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# THE ROLE OF ARTIFICIAL INTELLIGENCE IN IMPROVING WRITING SKILL

**Donizal Albi**[1]
Institut Agama Islam Negeri Kerinci , Jambi, Indonesia
Email: Donizalalbi04@gmail.com

**Yelni Erniyati**[2]
Institut Agama Islam Negeri Kerinci , Jambi, Indonesia
Email: yelnierniyati1@gmail.com

***Abstract***
*This study aims to explore the role of Artificial Intelligence (AI) in enhancing students' writing skills at university. Anchored in digital learning theory, this qualitative study gathered data through in-depth semi-structured interviews with ten university students. The collected data were analyzed using thematic analysis to identify key patterns of AI integration in academic writing. The findings reveal that AI significantly contributes to writing development by helping students construct better sentences, enrich vocabulary, and receive immediate feedback. Additionally, it fosters independent learning, boosting students' confidence and motivation. However, challenges remain, such as over-dependence on digital tools, difficulty interpreting feedback, lack of training, and varying language proficiency. These insights imply that while AI offers substantial benefits, its integration into higher education requires proper training and structured pedagogical support to maximize effectiveness.*

***Keywords:*** Artificial Intelligence ,EFL, learning, student, writing Skill

## 1. Introduction

There after AI is increasingly accepted and effectively controlled by people to assist them, it is currently working its way into the world of education. AI has evolved alongside the field of education and is now utilized progressively in educational institutions (Srinivasan, 2022, p. 4). The general definition of artificial intelligence AI is non living machine intelligence that is derived from human natural intelligence (Dai & Ke, 2022). Recognizing how computers think about, perceive, learn, make decisions, produce, and act is made easier for students through AI education (Yang, 2022). The extreme and dramatic prevail in estimates regarding how artificial intelligence could impact modernity (Siemens et al., 2022). Knowing the situation under which learning occurs in this complex structure is crucial because it will enable people to identify the periods when an intervention may be successful in enhancing learning (Nasir et al., 2022). For researchers, educators, the term "AI" is too general to be of any practical value. By emphasizing cognition rather than intelligence, the discussion of human-machine interactions shifts from a theoretical, high-level argument to one in which specific, concrete cognitive processes and activities can be recognized and practically assigned to the agent most qualified to carry them out. This results in two distinct cognitive systems human and artificial that perform cognitive tasks at varying speeds, scales, and in various manners. More research is required in the area of integrating and coordinating the outputs of both systems (Siemens et al., 2022) As students listen to several points of view and are expected to explain and defend their opinions, the CL environment presents social and emotional challenges. By doing this, the students start to develop their own original conceptual frameworks rather

than depending only on those of an expert or a text (Tan et al., 2022) Artificial intelligence AI, which provides the technological foundation for new services and tools that aid in daily choices, has demonstrated the potential to transform various aspects of our society and lives in recent decades (Niyogisubizo et al., 2022). Because of these technological advancements, academic writing a vital talent in all educational systems has undergone substantial change. The advent of numerous digital tools to help academics with their research, writing, and composing processes has really had an impact on academic writing.(Nguyen et al., 2024)

Artificial intelligence is the part of learning and developing writing skills because several reason. writing is more significant since it fosters language development and serves as a tool for thought. (Mohammad & Hazarika, 2016) Academic writing, which involves an organized way of conveying ideas, is an essential component of research and teaching. Researchers and educators frequently utilize it to provide logical reasoning and data-driven arguments in scholarly publications. (Albadawy et al., 2024) The phrase "AI Readiness" refers to the shift that educators and their students must undergo from a lack of knowledge about artificial intelligence AI and its capabilities to a non-technical awareness of what AI can accomplish (Luckin et al., 2022) In addition to a lack of desire, students' writing efficacy is also hampered by time constraints. Students are frequently required to complete their writing assignments within a specific time frame in EFL classes. As a result, many students sometimes struggle to complete their assignments. (Tuan, 2010) Generative AI, such as ChatGPT, holds great potential for enhancing critical literacy in writing and thought. AI could give students helpful criticism, correct their vocabulary, grammar, and sentence structure, and provide assignments that are specific to their areas of weakness. This enhances pupils' critical thinking abilities by enabling them to concentrate on areas that require work.(Mujahidin et al., 2024) Technology is revolutionizing the university classroom by altering the methods of communication, collaboration, and learning between educators and students.(Neumann & Hood, 2009) it is important to emphasize that writing essays is one of the most common yet challenging assignments for students. (Banihashem et al., 2024) By offering samples of proper language, sentence patterns, and paragraphs, generative AI can also help students with research and report writing. Additionally, AI can customize course materials to each student's unique requirements and interests, improving the efficiency and enjoyment of the learning process. To guarantee that pupils successfully acquire these abilities, teachers' roles and assistance are still essential.(Mujahidin et al., 2024) Individuals with these abilities could collaborate with their peers to learn new things by using technology and related innovations in highly complex ways (Tsz et al., 2022) AI has evolved into a very useful tool for academic writing. Writing helpers with AI capabilities assist with grammar, structure, citations, and following rules of discipline. (Albadawy et al., 2024) The power of technology, such as AI, is only a tool. The key to effective writing skills remains active learning, constant practice, and appropriate instruction. By employing AI properly, students can enhance their writing skills more effectively and confidently.

