

Attitudes toward AI in Writing: Opportunities and Challenges for English Students' Writing Skills

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To cite this article:

Efriza, D., Yusra, A., Usanto, H., & Andi Yaksa, R. (2026). Attitudes toward AI in Writing: Opportunities and Challenges for English Students' Writing Skills. *ENGLISH FRANCA: Academic Journal of English Language and Education*, 10(1 May), 153–166. <https://doi.org/10.29240/ef.v10i1.May.14914>

Abstract. The objective of this study was to examine the influence of learning and innovation skills on students' attitudes toward the use of artificial intelligence (AI) in writing and its effect on their writing proficiency. A sequential explanatory mixed-method design was employed to provide both statistical and in-depth insights. The quantitative data were gathered by means of a questionnaire and writing assessment from 34 second-semester English Department students of the Faculty of Teacher Training and Education, Universitas Jambi, through stratified random sampling from the population of 120 students. The questionnaire measured students' attitudes towards AI in writing through communicative, behavioural, and cognitive indicators, and the IELTS writing rubric was used to assess writing proficiency. To understand the experiences and perceptions of AI tools such as ChatGPT and Grammarly, qualitative data were collected through semi-structured interviews and classroom observations of seven purposively selected participants. The results showed that students' attitude towards AI significantly affected their writing skills (Sig. = 0.006 < 0.05). Students who had a positive and critical attitude toward AI managed to write in a more coherent manner, while those who relied excessively on AI demonstrated poorer results and less creativity. The point is that artificial intelligence could actually serve as a great means to enhance writing skills, but it should be accompanied by sufficient awareness and consciousness. This suggests that it is important to promote digital literacy and critical thinking regarding the use of AI in the learning of English.

Keywords: Artificial Intelligence, Attitude, Writing Proficiency

Introduction

This industrial revolution of Industry 4.0 could be one of the factors that led to the growth of artificial intelligence (AI). AI has evolved into one of the fundamental components of our existence. It plays a considerable part in many areas of life, both at macro and micro levels. It is everywhere, including in education. AI is increasingly present in different areas of our lives. The benefits of artificial intelligence are clear, from the ability to crunch huge data sets at lightning speed to improving efficiency and convenience, eliminating lengthy procedures and automating rote tasks without tiring.

It will be a big problem for students if they leave tasks to be done to AI. This will make students dependent on using AI to do all tasks, so that their own language skills will not develop. In other words, AI is a threat to language learning rather than a helper in language learning. The impact of students relying on AI to complete their tasks can be negative. Another issue is the over-reliance on AI to perform the task that is a dependence issue, as students may become less self-sufficient in case of a lack of AI (Apriani et al., 2025). Moreover, the over-reliance on AI can negatively influence the development of critical thinking skills since students will not be able to develop these skills if they rely too much on AI for solving problems

Article info:

<http://journal.iaincurup.ac.id/index.php/english>

Received 09 October 2025; Received in revised form 28 May 2026; Accepted 30 May 2026, Available Online 30 May 2026

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and thinking critically. Apart from this, students need to be creative during the learning process, and over-reliance on AI does not allow generating their own ideas or solutions. Furthermore, there is always the issue of data privacy and security related to the usage of AI tools since personal information needs to be shared when using AI tools. Lastly, there is not equal access to AI for all students. This can lead to inequities in education, where students who have access to AI will have an advantage over those who do not. To prevent any potential problems, there should be a balance achieved. While artificial intelligence can be a valuable asset in education in order to facilitate learning, it should not be used as an alternative to skills that students should be developing. Teachers and institutions have to guide the students on how to use artificial intelligence in a way that would support, not hinder, their learning process.

Moreover, Geoffrey Hinton, the godfather of AI, left Google. According to his confession, he regrets and fears the consequences of the artificial intelligence products he developed. In 2012, Hinton and two of his colleagues from the University of Toronto created AI technology that the company believes could be key in the future, namely neural networks learning from digital text. Hinton thought it could be a powerful solution for machines to understand and generate text and language. However, over the years of developing AI technology products, precisely when Google and OpenAI began developing AI chatbots, Hinton's views on the technology he created changed. "What is in this system is actually much better than what is in the (human) brain," said Hinton, as summarized by KompasTekno from The New York Times, Wednesday (3/5/2023). It means that AI will affect the way digital natives, people who grew up with the presence of digital technology or in the information age, learn a language and do their language assignments. By using some applications/ products that embed AI, it will be easy for the students to do language assignments.

