# Assessing Students' Perceptions of AI Grammar and Writing Assistance Tools: Implications for Academic Writing Instruction

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#### **ABSTRACT**

This qualitative study investigates how EFL students view academic writing Al tools (QuillBot, Grammarly, and ChatGPT). This qualitative study examines how English as a Foreign Language (EFL) learners see artificial intelligence (AI) tools for academic writing, including Grammarly, ChatGPT, and QuillBot. Ten seventh-semester students from Muhammadiyah University of Bengkulu's English Study Program were interviewed in order to collect data. The results show that students often utilize these AI tools, with QuillBot being used for paraphrasing, Grammarly mostly for grammar checking, and ChatGPT for idea generation. Eight out of ten students believe that using AI tools to improve their language and sentence structure is beneficial. However, difficulties arise while attempting more difficult tasks, such coherence and logical arguments; some students reported difficulties in maintaining a logical flow in their writing. Students report that while AI tools are helpful for grammar and sentence structure, they are not effective in fostering creativity and critical thinking. They also raised ethical concerns, such as plagiarism and depedence on AI tools. Most of students support the integration of these tools into EFL writing instruction as a complement to traditional methods. It is suggested that educators establish clear guidelines for using AI tools to support students' writing without limiting originality and critical thinking.

**Keywords:** Academic writing, AI grammar assistant, AI writing assisstant, Students' perceptions

### INTRODUCTION

The integration of AI tools into EFL writing instruction is potential for improving writing quality, efficiency, and engagement. However, these Al tools have some limitations dealing with complex writing tasks like building strong arguments and organizing coherence ideas (Cardon et al, 2023; Zhang et al., 2023). It is also important to consider plagiarism and dependence too much on the Al for their writing ((Mehta et al., 2024; Simpson, 2023). To maximize the benefits of AI tools in EFL education, a balanced approach is needed (Merdassi & Belmekki, 2024). This approach should combine AI support with traditional writing instruction and include guidelines for ethical usage. Al tools need to develop better support EFL students, helping them with more advanced writing skills beyond just grammar and sentence structure. By considering these factors, EFL educators

can more effectively integrate AI tools into their instructional strategies to enhance student writing skills.

Artificial intelligence (AI) grammar and writing aids like Grammarly, ChatGPT, and Quillbot have become popular in academic writing, particularly in circumstances where English is being used as a foreign language (EFL). Students use tools like ChatGPT and conventional grammar checkers to enhance their academic writing (Launonen et al., 2024; Al-Sofi, 2024). These technologies offer valuable support by enhancing grammar, sentence structure, and overall writing efficiency (Pratama & Sulistiyo, 2024). However, their adoption raises critical questions about their impact on student perceptions and effective use in EFL instructional strategies.

The use of artificial intelligence (AI) tools like Grammarly, ChatGPT, and Quillbot into English as a Foreign Language (EFL) writing instruction has gained significant attention due to their potential to enhance grammar, sentence structure, and writing efficiency (Kim & Oh, 2024). These tools offer support, helping students refine their academic writing. However, their use also raises critical questions about their limitations, particularly in complex writing tasks such as logical argumentation and coherence (Mouchel et al., 2024; Bhartia & Sehrawat, 2022). Ethical concerns, such as plagiarism and the risk of over-reliance on AI, also warrant careful consideration (Du & Tate, 2024). To maximize the benefits of AI tools in EFL education, a balanced approach is needed by combining AI assistance with traditional instruction and incorporates ethical guidelines.

Al tools have transformed the way students approach writing tasks. Research indicates that students find these tools beneficial for improving the quality and efficiency of their writing (Rafida et al., 2024; Ting & Jumaat, 2024). Moreover, ChatGPT and similar applications support users in brainstorming ideas, revising drafts, and refining their work ((Kim & Oh, 2024). Despite these advantages, concerns about overreliance, plagiarism, and diminished creativity persist (Al-Sofi, 2024). These mixed outcomes highlight the need for deeper exploration of how students perceive and use AI tools in academic contexts.

Existing literature provides valuable insights into the benefits of AI tools in enhancing students' academic wrting skills (Kim et al., 2024; Krajka & Olszak, 2024). However, limited research addresses the implications of these tools for EFL students' specifically in improving their academic writing proficiency. This gap underscores the importance of examining how AI tools influence students' writing practices and learning outcomes in EFL settings. Additionally, understanding these perceptions can inform strategies for integrating AI into instructional design.

The problem lies in balancing the opportunities and challenges presented by AI tools. While students gain efficiency and clarity in their writing, they may also develop dependency or neglect critical thinking skills (Datskiv et al, 2024; Elkatmış, 2024; Schei et al., 2024). Educators face the challenge of integrating these tools without compromising academic integrity or creativity. Institutions must also address the ethical implications of Al usage and provide training to foster responsible practices (Al-Sofi, 2024; Ting & Jumaat, 2024).

