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Students' Perspectives on Using Artificial in Academic Writing

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ABSTRACT

The development of Artificial Intelligence (AI) has greatly impacted English language learning, especially It adopted a descriptive quantitative approach through a survey. The sample included 20 fourth-semester students, with 16 females and 4 males. Data were gathered via an online Likert-scale questionnaire focusing on AI's benefits, ease of use, and challenges in academic writing. Descriptive statistics, such as percentages and mean scores, were used to analyze the responses. Results showed that most students viewed AI positively, citing its help in idea generation, grammar correction, vocabulary enhancement, and increasing writing efficiency. Some students, however, expressed concerns about overdependence on AI and its possible effects on critical thinking. Overall, AI was seen as a helpful tool for boosting students' academic writing skills.
Keywords: *Artificial Intelligence; Academic Writing; Students' Perspectives; English Education Students; Higher Education.*

IINTRODUCTION

The rapid growth of digital technology in the twenty-first century has profoundly impacted many areas of human life, especially education. Digital transformation has altered not only how people access information but also how teaching and learning occur, making them more adaptable, engaging, and reliant on technology. In higher education, technology now plays a vital role in facilitating effective learning and improving students' academic results. As Selwyn (2022) notes, digital tools are essential in modern education by broadening learning opportunities and fostering the development of students' academic skills.

Artificial Intelligence (AI) is among the most notable technological breakthroughs in recent times. It involves computer systems that perform tasks that typically require human intelligence, such as solving problems, processing language, making decisions, and creating content (Russell & Norvig, 2021). As AI advances, it has enabled a variety of applications that are becoming increasingly prevalent in educational environments.

The rise of generative AI has transformed the way students handle academic tasks. Tools like ChatGPT, Grammarly, QuillBot, Gemini, Claude, and Microsoft Copilot are now widely available and commonly used by students for studying purposes. These applications can generate ideas, offer feedback, correct grammar, paraphrase content, and help organize academic work. As a result, AI has become a powerful

educational technology that aids students in various learning activities (Dwivedi et al., 2023).

The use of AI in language education has gained significant attention from educators and researchers. In English as a Foreign Language (EFL) settings, AI provides opportunities to enhance language learning through personalized support, instant feedback, and accessible resources. Kasneci et al. (2023) suggest that AI could revolutionize language education by enabling tailored learning experiences and encouraging independent learning.

Among the four language skills, writing is often considered one of the most difficult for EFL learners. Writing requires students to generate ideas, organize information clearly, use proper grammar and vocabulary, and express their thoughts effectively. Unlike speaking, writing calls for greater linguistic accuracy and mental effort. Therefore, writing is considered a complex skill that needs constant practice and growth (Hyland, 2019).

Academic writing, specifically, is a key ability that university students need to master. It is frequently used in essays, research papers, reports, proposals, and theses. Academic writing demands that students to use formal language, logical reasoning, clear organization, and evidence-based arguments. According to Bailey (2018), successful academic writing involves not just language skills but also critical thinking and the ability to build well-supported arguments.

Despite acknowledging its crucial role in language proficiency, many EFL (English as a Foreign Language) students face significant difficulties with academic writing. Previous research has highlighted a range of specific challenges these students encounter, including limited and underdeveloped vocabulary, frequent grammatical errors, poor organization of ideas, and a lack of practical experience in academic writing contexts. These obstacles often impede their ability to produce well-structured, cohesive, and high-quality academic texts that meet scholarly standards (Fareed et al., 2016).

In addition, students commonly struggle to construct cohesive arguments in their writing. They face challenges in connecting ideas effectively, maintaining a logical flow throughout their texts, and presenting evidence convincingly. Rahmatunisa (2014) observed that EFL learners frequently encounter difficulties related to grammar accuracy, content development, organizational coherence, and appropriate language use when completing academic writing tasks, which collectively hinder their overall performance and progress in academic literacy.

The difficulties inherent in academic writing have led students to explore a variety of support options to enhance their writing skills throughout the process. Traditionally, these students depended heavily on their instructors for guidance, collaborated with peers for feedback and ideas, utilized writing centers for specialized assistance, and relied on grammar-checking software to correct errors. However, the rapid development and integration of advanced AI technologies have introduced a range of new tools that offer immediate, round-the-clock support, making assistance more accessible and convenient during every stage of writing.

