

Enhancing University EFL Speaking And Listening Skills Through AI-Based Conversational Tools

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Abstract

Artificial intelligence (AI)-based conversational tools are increasingly being integrated into English as a Foreign Language (EFL) learning because they offer flexible opportunities for language practice and immediate feedback. However, limited research has explored how university EFL students perceive the use of these tools to support speaking and listening development within the Indonesian higher education context. This study aimed to investigate EFL students' perceptions and experiences of using AI-based conversational tools, particularly ChatGPT, to support English speaking and listening learning. The study employed a qualitative descriptive design supported by descriptive questionnaire data. Thirteen undergraduate EFL students (8 females and 5 males), aged 19–23 years, from Muhammadiyah University Mataram, Indonesia, participated in the study. Data were collected through a five-point Likert-scale questionnaire and semi-structured interviews and analyzed using descriptive statistics and thematic analysis. Three major themes emerged from the findings. First, participants perceived that AI-based conversational tools promoted learner autonomy and confidence by providing immediate feedback, flexible opportunities for independent practice, and a supportive environment for speaking and listening practice. Second, participants reported that AI tools assisted with grammar, vocabulary, pronunciation, and listening comprehension but were less effective in addressing the sociolinguistic and contextual nuances of authentic communication. Third, participants perceived AI-based conversational tools as valuable complements to classroom instruction by encouraging more active participation and self-directed learning rather than replacing lecturer-guided interaction. These findings suggest that AI-based conversational tools are perceived by students as useful supplementary resources for supporting English language learning. The study contributes context-specific evidence from Indonesian higher education and offers practical implications for educators seeking to integrate AI-based conversational tools into EFL teaching while maintaining the essential role of authentic human interaction in language development.

Keyword: *EFL; AI-Based Conversation Tool; Speaking and Listening*

1. INTRODUCTION

Speaking and listening skills are important in the context of learning English as a Foreign Language (EFL) using AI-based conversation tools to communicate with native and non-native speakers and participate in real-life situations (Jabber & Mahmood, 2020). This is a crucial component in influencing language development for students in an academic environment (Wan & Moorhouse, 2025). On the other hand, in the context of English as a Foreign Language (EFL), students can easily develop speaking and listening skills through interactive practice (Alrasheedi, 2024; Gilakjani, 2012; Qassrawi, 2024). AI applications and chatbots also provide real-time individual responses to test participants, enabling better independent practice compared to traditional or classical models (Zawacki-richter et al., 2019). This serves as a companion during the learning process, as expressed by Hoang in his writing, thereby encouraging real-life interactions and strengthening the learning environment (Han, 2020; Hoang et al., 2023).

Traditional teaching in English as a Foreign Language (EFL) classes often focuses on grammar and reading, giving students few opportunities to develop their communication skills (Richards,

2015). With the advent of artificial intelligence (AI)-based conversation tools in education, learners can help bridge this gap by practising interactively, either with native or non-native speakers, anytime and anywhere in real time. Therefore, it can be stated that speaking and listening remain the two most important skills for learners of English as a Foreign Language (EFL), especially in situations where access to native speakers is limited (Tran et al., 2024).

For students research English as a Foreign Language (EFL), they often face challenges such as limited class time, lack of exposure to native speakers, and anxiety when speaking (Pambudi et al., 2024; Utami, 2024), so AI-based conversation tools have the potential to be a solution. However, adoption in Indonesia is still in its early stages, with limitations in infrastructure, digital literacy, and pedagogical integration (AITwijri & Alghizzi, 2024). On the other hand, education has transformed traditional pedagogical practices with natural language processing and technology, and machine learning has emerged as a powerful tool for improving the teaching and learning of English as a Foreign Language (EFL) (Wang et al., 2025). In this way, English as a Foreign Language (EFL) learners have the opportunity to utilize language in context, without being bound to other contexts (Fryer & Carpenter, 2006).

Although several international studies have examined the benefits of chatbots and AI applications in language learning processes (e.g., improved speaking fluency and listening skills), studies in the local Indonesian context are still minimal and need to be expanded, especially in relation to the experiences and needs of students. Empirical studies also indicate that chatbot-assisted learning has a positive impact on vocabulary retention, grammar mastery, and speaking fluency (Apriliani, 2024; Ayedoun et al., 2019). Other literature also found that learners who used conversation agents showed significant improvements in pragmatic competence and motivation (Bui et al., 2025; Wang et al., 2024). This feature is very useful for enhancing student-centered learning in English as a Foreign Language (EFL) Programs, where students individually and collectively have varying levels of proficiency.

