks uniqueness. Students emphasize that to maintain academic integrity, AI must be used with appropriate paraphrasing, new understanding of the theme, and the use of original sources. Conversely, excessive use of AI leads to dependency, which can compromise the quality of the learning process, hinder the development of critical thinking, and undermine academic ethics if its use is not wisely limited. This is in line with research conducted by Rudolph, Tan, and Tan (2023), which shows that the use of AI in the world of education causes crucial problems, arising related to information accuracy and academic integrity so that critical thinking and a high overall level of ethics are needed among students. Furthermore, Cotton, Cotton, and Shipway (2023) state that the use of AI in academic writing requires the ability to assess information, follow responsible paraphrasing practices and limit its use to avoid dependence on technology and ensure a meaningful learning process and focus on improving academic competence.

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*"I verify AI information by checking official sources such as journals or trusted websites." (Participant 1)*

*"I rewrote everything and cited the original sources." (Participant 2)*

*"Sometimes, if I rely too much on it, it can reduce my learning process." (Participant 3)*

*"Paraphrasing in my own words helps me avoid plagiarism." (Participant 4)*

*"AI supports learning if used in a balanced way, but can be harmful if used excessively." (Participant 5)*

Interview results indicated that students demonstrated a careful and responsible approach in implementing Artificial Intelligence (AI), underscoring the need to verify knowledge through credible academic sources and use paraphrasing to reduce plagiarism. Participants' responses also indicated that they understood that AI output should not be accepted without critical examination and re-understanding. Students also understood that over-reliance on AI can make learning less effective and hinder the development of critical thinking skills. These findings align with those of Tlili et al. (2023), who stated that the use of AI in higher education requires the integration of digital literacy and ethical awareness to ensure academic integrity among students. Other studies by Boudouaia and Felder (2020) and Sallam (2023) also emphasized that the balanced use of AI, along with source checking and following good academic practices, is crucial to enabling meaningful and sustainable learning. Interview findings not only highlight the need for verification and academic integrity, but also indicate that students have a deep understanding of the need to maintain balance in the use of Artificial Intelligence (AI) to prevent over-reliance. Students view AI as a useful tool to enhance the learning process if used wisely and regularly; however, AI can degrade the quality of learning if used excessively without active user engagement. They worry that over-reliance on AI will make students more difficult to think critically, make them less intellectually active, and make them less independent in their learning. This perspective aligns with the findings of Joksimović (2023), who argues that the integration of AI in education must be aligned with self-regulation to avoid hindering the development of advanced cognitive abilities. Holmes and Tuomi's (2022) study also revealed that if learners rely too much on AI systems without adequate pedagogical supervision, it can alter their engagement in cognitive processes. Deng and Yu (2024) also emphasize that finding the right balance when using AI is important to maintain self-directed learning and ensure that technology is a tool, not a substitute for human brain processes in higher education.

## CONCLUSION

The findings of this study conclude that artificial intelligence (AI) has significant potential in assisting students in academic writing, especially as a learning tool that crucially improves academic writing, helps develop ideas, creates writing frameworks, corrects grammar and improves the quality of writing without replacing students' role in critical thinking. In this study, students' perceptions view AI as a cognitive support tool designed to enhance the learning process and not as a means for plagiarism and a means to speed up the completion of assignments quickly. AI also makes students comfortable to ask questions about concepts, try new ideas, ask questions and learn from mistakes without having to worry. This indirectly by using AI as a learning tool increases their self-confidence and cognitive engagement in learning. This study also states that although there is potential in the use of AI, there are also problems and concerns, especially regarding the accuracy of information, the potential for plagiarism and the dangers of excessive use that make students less independent and difficult to think critically if used unwisely. Students demonstrate their responsibility and wisdom by ensuring accurate sources, using good paraphrasing techniques and by understanding the importance of balance when using AI. In conclusion, AI has great potential as a tool to support students in academic writing if used wisely, in a controlled manner, and with due regard for ethics. Educators and universities must also be assertive and play a role in providing regulatory guidance and improving digital literacy to protect academic integrity and the quality of learning.