Despite the growing body of literature on the integration of Artificial Intelligence (AI) in language education,

most existing studies have focused predominantly on general language skills such as speaking, reading, or grammar acquisition. Limited empirical attention has been given to how AI tools specifically influence academic writing skills, particularly among EFL (English as a Foreign Language) learners in rural or under-resourced educational settings like IAIN Kerinci. Furthermore, while many studies highlight the benefits of AI, fewer examine both the positive and negative implications, including overreliance, issues of academic integrity, and the development of critical AI literacy. This study addresses these gaps by exploring students' real experiences, perceptions, and challenges when using AI in academic writing, thus contributing a nuanced understanding of AI's pedagogical and psychological effects in a localized EFL context.

The rapid evolution of artificial intelligence (AI) has significantly transformed modern education, finding its way progressively into educational institutions as non-living machine intelligence derived from human natural intelligence (Srinivasan, 2022; Dai & Ke, 2022; Yang, 2022). This integration has triggered dramatic shifts in modernity and academic writing—a vital skill for conveying organized ideas and data-driven arguments in scholarly research (Siemens et al., 2022; Nguyen et al., 2024; Albadawy et al., 2024).

Academic writing is essential because it fosters language development and serves as a crucial tool for thought (Mohammad & Hazarika, 2016). However, students frequently face challenges such as time constraints and limited writing efficacy in EFL classes (Tuan, 2010; Banihashem et al., 2024). To address these hurdles, generative AI tools like ChatGPT have emerged, offering valuable assistance with grammar, vocabulary, sentence structures, citations, and critical literacy (Mujahidin et al., 2024; Albadawy et al., 2024).

From a theoretical perspective, understanding this technological integration involves recognizing distinct human and artificial cognitive systems that perform tasks at varying speeds and scales (Siemens et al., 2022). Additionally, "AI Readiness" highlights the necessary transition for educators and students from lacking knowledge to possessing a non-technical awareness of what AI can achieve (Luckin et al., 2022). While previous studies have widely explored AI's general impact on language skills like speaking, reading, or grammar acquisition (Niyogisubizo et al., 2022; Mujahidin et al., 2024), limited empirical attention has been given to how AI tools specifically influence academic writing skills among EFL learners in under-resourced or rural settings, such as IAIN Kerinci. Furthermore, fewer studies examine both the positive and negative implications, including overreliance and academic integrity.

To address these gaps, this study explores students' real experiences, perceptions, and challenges when using AI in academic writing, thereby providing a nuanced understanding of AI's pedagogical and psychological effects in a localized EFL context

## 2. Literature Review

### A. Artificial intelligence

AI is a technology with many applications, perceived and designed to support human capabilities.The possibility of AI technologies to solve problems in various domains, including education, has attracted a lot of attention due to their rapid advancement. Both in the developed and developing worlds, improving learning outcomes and offering pertinent education to everyone have been prevalent topics.