Several studies also highlight that AI-based applications improve fluency, vocabulary mastery, and listening comprehension, as well as increase students' motivation and willingness to communicate (Ramalingam et al., 2022). Furthermore, other literature also states that AI-based learning is a revolutionary measure, and, at the same time, the concept for ELS learners has seen a significant improvement in successful speaking comprehension by an average of 25% and listening comprehension by 30% compared to traditional approaches (Chang et al., 2023; Vincent et al., 2025). Therefore, the integration of AI conversation tools into the classroom presents opportunities and challenges that require critical reflection on pedagogical value, learning autonomy, and cultural relevance (Kovalyova, 2023).

Today, the spread of Artificial Intelligence (AI) in education has opened up significant opportunities and has the potential to shake up all aspects of institutions, especially in higher education institutions, making English as a Foreign Language (EFL) skills an essential discipline in higher education (Ilyas, 2025; Sitorus, 2024). Specifically, conversational AI, such as chatbots and adaptive feedback dialogue systems, contributes new intelligence through authentic and interactive speaking and listening exercises ((Shadiev & Yang, 2020). In the Indonesian context, Muhammadiyah Mataram University recognizes that digital transformation opens up opportunities, but the integration of technology and pedagogy still faces serious challenges, such as varying levels of digital literacy among students and lecturers.

This research aims to explore further the use of AI conversation tools in English as a Foreign Language (EFL) Classes at UMMAT, with a focus on improving students' speaking and listening skills through analysis of experiences and pedagogical implications. This research also contributes to the discussion on language learning by answering the following research questions: What are

the biggest challenges faced by EFL learners in relation to listening and speaking skills? How do AI-driven interactive platforms affect the improvement of EFL learners' listening and speaking skills? What are the socio-pedagogical changes in learning interaction patterns? Finally, it is important for future research to pay attention to learning such as English as a Foreign Language (EFL), which mostly focuses on short-term utilization. There needs to be further evidence on whether these improvements can be sustained in the long term (Anh, 2024). This will ensure that the impact of AI in language teaching achieves significant results and reduces the possibility of misuse.

This study complied with the ethical guidelines for educational research. Participation was voluntary, informed consent was obtained from all participants, confidentiality and anonymity were strictly maintained, and all data were used solely for research purposes. According to institutional policy, formal ethical approval was not required for this study because it involved minimal-risk educational research with adult university students.

2. METHODS

In terms of methodology, this study aims to examine speaking and listening skills using artificial intelligence (AI)-based conversation tools for learners of English as a Foreign Language (EFL), focusing on 13 students and research subjects located at Muhammadiyah University Mataram.

2.1. Research design

This study employed a qualitative descriptive research design supported by descriptive quantitative data to explore English as a Foreign Language (EFL) students' experiences, perceptions, and attitudes toward the use of artificial intelligence (AI)-based conversational tools for improving speaking and listening skills. The qualitative component served as the primary approach, enabling an in-depth understanding of students' learning experiences, while the quantitative component provided descriptive evidence through a five-point Likert-scale questionnaire.

Data were collected using two complementary instruments: (1) a structured questionnaire consisting of Likert-scale items to examine students' perceptions of AI-based conversational tools, and (2) semi-structured interviews to obtain richer explanations of the questionnaire findings and to explore participants' learning experiences in greater depth. Questionnaire responses were analyzed using descriptive statistics, including frequencies and percentages, whereas interview data were analyzed thematically to identify recurring patterns, perceptions, and experiences.

The study was informed by Digital Empowerment Theory Passey, (2013), as cited in Munir et al., (2025), which emphasizes how digital technologies enhance learners' autonomy, engagement, and language development. Rather than applying Critical Discourse Analysis, this study adopted thematic analysis to interpret participants' interview responses and to explain how AI-based conversational tools influenced speaking and listening development within the participants' educational context.

Data collection was conducted in the English Language Laboratory at Muhammadiyah University Mataram, Indonesia. Participants first completed the structured Likert-scale questionnaire individually in the laboratory under the supervision of the researchers. After completing the questionnaire, each participant took part in an individual semi-structured interview in the same setting. The interviews lasted approximately 15–20 minutes and were conducted in a quiet environment to minimize distractions and ensure clear audio recording. With participants' informed consent, all interviews were audio-recorded, transcribed verbatim, and anonymized before analysis.