At the ASEAN Summit 2023, which took place on September 5th-7th, 2023, all countries present talked about AI threatening humanity. President Jokowi said that at the G7, G20, and ASEAN summit meetings, all of them talked about AI, which has no regulations regarding the use of AI (CNBC Indonesia, 2023). The development of AI technology is inevitable, so it is necessary to prepare for the presence of AI so that AI does not necessarily become a threat to education. For this reason, studies are needed to produce policies for educators in providing learning for digital native students so that learning objectives are maximally achieved and are not replaced by AI.

The rapid and widespread proliferation of AI-based technologies is an inevitable phenomenon that educators must face. These advancements bring both opportunities and challenges, particularly in understanding students' true language abilities in an era where digital tools can easily assist or even replace certain aspects of learning. Therefore, teachers and lecturers need to identify the true competencies of students and formulate effective strategies for teaching language skills in this new technological era.

Erkan and Saban (2011) argue that students who are good at receptive skills such as reading and listening, or at speaking, may still have problems with writing due to the fear of making mistakes and low self-efficacy. Different language skills involve different cognitive processes. We must understand through reading and listening; we must produce language through speaking and writing. For productive skills like vocabulary use, grammatical accuracy, and text organization, the cognitive load required can be considerably higher. So some students are better at the receptive skills, as understanding a language is different from producing a language. In the age of artificial intelligence, this difference is all the more pertinent since although technology can help in the superficial creation process, skill development still needs the involvement of learners cognitively and linguistically.

Some students are afraid of making mistakes, because writing appears to be more complicated than speaking. This could prevent them from writing without hesitation. Students might receive fewer chances to write than other forms of communication. Speaking and listening happen more often in real life as opposed to writing, which occurs only on some specific occasions. In speaking instances (such as when the teacher corrects their pronunciation), students may get more immediate and personal feedback than in writing assignments, where feedback may be later and in a more impersonal form (e.g., written

comments on a paper). Sometimes the language you speak is very different from the language you write. Students from certain linguistic or cultural backgrounds may find it difficult to adapt to conventions of written language. That is, students perceive that they are not able to communicate in written English.

Writing proficiency is critical to success in higher education and later professional endeavors. The ability to compose a long written document is viewed as the most effective way to gauge success within academic performance at the first-year level (Mdodana-Zide and Mukuna, 2023). Moreover, the ability to write informatively and analytically is viewed as one of the good ways that demonstrate the positive effects of higher education (Lee and Lee, 2022). In a knowledge economy, much of the value created by firms is locked in written documents (Brandt, 2005). This also underlines the importance of a workforce with good literacy skills.

Writing skills are important, but the National Assessment of Educational Progress (NAEP, 2002) has painted a bleak picture of the writing ability of American students. It is worth noting that proficiency or above proficiency was attained by less than one-third of the learners in grades four, eight, and twelve, specifically 28%, 31%, and 21%, respectively. Out of all three populations assessed, just 2% of the learners had advanced writing skills. Fourth- and eighth-grade learners performed much better than they had done in the 1998 test, while twelfth-grade learners scored somewhat poorly. Writing is one of the cognitive activities and involves several processes, such as memory skills and language and cognitive skills, which require instant retrieval of relevant knowledge about the subject matter (Kellogg, 2001). According to Abdullah (2022), having proficient linguistic skills is crucial in writing meaningful content. The production of extended texts puts a heavy load on the working memory.

In addition, competent writers are capable of handling the cognitively demanding activity of organizing thoughts, producing written text, and evaluating ideas and text (Storch, 2019; Lee et al., 2019). With such requisites, it is no wonder that the differences in writing proficiency, both developmental and individual differences, can be attributed to the limitations of working memory (Supiani, 2017). To become a proficient writer, you need to have the cognitive capacity to juggle multiple representations and manage the interactions among planning, generating, and evaluating.

