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Exploring the Impact of AI Chatbots on Students' Speaking Skills in EFL Learners: A Systematic Review

[1]Khulud Oktavia Rachmadani, [*2]Isna Ridhoatul Musyafa'ah[*], [3]Asti Hijriatul Januanto, [4]Ima Fitriyah
[1,2,3,4]State Islamic University of Syekh Wasil Kediri
Kediri, Indonesia
khuludor@gmail.com, musyafaahisna@gmail.com, asthijan4@gmail.com, imafitria@uinkediri.ac.id

Abstract. AI chatbot is one of the latest technologies in solving EFL students' problems with speaking anxiety and limited speaking practice. In this study, we conduct a Systematic Literature Review for the investigation of the effect of using AI chatbots on EFL students' speaking skills and learners' perceptions toward the use of AI chatbots in speaking skill improvement. We followed the SALSA framework, which includes Search, Appraisal, Synthesis, and Analysis to direct our work. We searched Lens.org and Google Scholar databases for articles. The articles published from 2020 to 2025. We also conducted a thematic analysis within 24 identified articles. Overall, evidence shows students benefit greatly by practicing with AI chatbots. Students who do so make gains in vocabulary, grammar, fluency, pronunciation, and foreign language speaking anxiety (FLSA) and thus feel more motivated to communicate in the target language, as students find bots to be a less critical audience. However, this meta-analysis did find a lack of evidence about the disadvantages of chatbot use. There are also the general limitations of AI, such as the tendency to output the same response for different inputs, and AI's inability to replace the teacher's contextual feedback. Thus, the study finds that AI chatbots are an effective and useful tool for improving EFL speaking ability when used in moderation and as a complement to teacher-led instruction in the classroom.

Keywords: AI Chatbots; EFL Speaking Skills; Learners' Perceptions

[1] Corresponding author: *Isna Ridhoatul Musyafa`ah, musyafaahisna@gmail.com*

Introduction

One of the most difficult skills in English is speaking. Speaking often becomes challenging for EFL learners because English is not their first language. Therefore, some of them still lack vocabulary, incorrect use of grammar, mispronunciation and their environment does not support them to enhance speaking skills. Pangestu and Suwartono (2024) stated that students encounter numerous obstacles in enhancing their English abilities, such as the absence of a supportive learning environment, limited vocabulary and ideas, low confidence, and the fear of making mistakes. These factors contribute to students' hesitation and low motivation to practice speaking English in their daily lives.

In the previous era, the use of technology was not common. At that time, speaking learning still utilized traditional methods like roleplay and storytelling. This method is effective, but it takes a long time to master speaking skills. According to Belda-Medina and Calvo-Ferrer (2022), traditional learning approaches were limited in promoting authentic communication and learner independence. Along with the development of the times, technology has begun to play an important role in various fields, including education. Rane et al. (2023) stated that technological progress has made the learning process more adaptive and efficient. The use of technology in the learning process makes learning activities more engaging, interactive, and able to overcome various problems, such as limitations of time and space that often arise when using traditional learning methods, as emphasized by Pangestu and Suwartono (2024), who found that AI-based tools can enhance student engagement and reduce the barriers of time and space in language learning. Therefore, the integration of technology in learning not only improves efficiency but also provides greater opportunities for students to learn more independently and effectively.

One of the latest technological innovations in the field of education, particularly in language learning, is the use of Artificial Intelligence (AI) or AI chatbots. AI technology today greatly assists and simplifies the learning process, especially in developing speaking skills. Recent research has highlighted the growing potential of AI chatbots in enhancing English language learning, particularly in improving speaking abilities among EFL learners. Studies have shown that AI chatbots can boost students' motivation to communicate, reduce speaking anxiety, and provide real-time feedback that supports pronunciation, fluency, and confidence. Moreover, they create interactive and authentic learning environments that encourage autonomous speaking practice and enhance overall speaking performance (Belda-Medina & Calvo-Ferrer, 2022; Hoang et al., 2023; Pangestu & Suwartono, 2024). Thus, the presence of AI chatbots has become a valuable innovation that transforms traditional language learning into a more engaging, supportive, and learner-centered process.