2.2. Data Analysis

Students who had little or no prior experience using AI-based conversational tools, or who had used them only sporadically, were excluded to ensure that all participants possessed sufficient experience to provide meaningful reflections on the use of AI for English language learning.

Data were collected using two complementary instruments: a structured questionnaire and semi-structured interviews. The questionnaire comprised 15 Likert-scale statements organized into three dimensions: (1) challenges encountered by EFL learners in developing listening and speaking skills (5 items), (2) the perceived influence of AI-based conversational tools on listening and speaking development (5 items), and (3) socio-pedagogical changes in learning interaction patterns resulting from AI integration (5 items). The previous reference to "10 questions" has been corrected for consistency with the questionnaire presented in the Results section. A complete version of the questionnaire is provided in Appendix A.

The questionnaire items were developed by the researchers based on the study objectives and relevant literature on AI-assisted language learning and digital empowerment. Prior to data collection, the instrument was reviewed by two experts in the fields of English language education and educational technology to ensure content validity, and was pilot-tested on 13 EFL learners who were not included in the main study. Feedback from this pilot study was used to improve the clarity and wording of the questionnaire items. The internal consistency of the questionnaire was assessed using Cronbach's alpha coefficient, which indicated a level of reliability (acceptable/good/very good).

To complement the questionnaire findings, semi-structured interviews were conducted using an interview guide consisting of open-ended questions aligned with the same three research dimensions. The interview protocol explored participants' experiences, perceived benefits, challenges, and changes in learning behaviors associated with AI-based conversational tools. Each interview lasted approximately 15–20 minutes, was audio-recorded with participants' consent, transcribed verbatim, and anonymized prior to analysis.

Interview data were analyzed using thematic analysis following the procedures proposed by Braun (2006), including familiarization with the data, initial coding, theme development, theme review, theme definition, and report writing. The qualitative findings were used to explain and enrich the descriptive results obtained from the questionnaire.

The study involved 13 English as a Foreign Language (EFL) students (8 females and 5 males), aged between 19 and 23 years, who regularly used artificial intelligence (AI)-based conversational tools, particularly ChatGPT, as supplementary resources for learning English. Participants were selected through purposive sampling based on the following inclusion criteria: (1) they were enrolled as active students in the EFL course during the study period; (2) they had regularly used AI-based conversational tools for English learning for at least one semester prior to data collection, including activities related to speaking and listening practice; and (3) they voluntarily agreed to participate by providing informed consent.

Students were excluded if they (1) had no prior experience using AI-based conversational tools for English learning or (2) had used such tools only occasionally or irregularly, resulting in insufficient experience to provide informed reflections on their learning process. These exclusion criteria were established to ensure that all participants possessed adequate experience with AI-based conversational tools, thereby enhancing the relevance, consistency, and credibility of the qualitative data.

3. RESULTS AND DISCUSSION

3.1. Results

This section presents the findings obtained from the Likert-scale questionnaire and the semi-structured interviews conducted with 13 English as a Foreign Language (EFL) students at Muhammadiyah University Mataram, Indonesia. Participants consisted of eight female and five male students, aged between 19 and 23 years. Questionnaire responses were recorded using a five-point Likert scale, where 5 = Strongly Agree (SA), 4 = Agree (A), 3 = Neutral (N), 2 = Disagree (D), and 1 = Strongly Disagree (SD). The findings are organized into three themes corresponding to the research questions: (1) the major challenges encountered by EFL students in speaking and listening, (2) the perceived influence of AI-based conversational tools on speaking and listening development, and (3) socio-pedagogical changes in learning interaction patterns. The qualitative findings are presented alongside the questionnaire results to provide a comprehensive interpretation of participants' experiences.

3.1.1. Speaking and Listening Challenges Before Using AI Chatbot

In the context of speaking and listening challenges in learning English as a foreign language (EFL), the research focuses on how students authentically generate interesting ideas without the use of AI chatbot tools to assist in their learning. They only learn manually with lecturers, resulting in natural language or learning with traditional methods as they are. Based on the results of a questionnaire on this topic, the research details are shown in Table 1, which reveals the challenges students experienced in speaking and listening before using AI chatbots.

