

The Role of AI Chatgpt in Improving Writing Skills of Indonesian EFL Senior High School Students

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ABSTRACT

This study examined the effectiveness of AI ChatGPT in enhancing writing skills among Indonesian EFL learners at MA NWDI Tembung Putik. A qualitative case study was conducted with 30 senior high school students using questionnaires and semi-structured interviews. The findings indicate that students benefited from ChatGPT in three main areas: improving grammar accuracy, strengthening coherence in essay organization, and supporting autonomous revision. Many students also reported that ChatGPT provided useful prompts when they faced difficulties generating ideas, although its impact on writing confidence was more limited. These results suggest that ChatGPT can serve as a valuable supplementary tool for EFL writing instruction, particularly in resource-limited classrooms. However, the study emphasizes the need for teacher guidance to ensure that AI use fosters critical thinking and responsible learning practices.

Keywords: *AI ChatGPT, EFL Learners, Writing Skills, Learner Autonomy, Qualitative Research*

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INTRODUCTION

The use of Artificial Intelligence (AI) in education, especially in English language instruction, has become increasingly prevalent in Indonesia. One of the most significant innovations in AI is ChatGPT, a text-oriented chatbot that helps students create, edit, and enhance their writing instantly. This tool provides assistance not only in vocabulary and grammar but also in improving coherence, clarity, and structure in written works. A study by Siregar, Siregar, and Damanik (2024) indicated that students perceived ChatGPT as a beneficial ally in writing, particularly for structuring ideas, enhancing language precision, and reducing stress during writing assignments.

In Indonesia's EFL context, numerous students continue to face difficulties in articulating their thoughts in written English, often struggling with limited vocabulary, grammatical errors, and weak organization. To address these challenges, teachers have begun to explore AI tools as alternative learning resources. Research by Agustini (2023) revealed that ChatGPT facilitated learner autonomy by enabling students to revise and assess their writing independently, aligning with curriculum goals that emphasize self-directed learning and digital skills. Similarly, Wahyuddin et al. (2023) noted that learners who used ChatGPT for essay writing experienced improvements in content generation, argument organization, and language refinement.

Other studies also confirm the positive contribution of ChatGPT to writing development. For instance, Pariyanto and Tungka (2024) highlighted that students receiving AI-generated feedback gained greater fluency and confidence in expressing their ideas, particularly in narrative and argumentative essays. Faiz et al. (2023) emphasized that ChatGPT supports writing proficiency when balanced with the development of independent skills,

cautioning against overdependence. Al-Alami (2024) further demonstrated that students adopted positive attitudes toward using ChatGPT for drafting, revising, and editing, regarding it as a motivating and time-saving tool. In postgraduate settings, Werdiningsih et al. (2024) found that Indonesian Master's students strategically used ChatGPT to revise and refine their academic texts, showing its relevance across different educational levels.

The theoretical foundation for using ChatGPT in EFL writing is also supported by broader perspectives on AI in education. Luckin et al. (2016) describe AI as a cognitive partner that engages learners in meaningful interaction, while Meurers and Ziai (2022) argue that Natural Language Processing (NLP)-based tools such as ChatGPT provide contextualized and immediate feedback essential for language development. Nevertheless, ethical considerations remain crucial. Holmes et al. (2021) caution that AI in education raises concerns about fairness, bias, and responsible use, underscoring the need for teacher guidance in its implementation.

Despite these promising insights, previous research has left important gaps. Most studies have been conducted in higher education contexts or among university students, while much less is known about how AI tools function in secondary school settings, particularly in resource-limited Indonesian classrooms where teacher feedback may be delayed or limited. Additionally, earlier studies have tended to focus on technical outcomes such as grammar, vocabulary, and organization, with less attention to psychological aspects such as students' confidence, motivation, and independence in the writing process.

Therefore, this study aims to examine the role of ChatGPT in improving writing skills among Indonesian senior high school students at MA NWDI Tembung Putik. Unlike earlier research, it explores both linguistic improvements (grammar, coherence, vocabulary, and organization) and learner-related outcomes (autonomy and confidence). By addressing this gap, the study contributes to a more contextualized understanding of how AI can be meaningfully integrated into Indonesian EFL classrooms, offering practical insights for teachers and learners in similar educational environments.

METHOD

Research Design

This research employed a qualitative case study design to investigate the role of ChatGPT in enhancing writing skills among senior high school EFL learners. A qualitative approach was deemed appropriate because it allowed the researcher to explore students' experiences, perceptions, and interactions with ChatGPT in a natural classroom context (Creswell & Poth, 2021).

Research Site and Participants

The study was conducted at MA NWDI Tembung Putik, a senior high school located in East Lombok, West Nusa Tenggara, Indonesia. The school provides formal education at the secondary level and offers English as a compulsory subject. It was selected as the research site because it had integrated English learning into its academic structure, and the students had a sufficient foundation in English to meaningfully interact with digital learning tools such as ChatGPT.

The participants of this study were 30 students drawn from Class 1A (X) and Class 3A (XII). The age range of the students was between 15 and 18 years old, representing early to late adolescence. Their English proficiency level was generally at a basic to lower-intermediate stage (A2–B1 on the CEFR scale), as identified by their teachers' evaluation and classroom performance. This made them suitable subjects for a study focused on developing fundamental writing skills.

In terms of gender balance, the group consisted of 17 female students and 13 male students, reflecting the typical composition of classes at the school. Their prior exposure to English was limited to formal classroom instruction, and most had little to no prior experience using AI-assisted tools for learning. These characteristics provided valuable insights into how ChatGPT could be introduced to learners with modest English proficiency and minimal technological exposure.