Through AI chatbots, students can practice speaking directly without the fear of making mistakes, as the system can provide instant feedback. This is supported by studies showing that AI chatbots help reduce learners' speaking anxiety while improving fluency and pronunciation (El Shazly, 2021; Yang et al., 2022). In addition, AI can also adjust the level of difficulty based on the user's ability, thereby helping to increase students' confidence in using and learning a foreign language, particularly English. According to Dhaniswara (2023) and Aliakbari et al. (2025), adaptive AI systems are capable of personalizing feedback and practice

according to learners' proficiency, which strengthens confidence and motivation. That is why AI chatbots are very helpful in learning, because they can adjust to each student's level and help them improve their speaking ability step by step.

Many studies have explored the use of AI chatbots to help EFL students improve their speaking skills. However, the findings are still scattered and not well summarized, making it difficult to understand how chatbots actually help students speak better and how learners feel about using them. Most of the studies also used chatbots as extra tools outside formal lessons, and only a few looked at students' motivation, confidence, or speaking anxiety. The aim of this review is to bring together and analyse previous research about the use of AI chatbots for developing speaking skills in EFL learning. It hopes to give a clearer understanding of how chatbots are used, what results they produce, and what benefits and challenges are found in different studies.

Based on this aim, this review answers the following research questions:

1. In what ways have AI chatbots been used to help EFL students improve their speaking skills?
2. How do students perceive AI Chatbots for improving speaking skills?

Literature Review

Ways AI chatbots help students

AI chatbots are significantly revolutionizing the way students learn by offering engaging and immersive experiences that greatly exceed teaching methods in classrooms globally. These advanced technologies establish a supportive and flexible educational setting by providing learning materials in a highly customized way that accurately addresses each students distinct learning requirements, speed and tastes. Many empirical studies have repeatedly shown that AI-driven educational tools provide significant benefits for learners involved in language acquisition settings, where individualized feedback and repetition are essential. These chatbots' primary function is to act as virtual partners, allowing students to practice real-world interactions anytime they want without being constrained by time or location. This skill is especially important since it allows students to participate in real-world speaking activities entirely independently, eliminating the usual difficulties associated with needing a human interlocutor, which often presents a significant barrier to successful language learning (Shikun et al. 2024). As a result, with consistent practice and polishing, students can gradually gain confidence while simultaneously enhancing the fluency and organic rhythm of their language abilities over time.

Extensive research clearly shows that AI tools greatly improve learners' speaking abilities in key areas, such as improved pronunciation accuracy, natural conversational rhythm, fluency, and the capacity to maintain coherent conversations (Aliakbari, Barzan, & Sayyadi 2025; Ding & Yusof, 2025). Additionally, by progressively improving students' self-assurance and mental ease when interacting with the target language in real-world contexts, these innovative programs successfully foster personal development (Ahyarudin & Jamilah 2024; Hoang, Duong, & Le, 2023). In addition to enhancing technical skills, AI chatbots have a big impact on students' overall attitudes and emotional engagement with the learning process, serving as powerful motivators that encourage students to develop clear, attainable learning goals and participate more enthusiastically and eagerly in discussion activities, resulting in greater learning delight and a

noticeable boost in academic enthusiasm (Aldosari, 2024). AI chatbots are transforming academic fields beyond language education by adding entertainment and interactivity to learning materials, making difficult subjects more appealing and approachable (Yetişensoy & Karaduman 2024). They also seamlessly integrate into a range of teaching strategies, such as supporting flipped classroom approaches by providing comprehensive preparatory resources for self-study, maximizing in-class time for more intensive engagement, group discussion, and practical exercises (Setyoningrum, 2024). Additionally, AI chatbots play a critical role in teaching students modern communication skills through authentic digital conversations that mirror real-world professional and social interactions. These skills are necessary for success in technology-oriented environments that demand skillful use of technology and seamless collaboration with diverse international colleagues (Alwazzan, 2023).