At present, there is more and more research on the impact of AI writing tools on students' writing skills, and this research is relevant to the TEFL industry. Several studies show that the use of AI-based writing tools in their practice can improve students' writing skills (e.g., Kurniati and Fithriani, 2022; Wang, 2022; Zhao, 2022). However, there are also apprehensions raised by certain researchers regarding the potential drawbacks of these tools (e.g., Y. Liu et al., 2022; Lund and Wang, 2023; Qadir, 2022). It can be interpreted that there are controversial opinions in research on the usefulness of AI in the language learning process. However, many researchers have studied the use of AI for writing skills, but they do not examine how students' attitudes towards the use of AI in learning to write, how wise students' attitudes are towards the use of AI in the writing learning process, and to what extent AI has an effect on the overall quality of writing. Language learners can learn a language from language apps with AI, but sometimes it is abused, especially for writing, and much research only focuses on using AI to increase students' writing skills. For this reason, the teacher or lecturer should know the attitude of language learners in using AI for writing as facilitation in language learning.

Besides, several studies have been conducted to investigate English teaching practice at the university level (Liu, 2018; Rahman, 2018; Zhang et al., 2020). However, very little research has been undertaken to investigate English students' attitudes in using AI for learning writing skills. The issue of attitudes in language learning by using artificial intelligence affects the result of someone's decision to learn a language. Recognizing the significance of attitudes toward learning English and the status of English as an international language, this study aimed to explore the attitudes of English Department students at a public university in Indonesia. The focus was on their perspectives regarding learning English and the use of Artificial Intelligence in language learning.

For lecturers, it is important to know the way of students, as independent learners, use AI for writing to provide appropriate treatment or models in learning writing so that students have real abilities in writing skills, not artificial ones. This study is important to see the effect of English students' attitudes in using AI for writing and to provide some strategies lecture in classroom practices to face the challenges and changes caused by students' use of AI in learning writing.

Theoretical Framework

Attitude is generally defined as an individual's feelings, beliefs, perceptions, and behavioral tendencies toward a particular object or phenomenon. Gardner, cited in Soleimani and Hanafi (2013), defines attitude as someone's feelings, prejudices, fears, and beliefs about a topic. Similarly, Abidin (2012) explains that attitude is closely related to personality and plays an important role in determining students' achievement in language learning. Learners who possess positive attitudes toward language learning tend to continue learning and achieve better academic outcomes.

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Students' perceptions of AI may influence their attitudes toward, and acceptance and adoption of, artificial intelligence (AI) tools in their academic writing practices within the framework of AI-supported writing. Students who have a positive attitude toward AI may be more likely to use AI tools effectively for brainstorming, checking grammar, developing ideas, and supporting academic writing. In contrast, negative attitudes can lead to anxiety, mistrust, or a reluctance to use artificial intelligence (AI) technologies. The current research builds on the results of the work by Kasneci et al. (2023). In particular, the researchers identified enormous opportunities for using AI-based apps such as ChatGPT in helping students strengthen their writing skills and develop critical thinking. Besides, Chan and Hu (2023) found that students perceived the use of AI-based writing apps as a means to improve their writing and language proficiency but expressed some concerns regarding their dependency and cheating.

Yildiz (2023) emphasizes that there are three major dimensions that reflect students' attitudes toward the use of AI in language teaching: communicative, behavioral, and cognitive aspects. The communicative aspect involves learners' perceptions of the use of AI in communication and expression of ideas, the behavioural aspect involves learners' actions and willingness to use AI tools, and the cognitive aspect involves learners' beliefs and understanding of the usefulness of AI in learning. Similarly, Gao et al. (2025) argued that students' acceptance of AI technologies in education is strongly influenced by their behavioural responses, cognitive perceptions, and interaction experiences with AI-supported learning systems.

Behavioural Aspect of Attitude toward AI in Writing

The behavioural aspect refers to learners' actions, reactions, and tendencies in using AI for writing activities. According to Kara (2009), positive attitudes are reflected through active engagement, willingness to learn, and motivation to solve academic problems. In AI-assisted

writing, behavioural attitudes can be seen from students' willingness to use AI tools, frequency of use, and readiness to integrate AI into their writing practices.

Several previous studies support the importance of behavioural attitudes in language learning. Abidin (2012) reported that students with negative behavioral attitudes participated less in English learning activities. Similarly, Quinio and Espinosa (2024) noted that learners' negative behavioural attitudes often coexisted with positive cognitive perceptions of language learning technologies.

Ahmadi (2018) stated that the proper integration of technology in technology-assisted language learning can have a positive influence on the learners' engagement and improve language acquisition skills. Therefore, behavioural attitudes toward AI writing tools are essential in determining whether students actively utilize AI to support their writing development.

