


Artificial Intelligence in English as a Foreign Language Learning: A Study of Its Impact on Teaching and Learning Processes

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*Laura Aditia, Okta Ulantari, Sri Wahyuni^{abc}

¹²³STKIP Muhammadiyah Pagar Alam, Indonesia

Corresponding Author: Sriwahyunipga86@gmail.com

ABSTRACT

This study discusses how Artificial Intelligence (AI) is used in learning English and how it influences the teaching and learning process as a whole. Based on a library research, various AI tools such as chatbots, chat gpt, and adaptive learning applications can provide instant feedback and adjust lessons according to each student's ability. The findings show that AI helps improve students' motivation, communication skills, and learning efficiency. However, there are still challenges, including limited technology, unequal access to digital resources, and students becoming overly dependent on automation. Therefore, AI should be implemented in education ethically and collaboratively to support teachers and maintain a balance between technology and human interaction. AI tools like chatbots, personalized learning apps, and language processing software assist students in practicing English by giving quick feedback and adjusting to their learning pace (Rohmiyati, 2025, p. 8). Moreover, the use of AI technology provides significant benefits for teachers in addressing challenges in the digital era

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INTRODUCTION

Artificial Intelligence is a branch of computer science that focuses on creating machines capable of thinking, learning, and acting like humans. With the development of Artificial Intelligence, computers are now able to perform tasks that typically require human intelligence, such as understanding spoken language, making decisions, retrieving information, and learning from experience. Over time, the rapid advancement of technology – especially since the early 2000s – has significantly transformed various aspects of human life, including education. One of the most impactful innovations in this transformation is the emergence of Artificial Intelligence as a powerful tool to support teaching and learning processes.

The development of technology in the twenty-first century has greatly influenced the way people learn and interact with knowledge. Artificial Intelligence has become one of the most important innovations in education, as it provides various benefits for both teachers and students. It assists in automating repetitive tasks, analyzing large amounts of data, and designing learning experiences tailored to individual learners. By integrating Artificial Intelligence into educational settings, the learning process can become more efficient, flexible, and student-centered. Its primary purpose in education is to enhance learning effectiveness and create experiences that suit each student's individual needs (Rohmiyati, 2025).

Furthermore, Artificial Intelligence enables personalized and adaptive learning, allowing students to progress at their own pace while receiving feedback that aligns with their abilities and learning styles. According to Chen, Zou, Cheng, and Xie (2023), Artificial

Intelligence systems can support individualized instruction by continuously analyzing student performance and adjusting learning materials accordingly. This approach not only improves learning outcomes but also encourages students to become more independent and responsible for their own learning process.

In the context of language learning, Artificial Intelligence shows great potential to enhance students' motivation, engagement, and overall achievement. Tools such as chatbots, ChatGPT, and adaptive learning applications provide students with immediate feedback and opportunities to practice language skills in an interactive and meaningful way (Rohmiyati, 2025). These technologies create a more dynamic learning environment where students can actively participate and develop their communication skills with greater confidence. In addition, Artificial Intelligence can simulate real-life communication scenarios, allowing learners to practice language use in contexts that closely resemble authentic situations.

Moreover, Artificial Intelligence also offers valuable support for teachers. As explained by Agustina et al. (2024), Artificial Intelligence helps educators address challenges in the digital era by encouraging more innovative, creative, and effective teaching strategies. Teachers can use Artificial Intelligence tools to design instructional materials, monitor student progress, and provide more targeted feedback. This allows teachers to focus more on facilitating meaningful learning experiences rather than being burdened by administrative tasks.

A study conducted by Susmita, Zaim, Thahar, and Wahyuni (2024) revealed that most high school students have positive perceptions of using Artificial Intelligence in English language learning. Many students are already familiar with Artificial Intelligence tools and believe that these technologies can help them understand lessons better, increase their confidence, and improve their academic performance. However, despite these advantages, the integration of Artificial Intelligence in education also presents several challenges. These include the risk of overdependence on technology, unequal access among students, concerns about data privacy and security, and the potential reduction of direct interaction between teachers and students.

