



Using ChatGPT as Artificial Intelligence (Ai) Tool to Improve Students' English Proficiency

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Abstract

This study examines the role of Artificial Intelligence (AI), particularly ChatGPT, in enhancing English proficiency among Generation Z learners. Using a library-based literature review of academic sources published between 2018–2024 and supported by preliminary observations of 28 students, this research functions as a synthesis of existing studies and does not generate new empirical data. Findings indicate that ChatGPT provides more comprehensive real-time corrective feedback than traditional mobile learning tools and standard grammar checkers, offering explanations, revision options, and personalized input. Prior research reports improvements in writing accuracy, vocabulary development, and learner autonomy when AI tools are integrated into language learning. Generation Z learners also demonstrate strong motivation and engagement when using AI-supported platforms. Overall, the study highlights AI's potential to accelerate English proficiency and recommends that educators incorporate AI-driven tools to enhance instructional effectiveness and support independent learning.

Keywords: Artificial Intelligence; English Proficiency; English Skills

Introduction

The rapid advancement of Information and Communication Technology (ICT) has significantly influenced various aspects of human life, including education. ICT has evolved from merely supporting basic information processing to enabling more sophisticated digital innovations that address complex learning needs (Losi, 2022; Rizky Vita Losi et al., 2023). In the post-pandemic era, ICT has played a crucial role in facilitating both formal and independent learning, giving rise to mobile-based

applications and, more recently, Artificial Intelligence (AI)-driven learning platforms.

AI has emerged as a transformative force in language education. Recent studies indicate that AI-based tools such as intelligent tutoring systems, chatbots, and speech-recognition platforms provide adaptive instruction, personalized feedback, and interactive learning materials that enhance students' performance in English language learning (Ali, 2024; Fitriani et al., 2023). Researchers such as Chen (2023) and Davis (2020) emphasize that AI also promotes learner autonomy by offering individualized resources and immediate corrective feedback. A range of AI-supported applications—including ChatGPT, Busuu, Mondly, ELSA, and Andy—has been developed to support learners in improving their English skills through real-time, tailored assistance.

Despite these advancements, preliminary observations conducted at SMAN 2 Binjai reveal a notable gap. Most students, who belong to Generation Z and are generally familiar with digital technologies, remain unaware of AI-based learning tools that could facilitate more effective English learning. Their reliance on Google Translate shows limited support for developing productive language skills, and their English teacher has not introduced AI-assisted applications due to limited information and training regarding their pedagogical benefits. These findings highlight a disconnect between the potential of AI technologies and their actual use in classroom practice.

This gap is particularly concerning in today's global context, where multilingual competence and English proficiency play an increasingly important role in academic success, employability, and cognitive development (Losi, 2022). Given the rapid expansion of AI technologies and their demonstrated benefits for language learning, it is essential to explore how these tools can be effectively integrated into the learning environment of Generation Z students.

Therefore, this study aims to investigate the implementation of Artificial Intelligence (AI) to improve the English proficiency of students at SMAN 2 Binjai. Specifically, the study seeks to answer the following research questions:

1. What types of AI-based learning tools are relevant and applicable for improving English proficiency among Generation Z learners?
2. How can AI-supported tools enhance students' learning experiences and language performance?
3. What challenges and opportunities arise in integrating AI into English language instruction at SMAN 2 Binjai?

Method

This study employs a combined library research and preliminary observational approach. The library research component was conducted through a systematic review of reputable international journals, accredited national journals, and other scholarly publications published between 2018 and 2024, selected using predefined keywords to ensure relevance and reliability (Rizky Vita Losi et al., 2023; Wijaya et al., 2021). The inclusion criteria required publications to focus on AI-based

learning, English language education, or CEFR-oriented assessment, while non-peer-reviewed or thematically irrelevant sources were excluded.

This procedure aligns with the multilayered analytical approach proposed by Sare (1980). To enrich the literature findings, preliminary classroom observations were conducted to document teacher and student activities during AI-assisted learning, supported by CEFR-based written tasks used descriptively to contextualize students' English proficiency. Additional documentation regarding school conditions, facilities, and instructional processes was also examined. All data were analyzed using the Miles and Huberman qualitative analysis model—data reduction, data display, and conclusion drawing and verification (Miles & Huberman, as cited in Mulyanto et al., 2023). Insights from the literature were triangulated with observational data to provide an integrated interpretation of AI-supported English learning.

Results

Relevant and Applicable AI-Based Tools

The findings indicate that several AI-based learning tools are relevant and applicable for improving English proficiency among Generation Z learners, particularly ChatGPT, QuillBot, and Grammarly. The literature consistently highlights ChatGPT's strong capabilities in idea development, drafting support, and interactive feedback, making it one of the most widely adopted AI tools in educational settings (Kostikova et al., 2024; Wibowo et al., 2023). QuillBot contributes significantly to paraphrasing, lexical enhancement, and syntactic improvement, while Grammarly supports accuracy in grammar, punctuation, and academic writing conventions. Studies further show that these tools have been incorporated into instructional models, teacher training programs, and AI-enhanced learning designs (Kaswar et al., 2023; Zulfikasari et al., 2024). Collectively, these AI tools align well with the learning styles of Generation Z, who prefer efficiency, interactivity, and technology-driven support.