Cognitive Aspect of Attitude toward AI in Writing

The cognitive aspect refers to learners' beliefs, knowledge, understanding, and perceptions regarding AI usage in writing. Abidin (2012) explains that cognitive attitudes involve learners' beliefs toward the knowledge they obtain during the learning process. In AI-assisted writing, this aspect includes students' perceptions of AI usefulness, effectiveness, efficiency, and contribution to writing improvement.

According to Yildiz (2023), artificial intelligence can help language acquisition through cognitive functions that include comprehension, ideation, and composition. Likewise, Ahmadi (2018) argued that technology integration enhances learners' language skills when learners perceive technology as beneficial and supportive for learning activities.

Previous studies also demonstrated the significance of cognitive attitudes in language learning. According to Al-Tamimi and Shuib (2009), students had positive cognitive attitudes towards English due to the acknowledgement of its educational and social values. Similarly, Herwiana and Laili (2021) found that students had positive attitudes toward English learning in general, but positive attitudes did not necessarily lead to high language proficiency.

Thus, students' cognitive attitudes toward AI writing tools may determine how they evaluate AI as a learning resource and whether they believe AI can effectively improve their writing performance.

Communicative Aspect of Attitude toward AI in Writing

The communicative aspect refers to learners' perceptions and attitudes toward the use of AI as a tool for facilitating communication, idea expression, interaction, and language production during the learning process. Communicative attitudes refer to students' perceptions of AI in helping them to express ideas, to organize arguments, to generate responses, and to improve interaction in English writing activities.

Yildiz (2023) stated that in AI-assisted language learning, the communicative aspects refer to the communicative functions of AI in supporting learners' language production and interaction. Learners tend to develop positive attitudes when AI tools help them communicate ideas more clearly and confidently in the target language.

Similarly, recent studies indicate that AI technologies can strengthen students' communicative confidence and language interaction skills. Vistari et al. (2026) point out that students' positive attitudes toward AI significantly contributed to their communicative readiness and confidence in language learning activities. Students with higher technological readiness and positive AI perceptions showed higher communication-enhanced confidence in the context of learning English.

Speech-recognition chatbots and AI-based communication tools are also seen as helpful in improving communicative competence in language learning. AI-supported interaction allows learners to practice language production, get immediate feedback, and gain confidence in expressing their ideas in English.

In writing activities, communicative attitudes towards artificial intelligence may be students' perceptions of AI helping them generate ideas, improve clarity of expression, help

with academic communication, and help with interaction in English writing tasks. Therefore, the communicative aspect plays an important role in shaping students' acceptance and effective utilization of AI technologies in language learning and academic writing.

Artificial Intelligence has increasingly been integrated into language learning and writing instruction. AI writing tools can aid in idea generation, grammar correction, content structuring, and writing productivity. According to Ahmadi (2018), technology can play an important role in the enhancement of learners' language acquisition skills if it is applied properly in educational contexts.

Writing with AI also presents students with opportunities and challenges. AI technology will aid learners in developing their writing skills and increasing efficiency, and promote autonomous learning as well. But overuse of artificial intelligence might decrease students' critical thinking, creativity, and originality in writing.

Recent research suggests that learners' attitudes toward AI significantly affect how effective AI tools are in supporting writing development. Students with positive behavioural, cognitive, and emotional attitudes are more likely to use AI productively and responsibly in academic writing contexts.

Based on these theories and previous studies, the present study investigates English students' attitudes toward AI in writing by focusing on behavioural, cognitive, and emotional aspects. Furthermore, the study explores the opportunities and challenges of AI usage in improving students' writing skills in the Indonesian university context.