Table 1. Speaking and Listening Challenges Before Using AI Chatbots

No	Statement	Responses				
		SA	A	N	D	SD
1	I often find it difficult to construct coherent sentences in English.	23,1%	69,2%	7,7%	0%	0%
2	My limited vocabulary makes it difficult for me to express my ideas clearly when speaking.	7,7%	84,6%	7,7%	0%	0%
3	I often do not fully understand spoken explanations in English due to the speaker's accent and speed of speech.	23,1%	46,2%	30,8%	0%	0%
4	I feel nervous and lack confidence when asked to speak English in front of other people.	0%	69,2%	30,8%	0%	0%
5	My learning environment does not provide many opportunities to practice speaking and listening in	23,1%	53,8%	15,4%	7,7%	0%

English on a regular basis.

3.1.2. The Influence of AI Chatbots on Improving Speaking and Listening Skills

In understanding speaking and listening in the context of learning English as a foreign language (EFL), it is important to look further at what happens when EFL learning is supported by artificial intelligence (AI) or AI chatbots, which have been complexly influenced to facilitate the learning process. Thus, speaking and listening skills can be mastered by students with a deep academic understanding, and students even state that with the help of this AI chatbot, they feel more confident in presentation activities in class and elsewhere. To understand this further, the researcher includes Table 2 below according to the student responses obtained from the following questionnaire:

Table 2. The Influence of AI Chatbots on Improving Speaking and Listening Skills

No	Statement	Responses				
		SA	A	N	D	SD
1	The AI chatbot helps me correct my grammar and word choice when preparing or practising speaking.	15,4%	69,2%	7,7%	7,7%	0%
2	Practicing with the AI chatbot has made my speaking skills more fluent and structured.	7,7%	61,5%	7,7%	0%	0%
3	The AI chatbot helps me understand the listening material because it can provide explanations in simpler and clearer language.	7,7%	53,8%	0%	0%	0%
4	Overall, using an AI chatbot has improved my English speaking skills.	7,7%	61,5%	23,1%	7,7%	0%
5	Overall, using an AI chatbot has improved my listening skills in English.	7,7%	61,5%	23,1%	7,7%	0%

The findings presented in Table 2 indicate that participants generally perceived AI-based conversational tools as beneficial for developing their English speaking and listening skills. Across all five statements, most participants expressed positive attitudes, suggesting that AI chatbots function not only as language practice tools but also as sources of immediate feedback and individualized learning support.

A large majority of participants (9–11 of the 13 students, depending on the item) agreed that AI chatbots helped them improve grammar, expand vocabulary, and organize ideas more effectively when preparing for speaking tasks. Participants also reported that regular interaction with AI chatbots contributed to greater speaking fluency and confidence by providing opportunities for repeated practice in a low-anxiety learning environment. Similarly, most students perceived that

AI-generated explanations made listening materials easier to understand because the information could be presented in simpler and more accessible language.

Although the overall responses were overwhelmingly positive, several participants selected neutral responses and one participant expressed disagreement regarding the overall improvement in speaking and listening skills. These responses suggest that the effectiveness of AI-based conversational tools may vary according to individual learning preferences, prior language proficiency, or the extent to which students actively engage with the technology. Therefore, while AI chatbots appear to provide valuable support for language learning, they should be viewed as complementary learning resources rather than substitutes for teacher guidance and authentic classroom interaction.

Overall, the findings suggest that participants perceived AI-based conversational tools as valuable resources for supporting the development of their English speaking and listening skills. Most students reported that interacting with AI chatbots helped them feel more confident when practicing English, facilitated vocabulary and grammar development, and made listening materials easier to understand. These findings reflect students' subjective learning experiences rather than objective measurements of language proficiency.

The participants also perceived broader socio-pedagogical benefits associated with AI-supported learning, including greater learning autonomy, more frequent opportunities for independent practice, and increased exposure to authentic and contextually relevant language use. These perceptions are consistent with the arguments of Kundu & Bej, (2025), who suggest that AI-supported learning environments can enhance learners' engagement and provide adaptive learning support. However, because the present study relied on self-reported perceptions rather than direct assessments of speaking and listening performance, the findings should be interpreted as evidence of students' experiences and perceived benefits rather than objective improvements in language proficiency. Consequently, AI-based conversational tools may be considered a useful complement to conventional English language instruction, while further studies employing experimental or longitudinal designs are needed to examine their actual effects on speaking and listening achievement.