Students' Perspectives on AI Chatbots for Speaking Skills

Adoption of technology in educational settings is based on direct student input, which provides a true understanding of its effectiveness and possible areas for improvement. Studies on EFL students' opinions regarding the employment of AI chatbots to enhance speaking skills reveal positive attitudes, mostly because of the special psychological ease and practical advantages that surpass conventional classroom obstacles. One significant benefit highlighted by research is the significant reduction in Foreign Language Speaking Anxiety (FLSA), a prevalent issue that frequently immobilizes EFL learners when speaking publicly in traditional settings. Studies show that interacting with AI chatbots effectively reduces this anxiety by offering a safe practice environment that significantly boosts confidence and produces observable improvements in speaking ability and communication readiness (El Shazly, 2021; Ding & Yuso; Singh & Singh, 2024). According to Shikun et al. (2024) and Maysuroh, Fikni, and Aisyah (2025), students particularly appreciate the nonjudgmental environment created by AI interactions, where conversations take place entirely without external assessment, critique, or the social pressure associated with human-guided sessions, offering unmatched liberty to confidently explore language forms, view errors as natural learning moments, and gradually improve abilities without anxiety about humiliation, adverse judgment, or loss of reputation in front of classmates or teachers.

According to Maysuroh et. al (2025) and Mudawy (2025), AI chatbots offer simplicity and ease of use, which are highly appealing to busy learners managing hectic routines. Students continue to value their 24/7 accessibility for English speaking exercises at any hour, day or night, on weekdays or weekends, without any logistical obstacles, effectively addressing persistent issues like missing language partners or timing conflicts and creating plenty of opportunities to develop fluency through continuous, stress-free practice that promotes automaticity. Students often report significant increases in self-confidence regarding language abilities after consistent use, attributing this growth to positive reinforcement loops and incremental progress tracking embedded in AI platforms (Singh & Singh, 2024). The intrinsically entertaining, gamified, and interactive nature of chatbot conversations turns speaking practice from a dreaded chore into an enjoyable activity that sparks higher motivation and greater willingness for regular sessions (Mahmoud, 2022).

Method

In this study is using a systematic literature review based on the SALSA (Search, Appraisal, Synthesis, and Analysis) framework proposed by Grant and Booth (2009). This study chose this framework because the process it provides is well-organized and transparent, allowing for a more structured approach to collecting, evaluating, analyzing, and synthesizing existing studies on a specific research topic. This framework aims to expand the impact of AI chatbots on students' speaking habits in the context of EFL (English as a foreign language) learning.

The main framework is Lens.org and Google Scholar. When searching using the main keyword "AI Chatbots in speaking," 3,998 articles were identified from the Lens.org database. Then, in the next stage, during the screening process to ensure that the scope of the research was in accordance with the 2020-2025 publication filter, 3,563 articles were screened, followed by an open access filter, which resulted in 2,655 articles. This was followed by a filter on the fields of study, which only covered education, technology, and artificial intelligence, ultimately leaving 48 articles. After that, manual screening was carried out based on the title and abstract to ensure suitability with the topic of AI Chatbots and the speaking ability of EFL students, which ultimately resulted in two relevant articles. To strengthen the completeness of the search, the researchers also conducted an additional search through Google Scholar with the same inclusion criteria, resulting in 22 additional relevant articles. Thus, the number of articles included in this study was 24 articles.