Material and Method

The present study used a sequential explanatory mixed-method design to explore students' attitudes towards the use of AI for writing towards writing skills. Data were collected and analyzed both quantitatively and qualitatively to answer the research questions. The population of this study was all the second-semester students of the English department, which consisted of four classes of the Faculty of Teacher Training and Education (FTTE) Universitas Jambi. The study was carried out with 120 English students during the 2023 academic year. Two classes were selected by stratified random sampling, and 34 students were chosen as participants. Also participating in the qualitative phase were seven English students who were purposefully sampled and provided their informed consent to be interviewed. The sample size for the qualitative section of the study was relatively small, but the study was conceptualised as exploratory, with a deep understanding sought rather than broad generalisation. The questionnaires were the quantitative instruments. The attitudes of students toward the use of AI in writing were evaluated by using a 14-item questionnaire measuring three criteria: communicative, behavioral, and cognitive perspectives (Yıldız, 2023). The questionnaire employed a 4-point Likert scale from strongly disagree to strongly agree. The construct validity of the instrument was tested by Confirmatory Factor Analysis (CFA), and Cronbach's Alpha ($\alpha > 0.70$) (Heale & Twycross, 2015) confirmed the instrument's reliability with strong internal consistency. In addition, the students were assigned a writing task, which they were asked to perform individually on-site. Their work was assessed using the IELTS writing rubrics and scored as good (3), acceptable (2), or poor (1). The quantitative phase involved a semi-structured interview protocol to qualitatively explore students' experiences of AI tools in terms of AI effectiveness, challenges, and strategies in interpreting AI feedback.

Descriptive statistics such as frequency, percentage, total score, and mean score were used to analyze the quantitative data to find the general trend of students' attitude towards AI in writing. Scoring criteria were used to categorize questionnaire results into positive and negative attitudes. The writing test scores were also analyzed to see students' writing performance levels. The qualitative data collected from the interviews were analysed through thematic analysis. The interview recordings were transcribed, coded, and categorized into several themes related to students' attitudes, experiences, opportunities, and challenges in using AI for writing. Finally, the results of the quantitative and qualitative phases were merged

and discussed to present a comprehensive view of students' attitudes towards AI-assisted writing.

Results and Discussion

Results

This section presents the results of students' attitudes toward the use of AI in writing activities based on the questionnaire data collected from the participants. The questionnaire aimed to identify whether students demonstrated positive or negative attitudes toward using AI writing tools in writing. The results were categorized according to the students' attitude scores and are presented in Table 1 below. The table provides a detailed description of each participant's score, category, total score, and mean score in order to illustrate the overall tendency of students' attitudes toward AI in writing.

Table 1.
Student Attitude in Using AI

Student's Code	Y (Attitude)	Category
Student 1	52	Positive
Student 2	50	Positive
Student 3	50	Positive
Student 4	33	Negative
Student 5	55	Positive
Student 6	21	Negative
Student 7	46	Positive
Student 8	42	Positive
Student 9	40	Positive
Student 10	37	Negative
Student 11	22	Negative
Student 12	30	Negative
Student 13	37	Negative
Student 14	38	Negative
Student 15	32	Negative
Student 16	33	Negative
Student 17	41	Positive
Student 18	41	Positive
Student 19	35	Negative
Student 20	42	Positive
Student 21	30	Negative
Student 22	30	Negative
Student 23	48	Positive
Student 24	30	Negative
Student 25	24	Negative
Student 26	40	Positive
Student 27	37	Negative
Student 28	36	Negative
Student 29	40	Positive
Student 30	44	Positive

Student 31	32	Negative
Student 32	41	Positive
Student 33	50	Negative
Student 34	37	Negative
Total	1296	
Mean	38,11764706	

The data presented in Table 1 shows the results of 34 students' attitudes toward using AI writing tools. The scores are between 21 and 55 and are labeled as "Positive" or "Negative". 16 students have a "Positive" attitude towards AI writing tools, with the scores generally between 38,12 to 55. Meanwhile, 18 students have a "Negative" attitude, with a score of 21 to 37. This suggests that while there is a subset of students who are receptive to the notion of AI writing tools, the general student attitude towards the use of such technologies is one of caution or apathy. The findings imply the need for measures to fight against such negative attitudes and encourage positive interaction with AI-based writing.

Table 2.
Student Writing Skills Assessment Results

Student's Code	Writing Score	Category
Student 1	3	Good
Student 2	2,5	Acceptable
Student 3	3	Good
Student 4	2,5	Acceptable
Student 5	3	Good
Student 6	1	Poor
Student 7	2	Acceptable
Student 8	2,5	Acceptable
Student 9	2	Acceptable
Student 10	2	Acceptable
Student 11	1	Poor
Student 12	1	Poor
Student 13	2,5	Acceptable
Student 14	2,5	Acceptable
Student 15	2	Acceptable
Student 16	2,5	Acceptable
Student 17	2,5	Acceptable
Student 18	2,5	Acceptable
Student 19	2,5	Acceptable
Student 20	2,5	Acceptable
Student 21	1,5	Poor
Student 22	1,5	Poor
Student 23	3	Good
Student 24	1,5	Poor
Student 25	1,25	Poor
Student 26	2	Acceptable
Student 27	2	Acceptable