Additionally, in the contemporary era of technology-driven customization, they have become more significant. (Srinivasan, 2022, p. 4)

Artificial Intelligence (AI) has rapidly transformed modern technology, offering versatile applications designed to augment human capabilities across various domains. In education, the integration of AI tools has gained significant attention worldwide due to their potential to improve learning outcomes, foster learner autonomy, and deliver personalized learning environments (Chiu, 2023; Srinivasan, 2022). Recent advances in generative AI and Large Language Models (LLMs) have further shifted these technologies from passive tools into interactive automated learning assistants, offering on-demand scaffolding beyond traditional classroom boundaries (Alharbi, 2023; Zawacki-Richter et al., 2019).

The majority of AI writing tools are designed to evaluate written content and provide feedback on various aspects of writing, including syntax, grammar, vocabulary, content, and structure (Widiati et al., 2023, p. 3). Recent developments in artificial intelligence (AI) have further contributed to the advancement of electronic writing tools, enabling them to provide more sophisticated feedback and support creative writing (Alharbi, 2023). Tools such as ChatGPT, DeepSeek, and Blackbox AI demonstrate these developments by offering different forms of assistance in the writing process. For example, ChatGPT tends to generate detailed descriptive feedback, including summary statements about an essay's content and suggested actions for improvement. However, students have been found to be better at recognizing and identifying problems within the feedback provided (Banihashem et al., 2024, p. 19). This suggests that although AI writing tools can support students in improving their writing, students still play an essential role in evaluating feedback critically and deciding how to apply it effectively.

**B. Writing Skill**

Writing is a core component of language learning and plays a significant role in academic success. It involves multiple aspects such as grammar, coherence, vocabulary, structure, and clarity (Swiecki et al., 2022). According to (Negari, 2011), writing goes beyond simple communication it is also a tool for developing critical thinking, particularly within academic settings. Developing strong writing skills requires both cognitive and linguistic abilities.

Graham and Perin (2007) highlight that the students can enhance their writing performance through specific strategies like planning, revising, and editing. Recently, the integration of digital technologies and artificial intelligence in writing instruction has greatly supported students in improving their writing quality. AI-powered tools such as Grammarly, QuillBot, and ChatGPT assist users in generating text, checking grammar, and refining coherence and cohesion (Widodo et al., 2023, p. 6).

In educational contexts, writing proficiency is often linked to higher academic achievement and better future career opportunities. Therefore, improving students' writing ability remains a primary focus in language education. With the growing availability of AI-based feedback systems, students can reflect more effectively on their written work and adopt better strategies to organize and express their thoughts.

To address these writing difficulties, AI-powered writing tools such as ChatGPT, DeepSeek, Grammarly, and Blackbox AI have emerged as transformative technological supports. Modern AI systems evaluate written content and

provide instant formative feedback across various dimensions of writing, including syntax, grammar, lexical diversity, and structural flow (Widiati et al., 2023; Su et al., 2023). Beyond basic grammar checking, generative AI acts as a cognitive accelerator, aiding students in overcoming writer's block during pre-writing stages (e.g., brainstorming, outlining) and supporting iterative drafting (Fitria, 2023; Hwang & Chen, 2023).

## 3. Research Method

This study adopted a qualitative research design utilizing a case study approach ( Creswell, 2018; Yin, 2018). A qualitative case study was selected because it enabled an in-depth, contextual exploration of a complex educational phenomenon within its real-world setting. Specifically, this design aimed to investigate how English language learners perceived and experienced the integration of Artificial Intelligence AI toolssuch as Grammarly, QuillBot, and ChatGPT in enhancing their academic writing skills, with a specific focus on the perceived benefits, limitations, and behavioral shifts associated with AI usage.

This study employed a qualitative case study approach to investigate the role of AI in enhancing writing skills among students within the academic environment of University. The research involved eight participants who were actively enrolled in English language classes. These students came from various regions across Kerinci Regency and Sungai Penuh City, Jambi Province. The Participants were purposefully selected to represent a balance in terms of geographic background rural and urban as well as gender, to ensure diverse perspectives.

The participants consisted of both male and female students from the same study program but with different levels of prior exposure to digital tools and internet access. Some came from remote rural areas with limited access to digital infrastructure, while others lived in more developed urban settings with greater technological support. This diversity provided a meaningful basis to examine how AI tools function in contexts with varying levels of digital readiness.