The assessment was conducted to evaluate the quality and suitability of the articles. The next stage of the assessment covered aspects such as the availability of findings data, the suitability of the research design, relevance to the topic, and the contribution of the research to the field of expertise. Discussing the use of AI chatbots and EFL. Only articles that meet all criteria proceed to the synthesis stage, resulting in 24 articles being synthesized. The synthesis stage is carried out using a thematic analysis approach to explain the variations and patterns in the findings among the reviewed articles. Types of AI chatbots used in learning.

In this study, participant characteristics and the context of EFL learning, speaking skills were also measured (e.g., fluency, pronunciation, accuracy, motivation, and engagement), as well as the learning methods and techniques for measuring speaking ability applied in each study. The final stage was an analysis aimed at critically interpreting the synthesized results to find common threads among the research findings. The analysis was conducted by comparing the research results to identify the effectiveness of AI chatbots in improving EFL students' speaking skills, their impact on psychological factors during the learning process, and students' perceptions of the use of chatbots in English language learning. The results of this analysis then became the basis for drawing general conclusions and recommendations for future research and learning practices.

Findings

This section interprets the findings from 24 selected studies on the impact of AI chatbots on speaking skills in EFL learners. By analysing all the findings, three main themes were identified: 1.) The impact of AI Chatbots on speaking skills, 2.) The challenges and limitations of AI Chatbots, 3.) Learners' perceptions of AI

Chatbots. These main themes were then divided into several sub-themes, including the following:

Table 1. Benefits and challenges of AI Chatbots in students' speaking skills

No	Category	Key Themes	Supporting References
1	Benefits	Enhance speaking performance and proficiency	Aliakbari et al. (2025), Ding & Yusof (2025), Singh & Singh (2024), Pangestu & Suwartono (2024), Setyoningrum et al. (2024)
		Reduction in speaking anxiety (FLSA)	El Shazly (2021), Ding & Yusof (2025), ÇAKMAK (2022), Singh & Singh (2024), Nguyen Hoang Anh (2024)
		Improvement of specific linguistic skills	Ahyarudin & Jamilah (2024), Hoang et al. (2023), Zou et al. (2023), Aliakbari et al. (2025)
		Boosted affective and motivational factors	Alsosar (2024), Singh & Singh (2024), Mahmoud (2022), Maysuroh et al. (2025), Shikun et al. ((2024)
		Supports autonomous and flexible learning	Belda-Medina et al. (2022), Maysuroh et al. (2025), Zou et al. (2023)
2	Challenges	Limitations in feedback quality	Maysuroh et al. (2025), Munir et al. (2025), Nguyen Hoang Anh (2024)
		Cognitive overload risk	Safar & Anggraheni ((2024), Nguyen Hoang Anh (2024)
		Logistical and ethical issues	Nguyen Hoang Anh (2024), Wang et al. (2023), Žáková et al. (2025)

Table 2. Perception of AI Chatbots in students' speaking skills

No	Category	Key Themes	Supporting References
1	Student Perception	High acceptance and positive attitude	Mudawy (2025), Žáková et al. (2025), Maysuroh et al. (2025), Alwazzan (2024)
		Appreciation for non-judgmental environment	Shikun et al. (2024), Maysuroh et al. (2025), Munir et al. (2025), El Shazly (2021)
		Value as a conversational partner	Mahmoud (2022), Alwazzan (2024), Belda-Medina et al. (2022), Mudawy (2025), Yetişensoy & Karaduma (2024)

The emerging themes presented in Table 1 highlight the main patterns found across the 24 reviewed studies. These themes were created through an analysis that grouped the findings into several categories, including improvements in language skills, the psychological impact of AI chatbots, the practical and teaching limitations of the applications, and students' views on using them for speaking practice. The following paragraphs explain the findings related to the two research questions of this review for a clearer understanding.