Despite these challenges, Artificial Intelligence still holds significant potential to improve the quality of language education when used appropriately. It is important to ensure that Artificial Intelligence is implemented ethically and responsibly, serving as a supportive tool rather than a replacement for teachers. As emphasized by Agustina et al. (2024) and Susmita et al. (2024), the effective use of Artificial Intelligence can create a balanced learning environment that combines technological innovation with essential human interaction. Therefore, the integration of Artificial Intelligence in education should be carefully managed to maximize its benefits while minimizing its potential drawbacks.

METHOD

This study employed a library research method to explore how Artificial Intelligence is used in language learning and how it influences the teaching and learning process. Library research is a qualitative approach that focuses on collecting and analyzing data from existing sources rather than conducting fieldwork. This method is considered appropriate for the present study because it allows the researcher to examine a wide range of scholarly perspectives, theories, and findings related to the integration of Artificial Intelligence in education. By relying on previously published works, the researcher can build a comprehensive understanding of current trends and developments in this field.

Through this approach, the researcher systematically collected, reviewed, and synthesized information from various academic sources, including journal articles, books, conference papers, and credible online publications. The selected sources were carefully evaluated based on their relevance, credibility, and contribution to the topic of Artificial Intelligence in language learning. The process involved identifying key themes such as the role of Artificial Intelligence in enhancing student engagement, providing personalized learning experiences, and supporting teachers in instructional practices. In addition, the researcher

compared findings from different studies to identify similarities, differences, and gaps in the existing literature.

By using the library research method, this study provides a clear and structured overview of how Artificial Intelligence supports language education. It highlights not only the benefits of Artificial Intelligence, such as improved learning efficiency and adaptive learning systems, but also the challenges associated with its implementation, including ethical concerns and technological limitations. Furthermore, this approach enables the researcher to draw meaningful conclusions and offer insights into best practices for integrating Artificial Intelligence effectively in educational settings. Therefore, this study contributes to a deeper understanding of the role of Artificial Intelligence in language learning and serves as a useful reference for educators, researchers, and policymakers.

FINDINGS AND DISCUSSION

The results of this study showed that Artificial Intelligence had a significant influence on language learning, bringing many advantages while also presenting several challenges. Based on the reviewed studies, Artificial Intelligence tools such as chatbots, speech recognition systems, and adaptive learning platforms have improved the quality of language learning by making it more interactive, efficient, and personalized (Rohmiyati, 2025). These technologies allow students to engage more actively in the learning process through interactive exercises and real-time responses. One of the most notable benefits is the provision of instant feedback, which enables students to identify and correct their mistakes quickly. This immediate response helps learners develop their language skills more effectively, particularly in areas such as grammar, pronunciation, and sentence structure. Similarly, Lee (2021) states that the use of Artificial Intelligence tools in language learning provides instant feedback, allowing students to correct errors promptly and improve their language proficiency in a more structured and consistent manner.

In addition, Artificial Intelligence contributes to creating a more learner-centered environment by supporting personalized learning experiences. Students are able to learn at their own pace, revisit difficult materials, and receive customized exercises based on their individual needs. This flexibility increases students' motivation and confidence, as they are not pressured to follow a uniform learning speed. Furthermore, Artificial Intelligence can simulate real-life communication situations, which helps students practice their speaking and writing skills in a more meaningful and contextual way. As a result, language learning becomes more engaging and relevant to students' daily lives.

From the teachers' perspective, Artificial Intelligence offers valuable assistance in managing classroom activities and improving instructional quality. As stated by Agustina et al. (2024), Artificial Intelligence makes it easier for teachers to organize learning activities and introduce more creative and innovative teaching methods, especially in the digital era. Teachers can use Artificial Intelligence tools to monitor students' progress, analyze learning outcomes, and identify students' strengths and weaknesses more efficiently. This data-driven approach enables teachers to adjust their teaching strategies to meet individual learning needs, thereby improving overall classroom effectiveness. Moreover, Artificial Intelligence reduces teachers' workload by automating administrative tasks such as grading and attendance tracking, allowing them to focus more on facilitating meaningful learning experiences.