To ensure the reliability and depth of data, the researcher conducted preliminary observations focusing on the students' learning environments, including the availability of digital devices and the use of AI-powered platforms such as Grammarly, QuillBot, and ChatGPT for academic writing tasks. These observations helped identify participants with differing levels of digital literacy, particularly in how they integrate technology into their writing practices.

Informal interviews and classroom observations were also carried out to explore students' learning behaviors, attitudes toward AI, and their overall experiences with writing instruction. The variation in participants' digital competence and educational context enriched the study's insights, especially regarding the interaction between technology and writing development in higher education.

Through this case study, The researchers aimed not only to observe the effectiveness of AI in supporting writing improvement but also to understand students' real experiences and perceptions of AI integration in their day-to-day academic learning.

The participants of this research consisted of eight English Education students actively enrolled in English language classes at IAIN Kerinci, Jambi Province. A purposive sampling technique was employed to select the participants based on specific criteria to

capture rich and diverse perspectives (Patton, 2015). The selection ensured a balanced representation in terms of geographic background, involving students from rural areas with limited digital infrastructure as well as urban settings in Kerinci Regency and Sungai Penuh City with greater technological access. Additionally, the sample incorporated a gender balance and varied levels of prior exposure to digital tools, providing a solid foundation for examining how AI tools function across different levels of digital readiness.

This study employed a qualitative case study approach, using semi-structured interviews as the primary method for data collection. The objective was to explore how English language learners perceive and experience the use of Artificial Intelligence AI tools in their writing development. The study specifically focused on the perceived benefits, limitations, and behavioral changes associated with the integration of AI in writing activities.

The data collection process involved several stages. First, participant profiles were identified, including academic standing, gender, place of origin (urban or rural), and their familiarity with AI based writing platforms. A total of eight English education students from IAIN Kerinci participated in the study, with a balanced representation of genders and geographical backgrounds to capture diverse experiences.

Second, the participants were asked open-ended questions concerning their engagement with AI tools, such as Grammarly, ChatGPT, and other writing assistants. They were encouraged to reflect on how these tools supported their grammar, structure, vocabulary, and overall writing confidence. They also discussed any challenges or ethical concerns, such as dependency or reduced critical thinking.

The collected data were analyzed using the Interactive Model of Qualitative Data Analysis proposed by Miles, Huberman, and Saldana (2014), which encompasses data condensation, data display, thematic interpretation, and conclusion drawing. First, raw audio recordings in Indonesian were transcribed verbatim, translated into English, and condensed by filtering out irrelevant details while highlighting key ideas related to AI integration. Second, manual coding was applied to categorize recurring patterns into specific codes, such as grammatical support, dependency concerns, and digital divide. Third, these codes were grouped into major thematic categories to interpret how background differences (urban versus rural) and digital literacy levels influenced students' AI usage in academic writing. Finally, conclusions were drawn and verified through member checking (Bressler & Lincoln, 1985) in follow-up sessions to ensure the credibility and trustworthiness of the findings.

The collected data were transcribed and reviewed manually. Key themes and patterns were identified and grouped based on participants' responses. Data were interpreted qualitatively by comparing recurring views and highlighting unique insights. To ensure the credibility of the findings, participants' responses were cross-checked through follow-up clarification sessions when needed. The final analysis aimed to offer a rich, contextual understanding of AI's role in enhancing students' academic writing skills. clarity (Swiecki et al., 2022)

## 4.Result and Discussion

### RESULT

By conducting in-depth semi-structured interviews with students of the English Education Program, the results of this

study are divided into two main sections: the benefits of using AI in developing writing skills based on students' perspectives, and the challenges they face while using the technology. In this section, participants' identities are anonym to maintain their personal privacy. Therefore, pseudonyms are used in place of their real names. These pseudonyms are: J, St, W, D, A, S, R and I.

The findings of this study demonstrate that the application of AI technology has significantly influenced the development of academic writing skills among fourth-semester students in the English Education Department at IAIN Kerinci. This aligns with global trends that position AI as an integral part of modern education, especially in supporting English language learning. This discussion elaborates in detail on how students utilize AI tools, the benefits they perceive, challenges encountered, and the pedagogical and psychological implications of AI integration in academic writing.