An analysis of the literature from the first research question regarding the assistance of AI chatbots on the students' speaking skills indicates an improvement

in the students' language proficiency. Interactions using chatbots are greatly encouraging toward the enhancement of students' vocabulary, grammar, fluency, and overall speaking skills. As noted by Aliakbari et al. (2025), Mahmoud (2022), Shazly (2020), and Shikun et al. (2024), students after conversing multiple times with the AI tools, began to stream clear, structured and well-articulated sentences. Regarding the overall language improvement, several other studies have focused on the particular aspects of the speaking skill that chatbots are able to assist with. One of the studies, Hoang et al. (2023) pinpointed the AI tools for speaking accurate pronunciation assistance that enabled students to refine their stress, rhythm, and intonation. In the same manner, Ahyarudin and Jamilah (2024) noted an enhancement in the AI tasks framed on a Genre-Based Approach on the use of vocational students' appropriate transactional language within their professions. The studies have also noted the ease with which students speak because AI chatbots are able to offer flexible assistance. The studies by Belda-Medina and Calvo-Ferrer (2022) and Zou et al. (2023) have shown that chatbots are available at any time which allows students to practice speaking more frequently and on their own. Their research revealed that constant availability encourages consistent speaking practice beyond classroom hours.

As to the second research inquiry on the psychological benefits and challenges of integrating AI chatbots in speaking practice, the results show a number of psychological benefits. The studies all documented the prominent theme of lower adult learners' speaking anxiety. The learners felt more comfortable engaging in practice speaking English with chatbots because they did not have to worry about receiving evaluative, negative feedback. This was illustrated by El Shazly (2021) and Çakmak (2022). This negative feedback environment strengthened supportive environment, and participants increased exercises, modified communicative willingness and improved environment. The studies of Aliakbari et al (2025), Shikun et al. (2024), and Singh and Singh (2024) reported that AI speaking exercises increased participants' communicative confidence, and they were able to express their ideas more freely, their participation was more focused, and they were able to maintain their attention on the exercises. Several studies reported that Chatbots increased teaching effectiveness, decreased lesson preparation time, and increased performance accountability during speaking, which reported that the overall effectiveness of speaking not only increased but students were more actively and meaningfully involved.

Besides the benefits of AI chatbots in learning, this review also identified several challenges related to the use of AI chatbots. Functional limitations often occur, such as chatbots misunderstanding student input, providing repetitive responses, or sometimes providing inaccurate feedback. Shikun et al. (2024), Munir et al. (2025), and Mudawy (2025) describe how these issues can disrupt communication and reduce the effectiveness of speaking practice. In addition to technical issues, several limitations in teaching were also identified. Several studies highlight that the role of teachers in learning cannot be completely replaced because AI chatbots struggle to understand emotional cues, deeper meanings, or complex and context-specific language. Students still require guidance to use chatbots effectively, and without proper instruction, they may become overly reliant on automated responses.

According to the analyzed studies, students' opinions of AI chatbots are typically positive. For speaking practice, several students found AI chatbots to be beneficial, simple to use, and entertaining. As stated by Maysuroh et al. (2025) and Mudawy (2025), they valued the immediate feedback and the opportunity to practice without feeling embarrassed. Some students, however, expressed worries about technical mistakes and pointed out that human input is still essential when taking on increasingly difficult speaking assignments. Overall, the findings indicate that although AI chatbots offer helpful assistance for EFL speaking practice, their efficacy is maximized when combined with appropriate direction and educational support.

The most noteworthy and insightful results show how AI can promote intrinsic motivation and a love of learning that goes much beyond conventional language proficiency criteria. Aldosari's 2024 study examines the impact of AI on Academic Enjoyment (AE) and Personal Best Goals (PBs), two emotional elements that are rarely examined. The findings demonstrate that AI users improve their speaking abilities more than their peers. Furthermore, engaging with AI greatly raises their Academic Enjoyment (AE), which improves the contentment and delight of language acquisition. This data demonstrates how AI has evolved from a straightforward feedback system to a vital psychological catalyst that maintains students' dedication to language learning environments and helps them meet difficult personal milestones (PBs) while also enhancing their speaking abilities. Furthermore, engaging with AI greatly raises their Academic Enjoyment (AE), which improves the contentment and delight of language acquisition. This data demonstrates how AI has evolved from a basic feedback system to an essential psychological trigger that maintains students' dedication to language acquisition.