The qualitative findings supported the questionnaire results by illustrating how participants perceived AI-based conversational tools as facilitating English speaking and listening practice. Three interrelated themes emerged from the interview data: (1) enhanced speaking confidence through repeated practice, (2) improved comprehension through immediate feedback, and (3) greater learner autonomy.

Regarding speaking practice, several participants explained that AI chatbots provided a supportive environment in which they could practice without fear of making mistakes. As Participant 3 (P3) stated:

"I can practice speaking as many times as I want without feeling embarrassed. The chatbot corrects my grammar and suggests better expressions, so I become more confident before speaking in class."

Similarly, Participant 7 (P7) noted:

"When I practice with ChatGPT, I receive immediate feedback on my sentences. This helps me organize my ideas before presentations."

Participants also described how AI-supported explanations facilitated listening comprehension. Participant 5 (P5) explained:

"If I don't understand an audio passage, I ask the chatbot to explain it in simpler English. That makes difficult listening materials easier to follow."

Likewise, Participant 10 (P10) commented:

"The chatbot explains unfamiliar vocabulary and gives examples in context, so I can understand conversations more easily."

A third theme concerned learner autonomy. Many participants emphasized that AI tools enabled them to practice independently outside the classroom. Participant 12 (P12) remarked:

"I don't have to wait until the next class to practice. I can use the chatbot whenever I have time, which makes me practice English more often."

Overall, these quotations demonstrate that participants perceived AI-based conversational tools as providing accessible opportunities for repeated practice, immediate feedback, and independent learning. These themes complement the questionnaire findings by illustrating the experiences underlying students' positive perceptions.

Regarding perceived effectiveness, Student 1 appreciated the personalized corrections and the adaptive difficulty level that kept the practice interesting. Student 2 felt that instant feedback improved listening accuracy and reduced misunderstandings. Student 3 considered the AI-based platform's speech recognition feature to be very helpful in identifying specific weaknesses in pronunciation while also highlighting that AI-generated prompts made listening exercises more authentic. However, students noted occasional frustration when the AI misinterpreted speech input, indicating that the precision of the technology still poses challenges. This variation shows that the usefulness of AI-based platforms is closely related to individual learning preferences and comfort levels with technology.

3.1.3. Socio-pedagogical changes in interaction patterns and learning independence

This study attempts to examine socio-pedagogical changes in interaction patterns and learning independence. This is particularly important for students learning English as a foreign language (EFL) in the future, given the emphasis on socio-pedagogical context. We can see such changes in how students interact with lecturers based on the use of AI chatbot tools. Students feel more prepared and independent as individuals during classroom discussions because they have previously practiced speaking and listening using AI chatbot tools. The research clearly explains the socio-pedagogical changes in their interactions and learning independence through the results of a questionnaire distributed to EFL students, as shown in Table 3 below:

Table 3. Socio-pedagogical changes in interaction patterns and learning independence

No	Statement	Responses				
		SA	A	N	D	SD
1	Since using the AI chatbot, I have become more independent in planning and evaluating my speaking and listening practice.	7,7%	53,8%	30,8%	0%	7,7%
2	Practising beforehand with an AI chatbot made me feel more prepared and confident when I had to perform or speak in class.	15,4%	53,8%	30,8%	0%	0%
3	The use of AI chatbots encourages me to be more active in asking questions	7,7%	61,5%	30,8%	0%	0%

	and discussing my speaking and listening difficulties with my lecturers.					
4	Using the AI chatbot has made me more active in sharing materials and strategies for learning speaking and listening with my classmates.	23,1%	53,8%	15,4%	7,7%	0%
5	Although I often use AI chatbots, I still feel that I need guidance from my lecturer to ensure that the use of AI in speaking and listening lessons remains ethical and focused.	7,7%	61,5%	30,8%	0%	0%