### I. AI as a Personal Assistant in the Writing Process

A majority of participants reported utilizing AI-based tools such as ChatGPT, Grammarly, and Google Translate to assist them in composing, organizing, and refining their academic writing. Each tool serves a different but complementary purpose:

ChatGPT was widely used for idea generation and outlining the structure of essays or reports. Students often relied on it when they faced difficulties starting their writing.

"When I'm stuck and don't know how to begin writing, I ask ChatGPT first. It usually gives me some ideas, and then I continue on my own." Rachel

Grammarly provides immediate feedback on grammar, punctuation, cohesion, and clarity, allowing students to recognize and learn from their mistakes.

"Grammarly really helps. It doesn't just fix my writing it shows me what I did wrong." Steven

Google Translate was often used to help students translate specific thoughts or phrases from Bahasa Indonesia into English, especially when they lacked vocabulary.

The use of these tools together reflects increasing digital competence and strategic behavior, where students use multiple resources to improve both the process and product of their writing.(Batchelor, n.d.)(Chaipidech et al., 2022)

### II. Increased Motivation and Confidence through AI

One of the most significant impacts of AI use is the increase in students' motivation and self-confidence. Many students who previously felt anxious or insecure about their English writing now feel more confident due to the assistance AI provides, which is non-judgmental and always available.

"I used to be scared of writing in English because I was afraid of making mistakes. But now I feel more confident because AI helps me check my work." William

The presence of AI as a writing companion reduces fear of failure and promotes self-efficacy, which is vital for long-term language development (Bandura, 1997). Students now view writing as less of a burden and more of an achievable task.

### III. AI and the Development of Academic Independence

Interestingly, some students have developed a more independent approach to using AI. Rather than relying on it entirely, they begin their drafts manually and later use AI to revise or enhance their ideas.

"I usually write on my own first, then I check with Grammarly and ChatGPT. But I still reread and edit again myself." Isabella.

This reflects the development of critical AI literacy an emerging awareness among students about using AI not as a crutch but as a guide. These learners demonstrate responsible and autonomous behavior by engaging with AI critically and ethically.

### IV. Risks of Dependency and Academic Integrity

Despite the advantages, the study also uncovered some risks. A number of students admitted to copying content directly from AI tools like ChatGPT without editing or fully understanding the material, particularly when under time constraints.

"I admit that sometimes I just copy from ChatGPT, especially when the deadline is near. But I've realized it doesn't help me learn." Daniel

This behavior points to a serious concern about academic integrity and over-reliance on technology. It echoes the warnings from (Adekunle et al., 2022) and(Kura et al., 2014), who caution against passive digital learning and the potential decline of critical thinking when learners depend too heavily on automated tools.

Educators must address this issue by promoting AI use as a supplementary aid, not a replacement for personal effort or creativity.

### V. AI-Enhanced Collaborative Learning

Rather than isolating learners, AI tools have sometimes fostered collaborative reflection among students. Several participants mentioned using AI-generated content as material for discussion and peer review.

"My friends and I often compare what ChatGPT gives us. Then we discuss whose version is better and what needs to be improved." Aliana

Such practices demonstrate that AI can encourage peer interaction and critical discourse, especially when students use it to evaluate and improve their own and others' writing. AI, therefore, becomes a springboard for deeper collaboration rather than a solitary tool.

### VI. Technical and Psychological Challenges

While many students benefited from AI, some reported psychological stress and anxiety when they couldn't access these tools due to unstable internet or device limitations.

"I feel panicked when the internet is down. It's like I can't write without AI." Sofia

This kind of technology dependency can hinder the development of core writing skills and poses a challenge for educators to maintain balance. Training in both manual writing and AI assisted writing is necessary to ensure students are capable of working in any condition.

## DISCUSSION

The findings of this study demonstrate that Artificial Intelligence (AI) tools play a significant role in enhancing students' academic writing skills. This aligns with existing literature stating that AI is transforming language learning, especially in writing development (Luckin et al., 2016). Participants reported using ChatGPT for idea generation and brainstorming., idea generation is a crucial phase in writing and often a barrier for EFL learners(McCarthy, 2004). Grammarly, widely used for grammar checking, supports (Harmer, 2007) view that immediate feedback strengthens grammatical accuracy and learner autonomy.