Although this synthesis highlights advantages, it also highlights problems, namely with regard to implementation quality and possible cognitive hazards. The primary challenge is in the quality of AI feedback; multiple studies reveal that while chatbot responses are timely, they can appear excessively ambiguous or lack the subtlety necessary for advanced language development (Maysuroh, Fikni, & Aisyah, 2025). First and foremost, study by Safar & Anggraheni (2024) emphasizes the issue of cognitive load by examining how learners may become cognitively overwhelmed by information overload or subpar interface design, which can hinder language acquisition. These findings are significant because they provide a critical viewpoint, emphasizing that careful pedagogical design to create the best possible, non-burdensome interactions is just as vital to the success of AI as the technology itself.

Discussion

Systematic research shows that users of AI chatbots have a significant impact on learning English as a foreign language (EFL). This technology serves as an effective solution to common learning obstacles, such as limited practice opportunities, lack of confidence, and anxiety when speaking (Pangestu & Suwartono, 2024). This discussion aims to explore how AI affects students' pedagogical and psychological structures, as well as the obstacles that need to be anticipated in implementing it in learning activities.

Unlike traditional methods that are limited, AI chatbots have the advantage where students no longer rely on the presence of a teacher just to practice speaking,

and students can practice more freely and flexibly anytime, anywhere, independently without limits. According to Ahyarudin and Jamilah (2024), the voice recognition feature in AI plays a significant role in providing direct feedback as well as increasing relevant vocabulary. This can help students become more accustomed to being independent in preparing themselves to practice the communication skills needed in everyday life.

The most significant impact brought by AI is predominantly seen in students' emotions. AI has been proven effective in lowering Foreign Language Speaking Anxiety (FLSA), which is a psychological barrier that usually hinders students' willingness to express themselves freely. The learning environment offered by AI is low-pressure and non-judgmental, allowing students to feel free to learn without fear of negative correction (El Shazly, 2021). This reduction in anxiety directly correlates with increased self-confidence, and the willingness to communicate (WTC) naturally grows as well. As a result, there will be a fundamental change where students are no longer passive but become more proactive in honing their language skills.

The presence of AI chatbots is highly relevant to the concept of self-directed learning, where full control of the learning process rests in the hands of the student (Mahmoud, 2022). One tangible application can be seen in the flipped classroom model, where students can use AI to practice basic speaking skills at home, making classroom time more effective (Setyoningrum, Susanto, & Setiaji, 2024). This provides educators with the opportunity to prioritize classroom activities that require deeper thinking and interaction, activities that cannot be replaced by machines. Therefore, AI should be viewed as a technological aid that supports the learning process, rather than as a replacement for the role of the teacher.

However, AI chatbots also have drawbacks related to the quality of feedback provided. Some students feel that although AI responses are quick and supportive, the feedback given by AI often feels rigid and fails to fully grasp the context of the language compared to human instructors. This proves that the presence of teachers cannot be replaced when it comes to providing detailed corrections and building a more complex understanding. Additionally, logistical challenges such as the distribution of infrastructure and the risk of excessive cognitive load for students are important factors that must be considered in the future development of educational technology.

Therefore, future research should focus more on the best ways to help teachers fill the gap left by AI chatbots. This discussion shows that the feedback provided by AI is often superficial and rigid. Therefore, designing and testing this research requires a special training program for teachers. Teaching teachers the skills to use AI as a basis for task training is also one of the objectives of this research. This will allow them to have more time in class to focus on things that AI cannot do. These include providing detailed evaluations, better adapting to context, and encouraging critical thinking. The ultimate goal is to create a model that confirms that AI also functions as a powerful assistant for teachers. Through this method, students can utilize AI functions for independent practice that is available 24/7 without replacing the role of teachers as the main educators.