Meanwhile, at the end of the findings based on Table 3, participants stated changes in socio-pedagogical interaction patterns in an academic context. Clearly, students felt more prepared and independent as individuals during class discussions because they had practiced speaking beforehand using chatbots. In addition, the first participant's statement, "Since using the AI chatbot, I have become more independent in planning and evaluating my speaking and listening exercises," was strongly agreed with by 7.7%, agreed with by 53.8%, neutral for 30.8%, and disagreed with by 0%, with other scale items at 7.7%. Regarding the second statement, "Practicing beforehand with the AI chatbot makes me feel more prepared and confident when I have to perform or speak in class," 15.4% strongly agree, 53.8% agree, and 30.8% are neutral, while the other two scale items are 0%. In the third statement, "The use of AI chatbots encourages me to be more active in asking questions and discussing my speaking and listening difficulties with my lecturers," 7.7% strongly agree and 61.5% agree, while the other two scale items are 0%. In the fourth statement, 'The use of AI chatbots has made me more active in sharing materials and strategies for learning to speak and listen with my classmates,' 23.1% strongly agree, 53.8% agree, 15.4% are neutral, and 7.7% disagree, while 0% for the other scale items. In the fifth section, "Although I often use AI chatbots, I still feel the need for guidance from my lecturer to ensure that the use of AI in speaking and listening lessons remains ethical and focused," strongly agree, 7.7%, agree, 61.5%, and neutral, 30.8%, while the other two scale items were 0%.

Based on other findings, there has been a significant change in the pattern of interaction in the academic social context for students and lecturers due to the use of artificial intelligence (AI) chatbots. As a result, students individually feel more prepared and independent during classroom discussions because they are accustomed to practicing speaking beforehand using chatbots. As emphasized by Student 1, "The chatbot really helped me understand the material before the discussion session, making me more confident to speak in front of others." Clearly, this understanding makes students more confident with the help of AI chatbots. In this context, their readiness in discussion forums is more cognitively reliable and effective in learning to improve their listening and speaking skills. Student 2 used vocabulary such as "I felt hopeless to understand" and "made me more confident" in an effort to emphasize the direct involvement of chatbots in the learning process. Furthermore, when viewed from a socio-pedagogical perspective, students view

chatbots as effective learning partners or friends, not only in mastering various forms of material but also in building more structured academic conversation and listening skills. Ultimately, this study reflects a shift in the role of learning models, which were originally controlled or monopolized by lecturers, triggering the power of technology that enables students to become more confident and independent. Therefore, this reflection is the ideology of modern learning today, with an emphasis on accessibility, autonomy, and the use of artificial intelligence (AI) tools in the classroom.

On the other hand, as we have seen, artificial intelligence (AI) tools are not only useful as technical support, but there is another aspect that needs to be emphasized, namely the emotional aspect and how the learning process is carried out well academically. Therefore, in the context of social relations and power, student 3 explains that there has been a shift in control from traditional teaching authority to more independent and student-centered learning based on artificial intelligence (AI). Of course, this argument is in line with what Munir et al., (2025), explained, that technology clearly functions as an empowering tool that encourages active participation and confidence in an academic environment so that students can easily access it anywhere and anytime. This means that changes like this signify a real shift in pedagogical aspects: from social interaction to technology-based individual practice. However, on the other hand, this presents several challenges that need to be addressed in building personal and collective communication in the classroom for students.

4. DISCUSSION

The present study explored EFL students' perceptions of using AI-based conversational tools to support English speaking and listening learning. The findings suggest that participants perceived AI chatbots as valuable learning resources that promoted greater confidence, independent practice, and more flexible opportunities to engage with English beyond the classroom. Rather than replacing conventional instruction, participants viewed AI as a complementary resource that extended opportunities for language practice and immediate feedback.

One of the most prominent findings concerns learner autonomy. Participants consistently described AI chatbots as enabling them to practice English at their own pace, receive immediate responses, and revisit learning materials whenever needed. This interpretation is consistent with Passey, (2013), Digital Empowerment Theory, which argues that digital technologies can foster learner agency by increasing access to learning resources and encouraging independent engagement with educational tasks. In the present study, students perceived AI-based conversational tools as reducing dependence on scheduled classroom interaction while supporting self-directed language practice.

Participants also emphasized that interacting with AI chatbots reduced anxiety associated with speaking English. The opportunity to practice repeatedly without fear of negative evaluation appeared to encourage greater willingness to communicate. This interpretation aligns with Self-Determination Theory Deci and Ryan (2000), which highlights the importance of autonomy and perceived competence in fostering intrinsic motivation. The participants' experiences suggest that AI-supported learning environments may create psychologically supportive conditions that encourage continued engagement with language learning.