Google Translate, though often debated, still serves as an accessible support tool for vocabulary development and understanding (Gaspari & Hutchins, 2007). This is consistent with its evolution from literal translation to context-aware assistance. AI tools also appeared to positively affect learners' motivation and confidence, consistent with Dörnyei's (2001) theory of motivation in second language acquisition. Reduced anxiety while writing and increased willingness to write mirror (Krashen, 1982) affective filter hypothesis.

Importantly, the study reveals that students did not use AI blindly. They typically wrote first drafts manually and later refined them using AI, reflecting critical digital literacy. This aligns with (Flavell, 1979) metacognition theory and Warschauer and (Warschauer & Healey, 1998)view that digital tools should promote learner independence. However, potential negative effects also emerged. Some students admitted to copying entire AI-generated texts without understanding them, supporting warning about uncritical dependence on external sources. Overreliance on AI may inhibit internal language acquisition, as emphasizes.

Another concern is emotional dependence. The anxiety of not having access to AI tools points to (Postman, 1993)) theory of technological dependency. Therefore, balanced use of AI tools, guided by pedagogical goals, is essential (Selwyn, 2016). On a positive note, AI-assisted writing triggered collaborative learning. Discussions about AI-generated content among peers confirm (Vygotsky, 1978) Zone of Proximal Development, where knowledge construction is socially mediated. In sum, AI offers meaningful support for academic writing when used ethically and critically. It enhances motivation, awareness, and confidence—but its risks must be managed through proper guidance and reflective teaching practices.

The present study has revealed that Artificial Intelligence (AI) tools have significantly contributed to the development of academic writing skills among fourth-semester students in the English Education Department at IAIN Kerinci. As digital literacy becomes an indispensable element of 21st-century education, AI emerges not merely as an optional aid but as a transformative force in language learning. The strategic use of tools such as ChatGPT, Grammarly, and Google Translate has shown to support students in various stages of writing—from idea generation and content organization to grammar correction and lexical refinement.

One of the key contributions of AI integration lies in its ability to enhance student motivation and reduce writing-related anxiety. The accessibility and non-judgmental nature of these tools provide a psychological safety net for students who may otherwise struggle with low confidence and fear of making errors in English writing. This increased sense of self-efficacy aligns with Bandura's (1997) framework, in which belief in one's capability significantly influences learning outcomes. As a result, writing is increasingly perceived as a manageable and constructive academic activity.

Furthermore, the findings suggest a shift towards greater academic independence among some learners. Students who initially relied heavily on AI tools gradually developed more responsible usage patterns. They began composing initial drafts independently and used AI for critical feedback and refinement. This practice demonstrates the emergence of AI literacy, which encompasses the ability to engage with technology in a critical, ethical, and autonomous manner—a vital

competency in modern academic environments.

Nonetheless, this study also highlights notable challenges, particularly the risk of over-dependence and academic dishonesty. A number of students reported copying content directly from AI-generated texts without adequate comprehension or adaptation, especially under time constraints. Such practices raise concerns about the erosion of critical thinking skills and the weakening of academic integrity. Therefore, educators must actively cultivate awareness and responsibility in AI usage, ensuring that these tools are viewed as support mechanisms rather than substitutes for genuine learning.

Moreover, the overreliance on digital tools introduces psychological and logistical vulnerabilities. Students expressed stress and helplessness when faced with technical disruptions such as poor internet connectivity or device malfunction. These reactions suggest an urgent need for balanced pedagogy that incorporates both AI-assisted and manual writing strategies. Reinforcing foundational writing skills, while integrating AI where appropriate, can safeguard students against the pitfalls of technological dependency.

In summary, the incorporation of AI into academic writing pedagogy offers substantial pedagogical benefits, particularly in enhancing motivation, confidence, and skill acquisition. However, the effectiveness of such integration depends on the development of critical awareness, ethical use, and balanced instructional strategies. Educators and institutions must work collaboratively to foster digital competence while upholding the core values of academic scholarship. Ultimately, while AI can significantly augment the writing process, the responsibility for intellectual engagement and original thought must remain firmly with the learner.