Anxiety about speaking a foreign language (FSLA) has decreased significantly because the AI environment has facilitated not only an increased willingness to communicate (WTC) but also a direct improvement in language

competence. A comfortable learning environment also motivates learners to take risks in terms of potential grammatical errors in order to develop fluency in speaking (Mudawy, 2025). In addition, improved accuracy (pronunciation) is also a clear benefit of this technology, where the automatic speech recognition (ASR) system connected to the chatbot provides quick, repeated, and accurate feedback on intonation and sound components. This stable adjustment is difficult for teachers to handle in a classroom environment, and students' pronunciation skills also need to be improved because they require clear communication transactions (Hoang, Duong, & Le 2023). Turning exercises into repetitions is supported by feedback procedures that target relevant developments in speaking skills (Ding & Yusof 2025).

AI becomes more effective when used as part of a structured learning model. For example, the Flipped Classroom method is aligned with AI Chatbot to provide basic speaking exercises and continuous feedback outside the classroom. Thus, face-to-face sessions can focus on more advanced, engaging, and interactive communication activities (Setyoningrum, Susanto, & Setiaji 2024). The Flipped Classroom method not only improves students' readiness before starting class, but also allows them to use learning time for more productive activities. In addition, AI also helps create a more individualized learning environment, where students can practice according to their individual needs and pace. This ultimately contributes to an increase in students' confidence and overall speaking skills.

The integration of AI in the Genre-Based Approach (GBA) also provides contextually appropriate learning tasks and contributes well to vocabulary and pronunciation expansion in various professional genres (Ahyarudin & Jamilah, 2024). Overall, the application of AI that is designed in this way supports the process of Self-Regulated Learning (SRL), which can be conceptually channeled by teachers to their students. The specially created AI Chatbot provides students with the space to manage their own learning process, conduct evaluations, and adjust their learning plans according to their own needs. This supports the emergence of learning independence while reaffirming the role of technology as one of the innovations in teaching English as a foreign language (Mahmoud, 2022).

Conclusion

According to this systematic review, AI chatbots are a ground-breaking and incredibly useful tool for enhancing speaking abilities in EFL settings. Studies regularly demonstrate that this technology significantly advances learners' language proficiency, including oral fluency, grammatical accuracy, and vocabulary growth. Crucially, AI chatbots can lessen Foreign Language Speaking Anxiety (FLSA) during learning and have a strong emotional influence. This improvement results from a welcoming and safe setting where students can confidently explore the language without worrying about being judged. As a result, students show greater will to study, gain self-assurance, and cultivate a Willingness to Communicate (WTC), all of which contribute to the development of a critical psychological basis for better language acquisition.

AI chatbots are a good fit for contemporary teaching paradigms, such as Self-Regulated Learning Theory, which empowers students to take charge of their own education. The long-term availability of AI technologies removes traditional time and access barriers, allowing for continuous and deliberate practice that is essential

for achieving fluency. Nevertheless, challenges still exist, such as frequent or occasionally inaccurate responses that could lower communication quality. Furthermore, while chatbots are helpful tools for fundamental practice, they cannot match the depth of contextual awareness, emotional insight, and comprehensive feedback often offered by human trainers. As a result, AI chatbots should be seen as revolutionary innovations that inspire teachers to move beyond merely imparting knowledge to developing technologically enhanced learning environments.

Three main topics should be the focus of future research: first, improving AI systems to provide more complex and context-sensitive remedial feedback; second, performing longitudinal studies to assess the lasting and cumulative effects of chatbot interactions on speaking skills; and third, tackling ethical and dependency issues like cognitive overload and students' overreliance on automated replies. The objective of ensuring that AI chatbot integration in EFL curriculum is accessible, long-lasting, and capable of fully realizing the instructional potential of this technology will be supported by addressing these crucial areas.

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