This study aims to assess students' perceptions of Al grammar and writing assistance tools in academic writing and their implications for EFL instructional strategies. By exploring the benefits and challenges associated with these tools, this research seeks to provide actionable insights for educators and policymakers. The findings will contribute to the development of balanced approaches that maximize the potential of AI in academic writing while reducing its risks. The following research questions will guide the current study: How do EFL students perceive the effectiveness of Al grammar and writing assistance tools in improving their academic writing skills?, What are the perceived benefits and challenges of using AI grammar and writing assistance tools in EFL academic writing?

### RESEARCH METHOD

This study used a qualitative research design to explore the perceptions of EFL students regarding the use of AI tools for academic writing (Rafida et al., 2024). The participants of this study were ten seventh-semester students enrolled in the English Study Program at Muhammadiyah University of Bengkulu. These students were selected using purposive sampling to ensure that they had sufficient experience with academic writing and AI tools.

Data were collected through semi-structured interviews, which allowed for in-depth exploration of students' views on AI tools such as QuillBot, Grammarly, and ChatGPT (Lee, 2024). The interviews were conducted in a relaxed and open-ended manner to encourage participants to share their personal experiences, challenges, and opinions regarding the use of these tools in their academic writing tasks. The interview questions were designed to gather information on how students used these tools, the benefits they perceived, the challenges they encountered, and any ethical concerns they might have had.

Thematic analysis was employed to analyze the interview data (Christou, 2024). The responses were transcribed and then coded to identify recurring themes and patterns. The researchers categorized these themes into key areas, including the perceived benefits of AI tools for grammar and structure, the challenges faced with more complex tasks like coherence and logical argumentation, and ethical concerns such as plagiarism and overdependence on AI tools.

Ethical considerations were prioritized throughout the research process. Informed consent was obtained from all participants, ensuring their understanding of the study's purpose and their voluntary participation. Participants were assured of the confidentiality and anonymity of their responses, and they were given the opportunity to withdraw from the study at any time without consequence.

This research method provides valuable insights into how EFL students view the role of AI tools in enhancing academic writing and offers practical recommendations for integrating these tools into EFL writing instruction.

### **FINDINGS**

Table 1 Students' Perceptions and Use of Al Tools in Academic Writing

	Questions	Responses
	1. How often do you use Al tools	All 10 students use Al tools regularly.
	such as Grammarly, ChatGPT, or	Grammarly is most commonly used
	Quillbot in your academic writing,	for grammar checking and

and for what specific writing tasks do you find them most helpful?	sentence structure correction. ChatGPT is primarily used for
do you in a mem most helpfore	brainstorming, generating ideas, and refining thesis statements.
	Quillbot is used for paraphrasing and improving sentence fluency.
2. In your experience, how effective are AI tools in improving the grammar and sentence structure of your academic writing? Can you provide any specific examples where these tools have made a noticeable difference?	8 out of 10 students find AI tools highly effective in improving grammar and sentence structure. One student mentioned that Grammarly helped identify frequent grammar mistakes in their research papers. Another noted ChatGPT's help in drafting coherent paragraphs quickly for assignments.
3. Have you encountered any challenges or limitations when using AI tools for more complex academic writing tasks, such as logical argumentation or ensuring coherence in your essays? Could you give an example?	6 students reported challenges with complex writing tasks. One student explained that ChatGPT sometimes created coherent paragraphs but failed to connect them logically in their research paper. Another student noted Grammarly occasionally flagged stylistic choices that were contextually appropriate.
4. Do you think AI tools can fully support you in your academic writing, or are there areas where they fall short? If so, which aspects of writing do you think AI tools struggle with the most?	Most students (7 out of 10) believe AI tools fall short in fostering creativity and critical thinking. While AI tools excel at grammar and structure, students feel they lack the ability to generate original ideas or complex arguments.
<ul> <li>5. What ethical concerns, if any, do you have regarding the use of Al tools like Grammarly, ChatGPT, or Quillbot? For instance, do you worry about issues like plagiarism or the potential for over-reliance on these tools?</li> <li>6. How do you ensure that your use of Al tools does not hinder your development of critical thinking skills and your ability to express original ideas in your writing?</li> </ul>	7 students expressed concerns about plagiarism, especially when using ChatGPT to generate content. 3 students mentioned worries about becoming overly reliant on AI, which could lead to diminished writing skills over time.  Students emphasized reviewing and editing AI-generated content to ensure their own voice remains dominant. 4 students mentioned consciously rewriting or modifying suggestions made by AI to ensure that their writing reflects their own
7. Do you believe that AI tools should be integrated into EFL writing	ideas and perspectives. 9 students agreed AI tools should be integrated into EFL writing

instruction at the university level? If instruction. They suggested using AI yes, how should they tools to complement traditional incorporated into the curriculum to methods, focusing on grammar support student learning checks, idea generation, and initial effectively? drafts, but still emphasizing the development of critical thinking and writing skills. Students suggested improvements 8. What improvements or additional such as better support for logical features would you like to see in Al argumentation and maintaining tools to make them more effective for advanced writing tasks, such as coherence over longer pieces of logical araumentation, idea writing. Some also requested AI tools that can help with citation, development, and maintainina coherence in longer essays? referencing, and providing more context-sensitive writing suggestions. 9. Do you feel that a combination of students agreed that a Al tools and traditional writing combination of Al tools and traditional instruction would be instruction would be more beneficial for improving your writing more beneficial. Al tools were seen skills? Why or why not? as helpful for quickly refining drafts, while traditional instruction remains essential for developing deeper skills in argumentation, creativity, and critical thinking. 10. What recommendations would Most students recommended that you offer to educators regarding educators establish clear guidelines the ethical and effective use of Al for AI tool usage, emphasizing that tools in EFL classrooms? How can Al should supplement rather than instructors ensure that AI tools replace the writing process. They enhance students' writing without also suggested that instructors compromising originality or critical encourage students to use AI tools thinking? in a multi-step process, focusing on arammar and structure while maintaining originality and ethical use.