## 4. Conclusion

This research underscores the pivotal role that Artificial Intelligence (AI) technologies play in enhancing the academic writing abilities of fourth-semester students in the English Education Department at IAIN Kerinci. As the integration of digital tools becomes increasingly central to contemporary education, AI proves to be more than a mere supplement—it acts as a catalyst for progress in language acquisition. Applications such as ChatGPT, Grammarly, and Google Translate have been instrumental across various stages of the writing process, helping students brainstorm ideas, organize content, and polish grammar and vocabulary usage.

A notable advantage of AI use is its contribution to improving students' motivation and reducing apprehension related to writing in English. The constant availability and neutral nature of AI tools offer psychological reassurance, especially to learners who experience low confidence and fear of making linguistic errors. This boost in confidence supports Bandura’s theory of self-efficacy, where learners’ belief in their abilities plays a critical role in achieving academic success. Consequently, many students now approach writing not as an intimidating task, but as a manageable academic endeavor.

In addition, findings reveal a growing trend toward independent learning. Some students are beginning to engage with AI tools more responsibly by drafting content on their own before turning to AI for feedback and suggestions. This demonstrates the emergence of AI literacy the ability to interact with AI critically and ethically while maintaining autonomy. Such

behavior indicates a positive shift toward more reflective and self-regulated writing practices, which are essential for long-term academic growth.

Despite these benefits, several concerns must be addressed, particularly regarding over-reliance and academic dishonesty. A number of participants admitted to copying AI-generated content without proper understanding, especially under tight deadlines. This pattern reflects a lack of critical engagement and poses risks to academic integrity. Therefore, educators must play an active role in guiding students to use AI tools as supports for learning, not as shortcuts that replace their intellectual efforts.

The psychological and technical dependency on AI also surfaced as a challenge. Students reported anxiety and a sense of helplessness when unable to access AI tools due to connectivity issues or technological limitations. Such experiences highlight the need for a balanced instructional approach one that reinforces foundational writing skills while leveraging AI as a supportive mechanism. This balance will help students build resilience and competence, whether or not technology is available.

To conclude, while AI integration in academic writing offers promising benefits including improved confidence, autonomy, and language proficiency it must be accompanied by pedagogical strategies that promote responsible use. The key lies in fostering students' digital competence without compromising their critical thinking and originality. AI should be viewed not as a replacement for human thought, but as a collaborative resource that, when used wisely, can significantly enrich the writing learning process.

## REFERENCES

Adekunle, M., Temitayo, I., Paul, O., Aruleba, K. D., & Sunday, S. (2022). Computers and Education :

Albadawy, M., Khalifa, M., & Albadawy, M. (2024). Using Artificial Intelligence in Academic Writing and Research : An Essential Productivity Tool Computer Methods and Programs in Biomedicine Update Using artificial intelligence in academic writing and research : An essential productivity tool. *Computer Methods and Programs in Biomedicine Update*, *5*(March), 100145. https://doi.org/10.1016/j.cmpbup.2024.100145

Chaipidech, P., Srisawasdi, N., Kajornmanee, T., & Chaipah, K. (2022). Computers and Education : Artificial Intelligence A personalized learning system-supported professional training model for teachers ' TPACK development. *Computers and Education: Artificial Intelligence*, *3*(March), 100064. https://doi.org/10.1016/j.caeai.2022.100064

Dai, C., & Ke, F. (2022). Computers and Education : Artificial Intelligence Educational applications of artificial intelligence in simulation-based learning : A systematic mapping review. *Computers and Education: Artificial Intelligence*, *3*(June), 100087. https://doi.org/10.1016/j.caeai.2022.100087

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive–developmental inquiry. *American Psychologist*, *34*(10), 906–911. https://doi.org/10.1037/0003-066X.34.10.906

Gaspari, F., & Hutchins, J. (2007).

Online and free: Translation resources for learners. In A. Pym & A. Perekrestenko (Eds.), *Translation technology and language teaching*. Universitat Rovira i Virgili.

Harmer, J. (2007). *The practice of English language teaching* (4th ed.). Pearson Education.

Krashen, S. D. (1982). *Principles and practice in second language acquisition*. Pergamon.