How AI Enhances Learning Experiences and Performance

AI-supported tools were found to enhance students' learning experiences and language performance through improved engagement, personalized feedback, and more efficient revision processes. Literature indicates that ChatGPT facilitates interactive drafting, QuillBot refines linguistic expression, and Grammarly provides real-time error correction, all of which contribute to improved writing quality (Nurhuda et al., 2023; Shidiq, 2023). Classroom observations confirm these benefits: students demonstrated higher engagement and confidence when using AI tools, and teachers reported that AI-assisted writing activities streamlined feedback cycles. CEFR-based writing assessments further support these findings. Students using ChatGPT showed improvements in idea organization and task development, QuillBot users produced greater vocabulary range and sentence variation, and Grammarly users generated texts with fewer grammatical and punctuation errors. Although the

assessment data were descriptive rather than statistical, the observed trends align with both the literature and classroom experiences, indicating that AI tools can meaningfully enhance students' learning outcomes.

Challenges and Opportunities in Integrating AI

The study also identifies several challenges and opportunities in integrating AI into English language instruction at SMAN 2 Binjai. Challenges include limited technological access, inconsistent internet stability, and varying levels of digital literacy among students, which sometimes hinder the smooth use of AI tools. Classroom observations also noted occasional student overreliance on AI-generated text, reflecting concerns raised in the literature about reduced critical engagement and the need for verification of AI outputs (Nurhuda et al., 2023; Shidiq, 2023). Nevertheless, the integration of AI presents promising opportunities. Teachers found that AI tools helped streamline feedback and facilitated more efficient writing instruction, while students benefited from increased motivation and more personalized writing support. With appropriate teacher guidance and institutional support, AI-based tools have the potential to significantly enhance instructional quality and foster more effective English language learning at the school.

Discussion

The findings of this study demonstrate that the integration of AI-based learning tools specifically ChatGPT, QuillBot, and Grammarly holds substantial pedagogical relevance for enhancing English proficiency among Generation Z learners. Each of these tools offers distinct yet complementary functionalities that align with the cognitive and linguistic demands of writing development. ChatGPT supports ideation, discourse organization, and interactive feedback; QuillBot facilitates paraphrasing, lexical variation, and improved sentence structure; while Grammarly enhances grammatical accuracy and adherence to academic writing conventions.

These tools meet the learning characteristics of Generation Z, who prefer interactive, technology-supported environments that provide immediate responses and personalized assistance. This is consistent with prior research showing that AI can support efficient teaching processes and new forms of learner engagement (Gocen & Aydemir, 2020; Kostikova et al., 2024; Wibowo et al., 2023). Thus, the selection of AI tools in this study is theoretically relevant and contextually appropriate for supporting English language learning.

In terms of learning experiences and language performance, the study reveals that AI-supported tools significantly enhance students' engagement, confidence, and writing quality. Classroom observations indicate that students used ChatGPT for brainstorming and drafting, QuillBot for sentence-level revision, and Grammarly for final editing. These patterns align with established stages of process writing and illustrate how distinct AI tools can scaffold different phases of the writing task. CEFR-based assessments further demonstrate descriptive improvements in coherence,

lexical range, and linguistic accuracy, reinforcing the argument that AI can enhance instructional feedback and promote learner autonomy.

These findings correspond with previous research suggesting that AI-driven feedback systems support iterative learning and reduce students' writing anxiety (Nurhuda et al., 2023; Shidiq, 2023). However, the literature also highlights that teachers remain cautious about the expanding role of AI. Haseski (2019) reports concerns that excessive reliance on AI may disrupt classroom routines and reduce teacher authority, while Picciano (2019) notes that university instructors fear that AI may gradually replace responsibilities traditionally managed by teachers, such as guiding discussions and cultivating critical thinking. These perspectives suggest that although AI offers clear pedagogical benefits, its implementation must be guided by thoughtful instructional design.

Despite the demonstrated advantages, this study identifies several challenges and opportunities in integrating AI into English instruction at SMAN 2 Binjai. Technological limitations—including inconsistent access to devices and varying levels of digital literacy—create disparities in students' ability to engage with AI tools effectively. Differences in teacher readiness and community attitudes further influence the success of AI adoption, reflecting broader debates surrounding the place of AI in educational settings. Consistent with the concerns expressed by Haseski (2019) and Picciano (2019), classroom observations in this study also indicate instances where students began to rely heavily on AI-generated text, which raises concerns about reduced creativity and critical thinking.

Such risks echo Shidiq's (2023) argument that educators must carefully design learning activities to ensure that AI functions as a supportive scaffold rather than a substitute for student reasoning. Yet, alongside these challenges lie significant opportunities: AI can streamline teachers' feedback processes, motivate learners, and enable more personalized instruction. To fully realize these opportunities, schools must develop clear guidelines, strengthen digital literacy training, and provide ongoing professional development to ensure that AI is integrated responsibly. When these conditions are met, AI has the potential to enhance instructional practices and contribute meaningfully to the advancement of English language education at SMAN 2 Binjai.

Conclusion

This study answered the research questions by identifying key AI-based learning tools, analyzing their influence on students' learning experiences, and evaluating the challenges and opportunities of integrating AI into English instruction at SMAN 2 Binjai. The results indicate that ChatGPT, QuillBot, and Grammarly effectively support Generation Z learners by improving idea development, paraphrasing abilities, and grammatical accuracy, while also enhancing engagement and writing performance.

However, concerns such as unequal technology access, varying levels of digital

literacy, and potential overreliance on AI persist. Accordingly, educators and institutions are encouraged to guide students in using AI tools responsibly, ensuring that learners do not develop overdependence on automated assistance. Instructional practices should continue to emphasize language understanding, creativity, and independent writing practice. Additionally, digital literacy training is essential to help students critically evaluate and appropriately apply AI-generated suggestions, ensuring that the final written output continues to reflect their genuine abilities.

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