### **DISCUSSION**

The research findings reveals multiple interconnected themes surrounding the integration of AI tools like Grammarly, ChatGPT, and Quillbot in English as a Foreign Language (EFL) writing instruction. These tools have been perceived positively by students for their role in enhancing writing quality, particularly in grammar and sentence structure. However, despite these advancements, there are several concerns, limitations, and implications for EFL instructional strategies that need to be addressed.

### **Enhanced Learning and Effectiveness**

The findings of this study align with those of Rafida et al. (2024) and Ting & Jumaat (2024), as students reported that AI tools significantly improved their writing efficiency and quality. Many students referred to these tools as

transformative, particularly in terms of self-editing, grammar correction, and improving sentence structure. This similar to the conclusions of Kim et al. (2024), where the enhancement in writing outcomes such as polished essays and better grades was also highlighted. However, a critical issue raised to the concerns found in the literature, was the limitations of AI tools in addressing more complex academic writing tasks. Despite of AI tools excellent for basic grammar checks, they still struggle to support the development of coherent academic arguments and in-depth analysis, which are essential for advanced academic writing (Ting & Jumaat, 2024).

## **Comprehensive Support**

The ability of AI tools to assist in a range of writing tasks from brainstorming ideas to final revisions has been acknowledged as a significant benefit, as noted by Kim et al. (2024). Students appreciated using ChatGPT for ideas and Quillbot for paraphrasing. However, the tools often criticize for not giving good feedback on writing that needs logical thinking and wellorganized arguments. As students expressed in this study, Al tools often fail to provide substantial guidance in areas such as argument development, critical thinking, and the logical flow of ideas, which are crucial for academic writing. This limitation suggests that while AI tools can assist in basic writing, their application for higher-order writing tasks needs to be enhanced (Rafida et al., 2024; Al-Sofi, 2024).

# **Concerns and Ethical Implications**

One of the most important concerns addressed in the study and the literature relates to the ethical implications of AI tool usage. A major concern is that students might plagiarize or become too dependence on AI for their writing. The students voiced similar concerns, particularly regarding tools like Quillbot, which can sometimes produce content that too closely to the existing sources. The ethical issues surrounding plagiarism are compounded by the potential for students to become overly dependent on AI tools, undermining their ability to develop critical thinking and originality in writing. These concerns are widely discussed in the literature, including by Rafida et al. (2024) and Al-Sofi (2024), and suggest a need for clear ethical guidelines and awareness in the educational setting to mitigate these risks.

### Implications for EFL Instructional Strategies

The integration of AI tools into EFL instruction requires a careful balance between technology and traditional pedagogy. Both Al-Sofi (2024) and Ting & Jumaat (2024) suggest that AI should complement, not replace, conventional writing instruction. This approach was also supported by students who recommended that lecturers guide students on the ethical use of AI tools and incorporate assignments that leverage these tools to enhance writing skills. The importance of training on the ethical use of AI tools is emphasized in the literature (Kim et al., 2024), and students similarly suggested that such training should be part of the curriculum to help students use AI tools responsibly and effectively.

## **Suggestions for Improvement**

The students view AI tools positively but there is also recognition of the need for further refinement. Many students expressed a desire for AI tools that are better developed to the specific writing needs of EFL learners. They expressed AI writing tools are developed for personalized writing suggestions, support for non-native speakers, and assistance with logical argumentation and coherence (Pandey & Bhusal, 2024; Xu et al., 2024). This need for improvement aligns with the literature, where scholars such as Rafida et al. (2024) and Ting & Jumaat (2024) highlight the gap between basic grammar checking and more complex academic writing needs. In the future, AI tools should give better feedback that considers the context of the writing, which would make them more useful for college-level work, especially for tasks that require arguments and critical thinking.

### **CONCLUSION AND SUGGESTION**

This study explores how EFL students use AI tools like Grammarly, ChatGPT, and Quillbot to improve their grammar, sentences, and ideas in their writing. However, these tools have limitations, especially for complex writing tasks like building arguments and organizing ideas. Ethical concerns, particularly regarding plagiarism and dependence on AI, also need to be addressed. To maximize the benefits of AI tools in EFL education, a balanced approach is required, one that blends AI support with traditional writing instruction and includes guidelines for ethical usage. Furthermore, there is a clear need for AI tools to develop, offering more support for EFL students and addressing advanced writing skills beyond grammar and sentence structure. By considering these factors, EFL educators can more effectively integrate AI tools into their instructional strategies to enhance student's writing skills.

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