
ENHANCING ENGLISH WRITING SKILLS THROUGH AI-BASED TOOLS
A CASE STUDY AT STAI DARUSSALAM SUMATERA SELATAN

Nurul Yuniar¹, Siti Aspiah²

 nurul.yuniar@staidasumsel.ac.id

 sitiaspiah@gmail.com

Sekolah Tinggi Agama Islam Darussalam Sumatera Sumatra

Abstract

This study explores the effectiveness of Artificial Intelligence (AI)-based tools in improving English writing skills among students in the Tadris Bahasa Inggris program at STAI Darussalam Sumsel. Employing a qualitative case study approach, the research involved 30 second-year students and utilized Grammarly and QuillBot as AI tools over one semester. Data were collected through pre- and post-intervention writing assessments, student questionnaires, and semi-structured interviews. Findings indicate significant improvements in grammatical accuracy, vocabulary use, and overall coherence, with 85% of students reporting increased confidence in writing. However, challenges such as over-reliance on AI tools and limited digital literacy were observed. This study underscores the potential of AI-based tools in ELT while highlighting the need for balanced integration to foster independent writing skills. Implications for curriculum design and teacher training are discussed.

Keywords: AI-based tools, English writing skills, Tadris Bahasa Inggris, STAI Darussalam, ELT

A. Introduction

The rapid advancement of technology has transformed English Language Teaching (ELT), particularly in the integration of Artificial Intelligence (AI) tools to enhance writing skills. In the context of Indonesian higher education, particularly at institutions like STAI Darussalam Sumsel, students often face challenges in mastering English writing due to limited vocabulary, grammatical inaccuracies, and difficulties in structuring coherent texts (Rohmatillah, 2014). AI-based tools such as Grammarly and QuillBot offer real-time feedback and paraphrasing capabilities, potentially addressing these issues (Fitria, 2021). This study investigates how such tools can enhance writing skills among students in the Tadris Bahasa Inggris program, focusing on their impact on grammatical accuracy, vocabulary enhancement, and text coherence.

Recent studies highlight the growing role of AI in ELT. Fitria (2021) found that AI tools improve students' writing by providing instant feedback, while Prasetya (2021) noted their

effectiveness in student-centered learning environments. However, concerns about over-reliance and the need for digital literacy training persist (Kusniyah, 2019). Given STAI Darussalam's commitment to innovative ELT practices, this research aims to explore the efficacy of AI tools in a localized context, contributing to the limited literature on technology-enhanced learning in South Sumatran Islamic higher education institutions. Based on introduction, the research questions is:

1. How do AI-based tools (Grammarly and QuillBot) impact the writing skills of Tadris Bahasa Inggris students at STAI Darussalam Sumsel?
2. What are the students' perceptions and challenges in using these tools?

B. Methodology

This study adopted a qualitative case study design to explore the integration of AI-based tools in the Tadris Bahasa Inggris program at STAI Darussalam Sumsel. The research was conducted over one semester (August–December 2024) with 30 second-year students enrolled in an English Writing course. Participants were purposively selected based on their enrollment in the English Writing course and their willingness to use AI tools. The sample consisted of 18 female and 12 male students, aged 19–22, with intermediate English proficiency (B1 level based on CEFR).

Data Collection by Pre- and Post-Intervention Writing Assessments: Students submitted a 300-word argumentative essay before and after the intervention. Essays were evaluated for grammatical accuracy, vocabulary use, and coherence using a rubric adapted from Prasetya (2021). Questionnaires designed by 15-item questionnaire assessed students' perceptions of AI tools' usability and effectiveness, using a 5-point Likert scale. Semi-Structured Interviews included ten students participated in interviews to explore their experiences and challenges in using AI tools.

Intervention

Students used Grammarly for grammar and style corrections and QuillBot for paraphrasing and vocabulary enhancement during weekly writing tasks. Training sessions on tool usage were conducted in the first two weeks, followed by guided practice and independent use.

Quantitative data from writing assessments and questionnaires were analyzed descriptively using percentages and mean scores. Qualitative data from interviews were coded thematically to identify recurring patterns related to benefits and challenges.

C. Results

1. Writing Performance

Pre-intervention essays showed common issues: 65% of students struggled with subject-verb agreement, 70% used repetitive vocabulary, and 60% produced incoherent arguments. Post-

intervention, grammatical errors decreased by 40%, vocabulary diversity improved by 35%, and coherence scores rose by 30%. The mean writing score increased from 65/100 to 82/100.

Student Perceptions

Questionnaire results revealed that 85% of students found AI tools helpful in improving writing confidence, 80% appreciated real-time feedback, and 75% noted enhanced vocabulary. However, 60% reported occasional confusion due to AI suggestions, and 50% felt overly dependent on the tools.

Challenges

Interviews highlighted challenges such as limited internet access (30% of students), difficulty interpreting AI feedback (25%), and a tendency to accept AI suggestions without critical evaluation (40%). Some students expressed concerns about losing their authentic writing voice.

Discussion

The findings align with Fitria (2021), who noted that AI tools enhance writing accuracy and confidence in EFL contexts. The significant improvement in grammatical accuracy and coherence supports Prasetya's (2021) findings on the efficacy of technology in student-centered learning. However, the challenge of over-reliance echoes Kusniyah's (2019) concerns about the need for digital literacy training to ensure critical use of AI tools. At STAI Darussalam, where resources may be limited, these challenges underscore the importance of integrating AI tools with traditional teaching methods to foster independent writing skills.

The study contributes to the literature by providing insights into AI tool implementation in a specific Indonesian Islamic higher education context. It suggests that while AI tools are effective, their integration requires careful scaffolding, including training on critical evaluation of AI suggestions and strategies to maintain students' authentic writing voices.

Implications

1. Curriculum Design: Incorporate AI tool training into ELT curricula to enhance writing instruction.
2. Teacher Training: Equip lecturers with skills to guide students in using AI tools critically.
3. Infrastructure Support: Address connectivity issues to ensure equitable access to AI tools.

Limitations

The study's small sample size and single-institution focus limit generalizability. Future research could explore longitudinal effects or compare AI tool efficacy across multiple institutions.

D. Conclusion

AI-based tools like Grammarly and QuillBot significantly enhance English writing skills among Tadris Bahasa Inggris students at STAI Darussalam Sumsel, particularly in grammar,

vocabulary, and coherence. However, challenges such as over-reliance and limited digital literacy highlight the need for balanced integration. This study provides a foundation for further exploration of technology-enhanced ELT in Indonesian Islamic higher education, advocating for strategic implementation to maximize benefits while addressing local constraints.

References

- Fitria, T. N. (2021). The use of Artificial Intelligence (AI) based applications in English language teaching: A case study. *English Education: Jurnal Tadris Bahasa Inggris*, 14(2), 123–135.
- Kusniyah, N. L. (2019). Evaluation study of English textbook for Indonesian Junior High Schools. *Edulangue: Jurnal Pendidikan Bahasa Inggris*, 2(1), 36–46.
- Prasetya, R. E. (2021). Student centre approach in teaching English for specific purposes Moodle-based. *English Education: Jurnal Tadris Bahasa Inggris*, 14(1), 45–60.
- Rohmatillah. (2014). A study on students' difficulties in learning vocabulary. *English Education: Jurnal Tadris Bahasa Inggris*, 6(1), 75–90.
- Syafryadin, S., Rahmawati, I. N., & Febriani, R. B. (2020). An analysis of code-mixing used in opinion rubric of Kompas newspaper. *English Education: Jurnal Tadris Bahasa Inggris*, 13(2), 89–102.