Student 28	2	Acceptable
Student 29	1,5	Poor
Student 30	2,5	Acceptable
Student 31	1,5	Poor
Student 32	2,5	Acceptable
Student 33	2,5	Acceptable
Student 34	2	Acceptable
Total	72,25	
Mean	2,125	Acceptable

Table 2 presents the writing skill scores of 34 students classified into three categories of "Good", "Acceptable," and "Poor". Scores are ranked from 1 to 3, with "Good" being the highest (3) and "Poor" the lowest (1). 5 students received a "Good" rating. 3. Most of the students, 25 in total, fell within the "Acceptable" range, between 1.25 and 2.5. The remaining 4 students fell into the "Poor" category with scores of 1 or 1.5. The total combined score of all students is 72.25, and the mean score is 2.125, falling in the "Acceptable" range. This seems to imply that there are a few students who are very good writers, but most students are adequate writers but not exceptional. There is room for improvement for many students to enhance their writing proficiency.

The sign of attitude in using AI for writing = 0,006 is smaller than 0,05. It can be concluded that attitude in using AI has a significant effect on writing skills, so hypothesis 7 is accepted. Both datasets can be described as follows:

Table 3.
Attitude in Using AI for Writing toward Writing Skills

Quantitative Result	Qualitative Result	Decision
0,006 < 0,05	S1, S2, S3, S4, S7 said that AI is a communicative tool that can improve their cognition during the writing learning process. S6 and S11 felt spoiled by the presence of AI in helping them with their writing without having to study more deeply.	Hypothesis Accepted

To provide a comprehensive understanding of students' behaviour in utilizing artificial intelligence (AI) during academic writing, a series of systematic observations was conducted throughout the writing assignments. The observations were directed at identifying patterns of AI usage and attitudes toward AI, and the quality of students' final written work. The observation findings can be seen as follows:

Table 4.
Findings from Observation

Observed Aspect	Behavioural Indicator	Findings from Observation
Use of AI in Writing	Opening and copying text from ChatGPT, Grammarly, QuillBot; revising after AI input	Most students used AI to draft initial versions. Some copied directly without revision.

Attitudes toward AI	Verbal comments on AI's strengths/weaknesses, awareness of plagiarism	Some students showed critical attitudes ("AI results lack depth"), while others relied on it completely.
Final Written Work	Logical structure, clarity of ideas, originality, minimal plagiarism	Students with a positive attitude in using AI for writing produced writing with clear flow and minimal logical errors.

Based on observations from the writing assignment sessions, it can be concluded that most students have used AI tools like ChatGPT and Grammarly in their academic writing process. But the way they use these tools is very different depending on their level of thinking skills and digital literacy skills.

Regarding attitude, students who knew about the limitations of AI acted selectively. They said AI was helpful as a source of inspiration, not as a tool to complete the whole assignment. Meanwhile, students who showed reliance on AI were less likely to pay attention to the process of independent thinking.

In terms of writing achievement, the students who had a positive attitude were able to write papers using logical structure, selecting the appropriate words, and providing relevant references. They could also use AI as a tool to assist them, rather than as a primary source of content. They also showed less plagiarism in their writing by paraphrasing and reevaluating AI outputs.

This finding supports the quantitative and qualitative findings that positive attitude in using AI affects the quality of students' writing. Attitudes towards AI are an enabler or barrier to realising the full capabilities of this technology. The observation suggests that the use of AI in writing is only effective when students have sufficient cognitive and ethical skills.

Students' attitude toward the use of AI in writing is one of the most important determinants of how much this technology can improve students' writing skills, as seen from the significance value ($0.006 < 0.05$). This is even more relevant considering the fast growth and easy availability of artificial intelligence (AI) technology in educational systems, such as that of Indonesia, where AI provides possibilities to facilitate English language learning. Furthermore, students indicated using AI-based applications, such as ChatGPT, Gemini, Grammarly, and DeepL, regularly, thus showing that such applications have become part of their usual writing routine. Tools such as Grammarly, ProWritingAid, and the grammar checker in Microsoft Word are examples of tools that provide instant feedback on grammar, punctuation, sentence structure, and style. Instant corrective feedback allows learners to know about their mistakes and correct them right away, and this practice can be beneficial for Indonesian learners who face problems with language because of the difference between their L1 and English. Nevertheless, some participants admitted that using such tools could be efficient only when used responsibly and critically, as too frequent usage would not help them acquire independent skills (Bibi & Atta, 2024).