Moreover, Susmita et al. (2024) found that most high school students have a positive perception of using Artificial Intelligence in language learning. Students reported that Artificial Intelligence made learning more enjoyable, interactive, and less stressful. They also believed that these technologies helped them better understand learning materials, increased their confidence in using English, and improved their academic performance. However, despite these positive perceptions, the study also highlighted several limitations. The use of Artificial Intelligence in schools is still constrained by unequal access to technology, particularly in under-resourced areas. In addition, concerns about data privacy and security remain significant issues that need to be addressed. Another challenge is the reduced level of

personal interaction between teachers and students, which may affect the development of social and emotional skills.

Despite these challenges, the overall findings suggest that Artificial Intelligence plays an important role in making language learning more effective and efficient. It supports personalized learning and helps teachers create more engaging and interactive classroom activities. Therefore, Artificial Intelligence should be implemented carefully and responsibly, ensuring that it complements rather than replaces the role of teachers. When used appropriately, Artificial Intelligence has the potential to create a modern, inclusive, and dynamic educational environment that benefits both teachers and students.

Chatbots

Chatbots are one of the most widely used applications of Artificial Intelligence that enable automatic communication between computers and humans through conversational interaction. According to Nghi (2019), chatbots are innovative tools designed to make interactions between users and machines more natural and human-like. In the context of language learning, chatbots have been recognized as effective tools for improving students' language skills, particularly in English learning (Afrianto, Rukmini, & Fitriati, 2019). These systems function as virtual conversation partners that allow students to practice speaking and writing in a safe and supportive environment without fear of making mistakes.

In practical use, chatbots are equipped with various features such as grammar correction, vocabulary suggestions, and daily learning logs. These features help students receive immediate feedback, understand their errors, and monitor their learning progress over time. As a result, students can improve their sentence accuracy and overall language proficiency more effectively. Furthermore, chatbots provide opportunities for repetitive practice, which is essential in language acquisition. By using Natural Language Processing, chatbots are able to understand user input and generate relevant and meaningful responses (Haristiani, 2019). This capability allows learners to engage in interactive and context-based conversations, making the learning process more dynamic and engaging.

ChatGPT

ChatGPT, developed by OpenAI, is an advanced Artificial Intelligence model that generates human-like text using Natural Language Processing. In the field of education, ChatGPT serves as a virtual assistant that supports a wide range of teaching and learning activities. It can help teachers design lesson plans, create exercises, generate teaching materials, and provide authentic examples of language use. For students, ChatGPT offers explanations, answers questions, and assists in practicing writing and communication skills in a flexible and accessible manner.

One of the main advantages of ChatGPT is its ability to provide personalized learning experiences. According to Susnjak (2022), ChatGPT can adapt to individual learners' needs by offering customized explanations and feedback based on their input. This personalized approach helps increase students' motivation and engagement in learning. In addition, ChatGPT encourages independent learning by allowing students to explore topics and practice language skills outside the classroom. It also improves teaching efficiency by supporting teachers in preparing instructional materials and responding to students' needs more quickly.

However, despite its benefits, the use of ChatGPT must be approached with caution. Ethical considerations are essential to ensure that this technology supports learning without replacing the role of teachers or reducing students' critical thinking skills. As noted by Zhai (2023), there is a risk that students may become overly dependent on Artificial Intelligence tools, which could affect their originality and academic integrity. Therefore, it is important to use ChatGPT as a supportive tool that enhances learning while maintaining the essential role of human interaction in education. When used responsibly, ChatGPT can significantly contribute to the development of a more effective, engaging, and modern educational system.

CONCLUSIONS

This study concludes the Artificial Intelligence had a big role in improving how students learned languages. Used the AI tools such as chatbots, speech recognition, and adaptive learning platforms made learning more fun, efficient, and personalized. AI gave feedback quickly to help students correct mistakes and build their language skills, while also making them more motivated and active in the learning (Rohmiyati, 2025). AI also helped the teachers manage their class better and used the teaching methods more creative that fit today's digital world (Agustina, et al., 2024). The generally students had positive opinions about AI, because they believed AI could help understand the lessons better, become more confident, and reached academic results higher (Susmita, et al., 2024). Even so, this study recognized still had several problems, such as limited access technology, data privacy issues, and reduced personal interaction between teachers and students. So that why, AI needed wisely and ethically to support teachers, it's not to replace them. In short, when used properly and responsibly, AI could help create a modern and inclusive learning environment where the technology and human interaction worked together to make language education more effective and meaningful.

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