AI tools offer numerous benefits for students engaged in academic writing. They can help generate ideas through intelligent prompts, assist in organizing and creating detailed outlines, suggest revisions to improve sentence clarity and coherence, identify and correct grammatical mistakes swiftly, enhance vocabulary choices for more precise expression, and paraphrase complex texts to ensure clarity and originality. Because of these capabilities, AI has gained considerable popularity among university students seeking to improve their writing efficiency and quality. Recent scholarly research, such as Wang (2024), indicates that AI technologies are significantly transforming students' writing practices by offering support across nearly every step of the writing process, from initial brainstorming to final editing.

From a theoretical standpoint, the integration of AI into education can be explained by the Constructivist Learning Theory. Vygotsky (1978) highlighted that learning happens through interactions between learners and the tools present in their learning environment. Educational technologies serve as mediating tools that support knowledge construction. In this context, AI can be seen as a learning support tool that helps students develop writing skills and construct knowledge independently.

Besides Constructivism, this study is also based on the Technology Acceptance Model (TAM) proposed by Davis (1989). TAM posits that people's acceptance of technology is mainly influenced by two factors: perceived usefulness and perceived ease of use. The more useful and user-friendly a technology appears, the more likely people are to adopt and use it. This framework is especially relevant for understanding students' acceptance and perceptions of AI tools in academic writing.

Students' perspectives are essential in evaluating how effectively AI can be integrated into education. Their perceptions shape attitudes, motivations, and behaviors related to technology use. Gaining insights into students' views on AI can reveal opportunities and hurdles in deploying it within academic environments (Chan & Hu, 2023).

Previous research shows generally positive student perceptions of AI-assisted writing. Many students find that AI aids in idea generation, overcoming writer's block, improving grammar, and enhancing overall writing quality. AI is also seen as a tool that boosts writing efficiency and cuts down the time needed to complete assignments.
Similarly, research across various EFL settings indicates that students tend to feel more confident and motivated when incorporating AI technologies into their writing. AI-supported learning environments typically lead to higher learner engagement and greater satisfaction than traditional methods. These results imply that AI can be an effective educational tool in language learning. Additionally, studies show that AI can enhance writing skills, enabling students to produce more organized, grammatically correct, and academically sound texts. These outcomes emphasize the potential advantages of integrating AI into writing instruction.

Despite its benefits, the growing integration of AI in academic writing has raised concerns. A primary issue is the risk of overdependence on technology. Relying too much on AI can diminish students' critical thinking, creativity, and problem-solving

skills. Some scholars warn that students may become passive consumers of information rather than active creators when they rely heavily on AI-generated content.

Another key concern involves academic integrity. The use of AI-produced materials has fueled debates about originality, plagiarism, authorship, and ethical standards in academia. Educational institutions worldwide are working to establish guidelines for the responsible use of AI in scholarly work. Consequently, understanding how students perceive AI is vital for shaping effective policies and ethical practices.

Although many studies have explored AI in education, most focus on its effectiveness in improving writing or on specific tools like ChatGPT. Few have examined students' views on multiple AI platforms, such as ChatGPT, Grammarly, QuillBot, and Gemini, in academic writing contexts.

Additionally, research specifically targeting students from Indonesian English Education Departments is limited. Most studies have been conducted in general higher education or international EFL settings, leaving a gap in understanding how these students perceive the benefits, challenges, and implications of using AI in academic writing.

This highlights an important research gap. While prior research has mainly concentrated on AI's role in enhancing writing performance, little attention has been paid to students' perceptions of various AI tools, especially among Indonesian English Education students. This study aims to explore fourth-semester English Education students' perspectives on academic writing. The results are expected to contribute to the literature on AI-assisted language learning and to offer practical insights for educators and institutions seeking to responsibly and effectively incorporate AI into writing instruction.

METHOD

Research Design

This study used a quantitative, descriptive survey approach. A quantitative method was chosen to collect numerical data reflecting students' views on Artificial Intelligence (AI) in academic writing. Creswell and Creswell (2018) describe quantitative research as a means of testing objective theories by analyzing relationships among variables using numerical data collection and statistical methods.