Sampling Technique

For this qualitative research, purposive sampling was employed to select participants who could provide rich and relevant data. The classes chosen were based on teacher recommendations and students' willingness to engage with the research activities. By focusing on this group, the study sought to capture how Indonesian senior high school students perceived and benefited from the integration of ChatGPT in their writing practice.

FINDINGS AND DISCUSSION

Findings

This study investigated how senior high school students at MA NWDI Tembeng Putik perceived and utilized ChatGPT in improving their writing skills. Data were obtained from questionnaires and informal interviews with 30 students. The findings are presented thematically to highlight both quantitative tendencies and qualitative insights.

Use of ChatGPT for Grammar, Vocabulary, and Coherence

Most students reported that ChatGPT supported them in correcting grammar, suggesting vocabulary, and improving the coherence of their writing. While the questionnaire showed that over half of the participants frequently relied on ChatGPT for these purposes, the interview data provided deeper insights. One student explained:

"Saya biasanya menggunakan ChatGPT untuk menerjemahkan dari bahasa Indonesia ke bahasa Inggris, lalu saya cek lagi struktur kalimatnya."

(I usually use ChatGPT to translate from Indonesian into English, and then I check the sentence structure again.)

This indicates that students did not merely copy results but used the tool as a learning resource to refine their understanding of grammar and sentence construction.

ChatGPT as a Tool for Idea Generation

Students also used ChatGPT when experiencing writer's block or struggling to organize their thoughts. As one student shared:

"Jujur ChatGPT sangat membantu saya, terutama kalau bingung mau mulai dari mana."

(Honestly, ChatGPT really helps me, especially when I don't know how to start.)

Such responses suggest that ChatGPT played a key role in the pre-writing phase, offering prompts and scaffolding that motivated learners to begin writing.

Autonomy and Independent Revision

Another strong theme was the way ChatGPT encouraged independent revision. Students described it as a "non-judgmental tutor" that made it easier to rework drafts without depending entirely on teacher feedback. One student remarked:

"ChatGPT membuat saya lebih percaya diri untuk mengedit tulisan sendiri sebelum dikumpulkan ke guru."

(ChatGPT makes me more confident to edit my own writing before submitting it to the teacher)

This shows that ChatGPT contributed to learner autonomy, consistent with the process-writing approach that emphasizes drafting and revising.

Limited Impact on Confidence

Despite these advantages, the findings also showed that ChatGPT's influence on writing confidence was mixed. While some students felt supported, others were hesitant. One student admitted:

"Saya masih takut salah, walaupun sudah dibantu ChatGPT. Kadang saya tidak yakin apakah jawabannya benar."

(I'm still afraid of making mistakes, even though ChatGPT helps. Sometimes I'm not sure if the answer is really correct)

This highlights that while AI tools improve technical aspects of writing, affective factors such as confidence still require teacher support and encouragement.

Discussion

The findings of this study demonstrate that ChatGPT had a positive impact on students' writing development, particularly in grammar correction, vocabulary enrichment, and text organization. These results are consistent with Siregar et al. (2024), who found that ChatGPT serves as a helpful writing aid that supports revision and clarity.

The interviews revealed that ChatGPT was especially valued as a tool for idea generation. This supports the view of Pariyanto and Tungka (2024), who emphasized the usefulness of AI feedback in narrative and argumentative writing. The quotes also illustrate how ChatGPT's role extended beyond correcting language to motivating students to start and continue writing.

A notable contribution of this study is the evidence that ChatGPT fostered learner autonomy by enabling independent revision. This aligns with Agustini (2023), who argued that AI integration encourages self-directed learning. However, the mixed results on writing confidence suggest that while ChatGPT is effective in providing technical support, it cannot fully replace the psychological encouragement that teachers provide (Al-Alami, 2024).

Overall, the combination of questionnaire data and interview excerpts highlights that ChatGPT functioned as both a linguistic support tool and a motivational aid. At the same time, its limitations in addressing students' confidence underscore the importance of guided, balanced use under teacher supervision.

CONCLUSIONS

This study investigated the role of ChatGPT in improving the writing abilities of Indonesian senior high school learners at MA NWDI Tembung Putik. The findings revealed that ChatGPT supported students in several important aspects: refining grammar and vocabulary, enhancing coherence, generating ideas, and encouraging more independent revision. Students valued ChatGPT as an accessible, non-judgmental support tool that helped them complete writing tasks more effectively. However, the impact on writing confidence was less consistent, with some students still hesitant to fully trust or rely on AI-generated feedback. These results confirm that ChatGPT can function as a valuable supplementary tool in EFL classrooms, especially in resource-limited settings where teacher feedback may be delayed. More importantly, it highlights the potential of AI to foster learner autonomy and engagement with the writing process. At the same time, the findings underline the importance of teacher guidance to ensure that AI use complements, rather than replaces, human feedback and critical thinking. Looking ahead, future research could adopt longitudinal designs to examine the long-term influence of ChatGPT on students' writing development. Experimental studies may also be conducted to compare the effectiveness of AI-assisted learning with traditional instruction or blended approaches. In addition, future investigations should pay closer attention to affective dimensions, particularly strategies to build students' confidence and reduce anxiety when using AI tools. Such studies would provide deeper insights into how ChatGPT can be integrated responsibly and sustainably into EFL classrooms, supporting not only technical writing improvement but also psychological growth and learner empowerment.

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