Kura, K. M., Shamsudin, F. M., & Chauhan, A. (2014). *Effects of honor codes and classroom justice on students ' deviant behavior*. *112*(Iceepsy 2013), 77–86. https://doi.org/10.1016/j.sbspro.2014.01.1141

Luckin, R., Cukurova, M., & Kent, C. (2022). Computers and Education : Artificial Intelligence Empowering educators to be AI-ready. *Computers and Education: Artificial Intelligence*, *3*, 100076. https://doi.org/10.1016/j.caeai.2022.100076

Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence unleashed: An argument for AI in education*. Pearson Education.

McCarthy, M. (2004). *Touchstone: From corpus to course book*. Cambridge University Press.

Mohammad, T., & Hazarika, Z. (2016). *Difficulties of Learning EFL in KSA : Writing Skills in Context*. *6*(3), 105–117. https://doi.org/10.5539/ijel.v6n3p105

Mujahidin, E., Ginting, N. B., Nurjanah, S., & Solehudin, T. (2024). *AI as a Personalized Tutor : The Effectiveness of AI- Based Writing Training Models in Enhancing Santri Writing Skills*. Atlantis Press SARL. https://doi.org/10.2991/978-2-38476-299-6

Nasir, J., Abderrahim, M., Kothiyal, A., & Dillenbourg, P. (2022). Computers and Education : Artificial Intelligence Temporal pathways to learning : How learning emerges in an open-ended collaborative activity . *Computers and Education: Artificial Intelligence*, *3*(July), 100093. https://doi.org/10.1016/j.caeai.2022.100093

Nguyen, A., Hong, Y., Dang, B., Huang, X., Hong, Y., & Dang, B. (2024). Studies in Higher Education Human-AI collaboration patterns in AI-assisted academic writing. *Studies in Higher Education*, *49*(5), 847–864. https://doi.org/10.1080/03075079.2024.2323593

Niyogisubizo, J., Liao, L., Nziyumva, E., Murwanashyaka, E., & Claver, P. (2022). Computers and Education : Artificial Intelligence Predicting student ' s dropout in university classes using two-layer ensemble machine learning approach : A novel stacked generalization. *Computers and Education: Artificial Intelligence*, *3*(March), 100066. https://doi.org/10.1016/j.caeai.2022.100066

Postman, N. (1993). *Technopoly: The surrender of culture to technology*. Vintage Books.

Selwyn, N. (2016). *Education and technology: Key issues and debates* (2nd ed.). Bloomsbury Publishing.

Siemens, G., Marmolejo-ramos, F., Gabriel, F., Medeiros, K., Marrone, R., Joksimovic, S., & Laat, M. De. (2022). Computers and Education : Artificial Intelligence Human and artificial cognition. *Computers and Education: Artificial Intelligence*, *3*(August 2021), 100107. https://doi.org/10.1016/j.caeai.2022.100107

Srinivasan, V. (2022). Computers and Education : Artificial Intelligence AI & learning : A preferred future. *Computers and Education: Artificial Intelligence*, *3*(March), 100062. https://doi.org/10.1016/j.caeai.2022.100062

Swiecki, Z., Khosravi, H., Chen, G., Martinez-maldonado, R., Lodge, J. M., Milligan, S., Selwyn, N., & Ga, D. (2022). *Computers and Education : Artificial Intelligence Assessment in the age of artificial intelligence*. *3*(March). https://doi.org/10.1016/j.caeai.2022.100075

Tan, S. C., Vwen, A., Lee, Y., & Lee, M. (2022). Computers and Education : Artificial Intelligence A systematic review of artificial intelligence techniques for collaborative learning over the past two decades. *Computers and Education: Artificial Intelligence*, *3*(June), 100097. https://doi.org/10.1016/j.caeai.2022.100097

Tsz, D., Ng, K., Luo, W., Man, H., Chan, Y., Kai, S., & Chu, W. (2022). Computers and Education : Artificial Intelligence Using digital story writing as a pedagogy to develop AI literacy among primary students. *Computers and Education: Artificial Intelligence*, *3*(February), 100054. https://doi.org/10.1016/j.caeai.2022.100054

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview. *Language Teaching*, *31*(2), 57–71. https://doi.org/10.1017/S0261444800012970

Yang, W. (2022). Computers and Education : Artificial Intelligence Artificial Intelligence education for young children : Why , what , and how in curriculum design and implementation ☆. *Computers and Education: Artificial Intelligence*, *3*(March), 100061. https://doi.org/10.1016/j.caeai.2022.100061