AI tools are quite useful in encouraging creativity and eliminating barriers in English writing. Indeed, participants stated that such AI tools as ChatGPT are helpful in brainstorming and overcoming writer's block, while Grammarly can be considered a reliable instrument for identifying and correcting grammar mistakes. Another big advantage of integrating AI is the possibility of receiving personalized feedback. Artificial intelligence systems are able to spot patterns of errors, provide personalized feedback, and support focused learning in large classrooms where teachers may sometimes fail to pay personal attention to students. Feedback helps students assess their performance and concentrate on areas that cause them problems. Furthermore, Grammarly can be used not only for correcting mistakes, but also as a good source for learning, since it enables learning about grammatical rules and writing

structure, as indicated by Fitria (2021). Similarly, Tafazoli (2024) concluded that tools empowered by AI assisted in expanding vocabulary and translating in a more natural way.

Besides accuracy in language, some participants (S1, S2, S3, S4, S7) noted that there are communicative and cognitive advantages of the AI-based instruments as well. In particular, AI was considered by them as a facilitator that helps in comprehension of the concepts and as an instrument that promotes critical thinking while writing. Nevertheless, some participants (S6, S11) noted that the excessive use of AI will lead to superficial learning and demotivation of the students for self-study. These opposite opinions demonstrate that there is a wide range of attitudes towards AI, which determine its potential and limitations in pedagogy (Sulaeman et al., 2024; Gunawan et al., 2024; Efriza et al., 2026).

Furthermore, the statistical analysis showed that attitudes toward AI explained 31.3% of the variance in students' writing skills. This was less than learning and innovation skills (32%) and technological literacy (39.4%). This implies that attitudes toward AI are not the most important factor, but they still play an important role in promoting learning motivation and guiding positive behaviors in the writing process. Likewise, the employment of AI applications was also found to indirectly enhance students' writing skills by creating positive attitudes, offering instant feedback, and encouraging students to work more actively, as revealed in previous studies (e.g., Kaharuddin, 2021).

Overall, these findings indicate that attitudes toward AI use not only affect motivation but also the overall outcomes of student writing. If students hold positive attitudes about AI, then they are more motivated to take part actively in the educational process, and this results in good grammar, vocabulary, and academic writing proficiency. Nevertheless, dependence brings about constraints on possibilities of individual practice and reflection. Thus, the balanced approach is necessary wherein writing assistance through AI should be combined with autonomous learning, responsible use of technology, and collaboration. Following the suggestions of the participants as well as other research, collaborative work with peers can be very useful for the development of writing skills that require critical thinking and idea generation (Tangkitjaroenkun et al., 2022).

In general, writing tools based on AI have many benefits such as high efficiency, availability, and personalization. However, the ability of AI to develop literacy skills is dependent on proper use of technology. AI should be regarded as a means that enhances and does not substitute basic literacy skills in writing through creativity and critical engagement. The findings thus highlight the importance of merging online literacy with continuous practice and collaborative learning to harness the advantages of AI in English writing instruction.

Conclusion

The research revealed the effect of students' attitude towards the use of AI on writing tasks on students' writing ability. People who were balanced and critical of AI could take advantage of the technology without losing the integrity of their learning. By contrast, students who depended too much on AI produced superficial writing and weaker arguments, showing that positive attitudes need to be accompanied by awareness and ethical responsibility. Thus, student attitudes are a reflection and a mediator of writing performance in an AI-affected learning environment. The study's findings indicate that students' attitudes towards AI use may influence their writing quality, with positive and reflective attitudes being associated with better performance. This means that AI in education is neither good nor bad; it is how students view it and use it. Hence, teachers should teach writing but also cultivate a balanced attitude towards AI in their students. This means engaging with both the promise and danger of AI tools and encouraging students to use them for brainstorming and feedback while still taking responsibility for original thought and expression.

Acknowledgement

The authors would like to express sincere gratitude to the *Institute for Research and Community Service (LPPM)* of *Universitas Jambi* for providing financial support for this research through its research grant program.

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