A descriptive survey design was selected because the focus was on describing a phenomenon without altering any variables. The study did not aim to explore causal links or the impact of one variable on another. Rather, it aimed to understand and detail students' perceptions of AI in academic writing. This approach enabled the researcher to collect students' opinions, experiences, and perceptions regarding AI tools used in academic writing tasks.

The research utilized the Technology Acceptance Model (TAM) developed by Davis (1989). TAM suggests that technology acceptance mainly depends on Perceived Usefulness and Perceived Ease of Use. Additionally, this study incorporated a third factor, Challenges and Concerns, to deepen the understanding of students' views on AI in academic writing.

Research Setting and Time

The study was conducted at the English Education Department (Tadris Bahasa Inggris/TBI) at the State Islamic College of Mandailing Natal (STAIN Madina) in North Sumatra, Indonesia. This site was chosen because Artificial Intelligence tools are increasingly used by students, especially for academic writing tasks.

Data collection took place at the second semester of the 2025/2026 academic year and was completed within 2 weeks.

Population and Sample

The research focused on all fourth-semester students studying in the English Education Department (TBI) at STAIN Madina. These students were chosen because they had already taken several English courses, such as Writing and Academic Writing, giving them enough experience in academic writing.

The study used a total sampling method. Sugiyono (2022) describes total sampling as the inclusion of every member of the population in the study. This approach is suitable for the small, manageable size of the population. the sample consisted of 20 fourth-semester students from the English Education Department. Among them, 16 were female (80%), and 4 were male (20%).

To participate in the study, students needed to meet these criteria:

1. They were currently enrolled as fourth-semester students in the English Education Department at STAIN Madina.
2. They had previous experience with Artificial Intelligence tools.
3. They used AI to aid in academic writing.
4. They voluntarily consented to take part in the study.

Research Instrument

The main data collection tool in this study was a questionnaire. It was chosen because it enabled the researcher to gather students' perspectives within a short timeframe efficiently. The questionnaire used a five-point Likert scale with the following options:

Score	Category
1	Strongly disagree
2	Disagree
3	Neutral
4	Agree
5	Strongly agree

Variables	Indicators	Description
Students' Views on Using AI in Academic Writing	Perceived Usefulness	Students' perceptions of AI's benefits in academic writing
Students' Views on AI in Academic Writing Challenges	Perceived Ease of Use	Students' perceptions of how easy it is to use AI tools
Students' Views on AI in Academic Writing	Challenges and Concerns	Students' concerns, limitations, and challenges related to AI use

Examples of questionnaire statements included:

- AI assists me in generating ideas for academic writing.
- AI helps enhance grammatical accuracy in my writing.
- AI simplifies academic writing tasks.
- I find AI tools user-friendly.
- I worry that overusing AI might lead to dependency among students.
- I am concerned that AI could diminish students' critical thinking skills in writing.

Overall, the questionnaire contained about 15–20 statements addressing all research indicators.

Data Collection Procedure

Data were gathered via an online survey using Google Forms. Before sharing the questionnaire, the researcher explained the study's purpose to participants and asked for their consent. The survey link was sent through the WhatsApp group of fourth-semester students in the English Education Department. Participants were instructed to complete the form based on their experiences with Artificial Intelligence tools for academic writing. The data collection spanned one week, allowing ample time for responses. Throughout this period, the researcher ensured that:

Participation was completely voluntary, and participants' identities stayed confidential. The data collected was used only for academic research. Participants could fill out the questionnaire freely, without external pressure. Once data collection concluded, all responses were downloaded into a spreadsheet and prepared for analysis.

Data Analysis Technique

The collected data were analyzed using descriptive statistics. This approach was used to summarize the data's main features and to identify trends in students' responses.

The analysis included these steps:

1. Classifying responses by each research indicator.
2. Calculating response frequencies for each questionnaire item.
3. Determining response percentages.
4. Computing the mean score for each indicator.
5. Interpreting results based on score categories.