## REFERENCES

- Afolayan, T., & Obielodan, O. (2022). Integrating AI in higher education: Ethical and institutional considerations. *Journal of Educational Technology and Policy*, 5(2), 45–59.
- Almulhim, M. (2023). AI applications in higher education: Enhancing learning efficiency and personalization. *International Journal of Educational Research*, 115, 102–115.
- Beck, J., Stern, M., & Haugsjaa, E. (1996). Applications of AI in education. *XRDS: Crossroads, The ACM Magazine for Students*, 3(1), 11–15.
- Belda-Medina, J., & Calvo-Ferrer, J. R. (2022). Artificial intelligence in language learning: Feedback and adaptive practice. *Computer Assisted Language Learning*, 35(5–6), 1262–1280.
- Boudouaia, A., & Felder, R. (2020). Responsible AI use in higher education: Maintaining academic integrity. *Higher Education Review*, 52(3), 233–249.
- Chen, X., Xie, H., & Hwang, G. J. (2020). AI-driven feedback and self-regulated learning in education. *Educational Technology Research and Development*, 68(3), 1505–1526.
- Cotton, D. R., Cotton, P. A., & Shipway, J. R. (2023). Chatting and cheating: Ensuring academic integrity in the era of ChatGPT. *Innovations in Education and Teaching International*, 61(2), 228–239.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage Publications.
- Deep, P. D., & Chen, Y. (2025). The role of AI in academic writing: Impacts on writing skills, critical thinking, and integrity in higher education. *Societies*, 15(9), 247. <https://doi.org/10.3390/soc15090247>
- De la Vall, C., & Araya, D. (2023). AI as a supportive tool in language learning. *Language Learning & Technology*, 27(1), 85–101.
- Deng, H., & Yu, F. (2024). Balancing AI use and student autonomy in higher education. *Computers & Education*, 199, 104821.
- Ge, Z. G., Liu, Y., & Zhao, G. (2025). Exploring the utilization of AI-generated learning resources: A systematic review. *AI Enhanced Learning*, 1(2), 295–325.
- Grassini, S. (2023). Shaping the future of education: Exploring the potential and consequences of AI and ChatGPT in educational settings. *Education Sciences*, 13(7), 692.
- Harry, A. (2023). Role of AI in education. *Interdisciplinary Journal & Humanity (INJURITY)*, 2(3), 112–125.
- Holmes, W., & Tuomi, I. (2022). State of the art and practice in AI in education. *European Journal of Education*, 57(4), 542–570.
- Holmes, W., Bialik, M., & Fadel, C. (2019). *Artificial intelligence in education: Promises and implications for teaching and learning*. Center for Curriculum Redesign.
- Jovanovic, J. (2024, September). The interplay of learning analytics and artificial intelligence. In *2024 19th Conference on Computer Science and Intelligence Systems (FedCSIS)* (pp. 35–44). IEEE.
- Joseph, O. B., & Uzundu, N. C. (2024). Integrating AI and machine learning in STEM education: Challenges and opportunities. *Computer Science & IT Research Journal*, 5(8), 1732–1750.
- Joksimović, S., et al. (2023). AI in education: Regulating use to support higher-order thinking. *Computers & Education*, 197, 104754.
- Kasneci, E., Seßler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., ... & Kasneci, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences*, 103, 102274. <https://doi.org/10.1016/j.lindif.2023.102274>
- Kengam, J. (2020). Artificial intelligence in education. *Research Gate*, 18, 1–4.
- Li, J., & Jeong, H. (2020). AI-driven speech recognition and linguistic analysis in language learning. *Computer Assisted Language Learning*, 33(7), 735–757.
- Li, C., & Lalani, F. (2020). AI for inclusive higher education: Supporting learners with special needs. *International Journal of Educational Technology in Higher Education*, 17(1), 1–20.

- Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence unleashed: An argument for AI in education*. Pearson Education.
- Rudolph, J., Tan, S., & Aspland, T. (2023). Personal digital assistant or job killer?: Generative AI and the teaching profession in higher education. *Journal of Applied Learning & Teaching*, 6(2), 7–16.
- Sallam, M., Salim, N. A., Barakat, M., & Al-Tammemi, A. A. B. (2023). ChatGPT applications in medical, dental, pharmacy, and public health education: A descriptive study highlighting the advantages and limitations. *Narrated by J*, 3(1), e103.
- Tlili, A., Denden, M., Abed, M., & Huang, R. (2024). Artificial intelligence ethics in services: Are we paying attention to that?!. *The Service Industries Journal*, 44(15–16), 1093–1116.
- William, F. K. A. (2024). AI in academic writing: Ally or foe?. *International Journal of Research Publications*, 148(1), 353–358.
- Yang, M. L. (2025). Artificial intelligence versus human teacher assistants and language learners' progress in learning and retention of complex sentences. *Current Psychology*, 44(7), 6292–6304.
- Yin, J., & Wang, L. (2022). AI and teacher collaboration in language learning: Balancing technology and pedagogy. *Computer Assisted Language Learning*, 35(8), 1302–1323.
- Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education - where are the educators?. *International Journal of Educational Technology in Higher Education*, 16(1), 1–27.
- Zhai, X., Chu, X., Chai, C. S., Jong, M. S. Y., Listenic, A., Spector, M., ... & Li, Y. (2021). A review of artificial intelligence (AI) in education from 2010 to 2020. *Complexity*, 2021(1), 8812542. <https://doi.org/10.1155/2021/8812542>
- Zhu, D., Bu, Q., Zhu, Z., Zhang, Y., & Wang, Z. (2024). Advancing autonomy through lifelong learning: A survey of autonomous intelligent systems. *Frontiers in Neurobotics*, 18, 1385778.