The percentage was determined using this formula:

P = (f / N) × 100%

Where:
P = Percentage
F = Response frequency
N = Total respondents

Furthermore, average scores were computed to assess students' overall outlook on the application of Artificial Intelligence in academic writing. The results are presented in tables, along with descriptive explanations, to clearly illustrate students' views on AI's usefulness, ease of use, and associated challenges. These procedures aimed to provide systematic and dependable insights into the perspectives of fourth-semester students in the English Education Department at STAIN Madina on AI in academic writing.

FINDINGS AND DISCUSSION

Findings

This study included 20 fourth-semester students from the English Education Department (Tadris Bahasa Inggris/TBI) at STAIN Madina. The participants were 16 females (80%) and 4 males (20%). Data collection was conducted using a questionnaire that assessed three key indicators: Perceived Usefulness, Perceived Ease of Use, and Challenges and Concerns related to the use of Artificial Intelligence (AI) in academic writing.

A. Perceived Usefulness

Table 1 presents students' views on the usefulness of AI for academic writing.

Table 1. Students' Views on AI's Usefulness in Academic Writing

No	Statement	Mean
1.	AI assists me in generating ideas for academic writing.	4.55
2.	AI helps me enhance the grammar in my texts.	4.70
3.	AI supports me in expanding my academic vocabulary.	4.40
4.	AI aids me in organizing my paragraphs more efficiently.	4.35
5.	AI increases my writing efficiency and saves time.	4.65
	Average Mean	**4.53**

Table 1 shows that the overall mean score for the usefulness indicator was 4.53, reflecting a very high level of agreement among participants. The statement with the

highest mean score was that AI helps improve grammar (M = 4.70), followed by AI's role in enhancing writing efficiency and saving time (M = 4.65). These results indicate that students see AI as a valuable tool for academic writing support. Most respondents reported using platforms like ChatGPT, Grammarly, QuillBot, and Gemini to generate ideas, revise grammar, and organize their assignments

B. Perceived Ease of Use

Table 2 shows students' perceptions of how easy it is to use AI tools.

Table 2. Students' Perceptions of AI Usability

No	Statement	Mean
1.	AI tools are readily available at any time and place.	4.75
2.	Using AI tools for academic tasks is straightforward.	4.60
3.	I rarely face major issues when working with AI.	4.25
4.	The features of AI tools are simple to grasp	4.35
5.	AI helps me finish writing tasks faster.	4.65
	Average mean	**4.52**

The findings reveal that students generally view AI as easy to use, with the highest mean score of 4.75 for the statement that AI tools are easily accessible. This indicates that students see AI applications as convenient and user-friendly for supporting their academic writing. The availability of AI tools on smartphones and laptops allows students to access immediate help whenever required. As a result, AI has become a vital learning resource for many students.

C. Challenges and Concerns

Alongside the perceived benefits and user-friendliness, this study explored students' concerns about AI use.

Table 3. Students' Challenges and Concerns About AI

No	Statement	Mean
1.	AI could foster dependence among students.	4.20
2.	AI might diminish critical thinking abilities.	4.05
3.	AI-produced information is not always reliable.	4.35

4.	AI raises concerns about academic honesty.	4.10
5.	AI-generated content must always be checked and confirmed.	4.70
	Avarage Mean	**4.28**

While students generally viewed AI positively, they also voiced concerns about its application. The highest average score was for the statement highlighting the need to review and verify AI-generated content (M = 4.70). These results suggest that students see both the benefits and the constraints of AI. They acknowledge that AI cannot fully substitute human judgment and critical thinking in academic writing.

Discussion

This study shows that fourth-semester students in the English Education Department at STAIN Madina generally view the use of Artificial Intelligence in academic writing positively. The data suggest that students see AI as a helpful and easily accessible tool that supports various writing processes. This positive attitude is reflected in the high average scores for both Perceived Usefulness and Perceived Ease of Use.

When assessing AI's usefulness, students indicated that it aids in idea generation, grammatical accuracy, vocabulary enhancement, paragraph organization, and completing writing tasks more efficiently. These results align with Kasneci et al. (2023), who emphasized AI's significant role in language education. Their research found AI offers personalized support and immediate feedback, helping learners improve their writing more effectively.

The current findings also align with Dwivedi et al. (2023), who suggested that generative AI technologies have revolutionized educational practices by enhancing productivity and supporting learning processes. Similar to their results, students in this study reported that AI decreased the time and effort needed for academic writing tasks.

From the perspective of the Technology Acceptance Model (TAM), the high average scores on the usefulness measure indicate a strong perception of usefulness. As Davis (1989) explains, users are more likely to adopt and keep using a technology if they believe it improves their performance. Hence, students' positive views of AI are likely due to the significant benefits they derive from it in academic writing.

The results on ease of use also reinforce previous research. Most participants found AI tools easy to access and straightforward to operate. This aligns with Chan and Hu (2023), who observed that students tend to accept AI technologies when they are user-friendly and offer practical advantages. In this study, students reported that AI platforms such as ChatGPT, Grammarly, QuillBot, and Gemini could be used without major technical issues.

These findings reinforce the concept of Perceived Ease of Use outlined in TAM. Davis (1989) argued that technologies perceived as user-friendly are more likely to be

accepted. The positive feedback from STAIN Madina students indicates that ease of use significantly influences the adoption of AI in academic writing.

However, students also voiced several concerns about using AI. A major worry was becoming too dependent on it. Participants felt that overreliance could impair their critical thinking and problem-solving abilities. This aligns with Chan (2023), who stated that excessive reliance on AI might decrease cognitive engagement and hinder the development of independent learning skills.

Additionally, students expressed concerns about the accuracy and trustworthiness of AI-generated content. They recognized that AI can sometimes produce incorrect or misleading information, which must be carefully verified before use in academic work. This concern aligns with Cotton et al. (2023), who highlighted issues of misinformation, academic integrity, and ethical considerations related to AI-generated content in higher education.

The findings can also be understood through the lens of Vygotsky's Constructivist Learning Theory (1978). According to this theory, learning occurs through interactions between learners and the tools available in their environment. AI can thus be seen as a learning support tool that promotes knowledge construction and skill development. However, its effectiveness depends on how students engage with the technology. When used critically and responsibly, AI can improve learning outcomes; however, passive reliance on AI may impede the development of essential academic skills.

Overall, the results of this study support and expand previous research on the role of Artificial Intelligence in academic writing. As in earlier studies, students viewed AI as a useful and accessible tool that aids writing. At the same time, they acknowledged the potential risks of overdependence, inaccurate information, and academic integrity. Therefore, while AI provides important opportunities to enhance academic writing, its use should be accompanied by critical thinking, ethical awareness, and responsible digital literacy practices.

The findings indicate that educators should not completely discourage the use of AI; instead, they should guide students in using AI effectively and responsibly. By incorporating AI into academic writing instruction within appropriate pedagogical frameworks, higher education institutions can maximize their benefits while mitigating potential drawbacks.

CONCLUSION

This study explored the views of fourth-semester students in the English Education Department (Tadris Bahasa Inggris) at STAIN Madina regarding the use of Artificial Intelligence (AI) in academic writing. The results suggest that students generally view AI positively in this context. They see AI as a helpful tool for generating ideas, enhancing grammatical precision, expanding academic vocabulary, organizing paragraphs well, and boosting efficiency in completing writing tasks.

Additionally, students expressed favorable opinions about how easy AI tools are to use. Platforms like ChatGPT, Grammarly, QuillBot, and Gemini were reported to be

accessible, easy to navigate, and able to provide instant support during the writing process. These findings demonstrate that AI has become a valuable resource for students, helping them develop their academic writing skills.

Despite these positive perceptions, students also raised several concerns about AI. Some felt that overreliance on AI might lead to dependency, diminish critical thinking skills, and raise issues around the accuracy of information and academic honesty. As a result, students emphasized the need to critically assess and verify AI-generated content before using it in their academic work.

Overall, the findings indicate that Artificial Intelligence significantly supports students' academic writing. Nonetheless, its application should be guided by critical thinking, ethical considerations, and responsible practices to ensure AI functions as a helpful learning tool rather than replacing students' cognitive efforts and writing skills.

This study offers valuable insights for educators and higher education institutions. Lecturers and institutions must provide clear guidance on the ethical and effective use of AI in academic settings. Moreover, future research should include more participants and explore diverse methods, like mixed-methods or experimental approaches, to better understand how Artificial Intelligence influences students' academic writing performance.

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