Furthermore, participants perceived AI chatbots as helpful for improving vocabulary use, grammatical awareness, and comprehension of listening materials through immediate explanations and personalized feedback. These perceptions are consistent with previous studies reporting that AI-assisted language learning can increase learner engagement and provide adaptive support for language practice (Kundu & Bej, 2025). However, unlike experimental studies that directly measure language performance, the present study examined students' perceptions and experiences rather

than objective gains in speaking or listening proficiency. Consequently, the findings should be interpreted as evidence of perceived educational benefits rather than measured improvements in language achievement.

Taken together, the findings indicate that AI-based conversational tools have the potential to enrich EFL learning by supporting learner autonomy, confidence, and continuous language practice. Nevertheless, these tools should be viewed as complementary to teacher-guided instruction rather than as replacements for classroom interaction. Future research employing larger samples, longitudinal designs, and objective assessments of speaking and listening performance would provide stronger evidence regarding the effectiveness of AI-supported language learning.

However, the findings also suggest several limitations of AI-based conversational tools in English language learning. Although participants appreciated the immediate feedback and flexibility provided by chatbots, some perceived the responses as overly rigid and insufficiently responsive to the social and contextual nuances of authentic communication. Participants reported that AI-generated interactions did not always reflect the pragmatic and sociocultural aspects of language use encountered in real-life conversations.

This observation can be interpreted in light of the concept of communicative competence proposed by Hymes, 1978, in the Aja et al., (2013) paper, which emphasizes that effective communication requires not only grammatical accuracy but also the ability to use language appropriately according to social and cultural contexts. While AI chatbots are capable of providing grammatical corrections and lexical suggestions, their limited ability to interpret contextual cues, interpersonal intentions, and culturally situated meanings may reduce the authenticity of language interaction (Alshwiah, 2024). Consequently, AI-based conversational tools should be regarded as complementary resources that support language practice rather than substitutes for authentic human communication and teacher-guided interaction.

More importantly, participants perceived that AI-based conversational tools influenced their classroom engagement by increasing their confidence and willingness to participate in English discussions. Several participants reported feeling better prepared to express their ideas after practicing with AI chatbots, suggesting that these tools functioned as supportive learning resources before face-to-face classroom interaction. Rather than replacing lecturers, participants viewed AI as providing additional opportunities to rehearse language production and receive immediate feedback in a low-anxiety environment.

These findings can be interpreted through Vygotsky's Social Constructivism Theory Vygotsky & Cole, (1978), which emphasizes that learning is mediated through cultural tools and social interaction. In the present study, participants perceived AI-based conversational tools as mediating resources that supported language practice, encouraged self-regulated learning, and increased confidence before communicating with lecturers and peers. This interpretation is also consistent with the Digital Empowerment perspective Passey, (2013), as participants described AI tools as expanding opportunities for autonomous learning beyond the classroom.

Although the findings are broadly consistent with those of Munir et al., (2025), the present study makes a distinct contribution by focusing specifically on students' perceived experiences of using AI-based conversational tools to support English speaking and listening development within the context of Muhammadiyah University Mataram, Indonesia. Whereas Munir et al., (2025), primarily examined students' experiences through a discourse-oriented perspective, the present study integrates descriptive questionnaire data with thematic interview analysis to explore how students perceive AI-assisted learning in relation to oral communication skills. This contextual and pedagogical focus provides additional insights into the role of AI-based conversational tools in supporting speaking and listening practice in Indonesian higher education.

Participants also described AI chatbots as non-judgmental learning companions that reduced anxiety when practicing English. Rather than interpreting these experiences as evidence of broader shifts in educational power relations, the present findings suggest that students perceived AI-based conversational tools as psychologically supportive learning resources that encouraged greater participation and learner autonomy. Given the qualitative descriptive design of this study, these interpretations should be understood as participants' reported experiences rather than as evidence of broader sociocognitive discourse processes.

From the research ideas presented above, it is clear that in practical terms, research refers to an understanding of chatbot development in the context of EFL, which should go beyond accurate speaking and listening output by taking into account the social dynamics of learning. Recognising the socio-pedagogical conditions that are developing today, students should be more familiar with critical thinking in the context of developing AI artificial intelligence.

5. CONCLUSION

To explore some of the conclusions that can be drawn from this study, the research offers important insights into how AI-enhanced chatbots reshape students' learning experiences and socio-pedagogical roles in the context of speaking and listening EFL. As the findings indicate, the presence of chatbots not only strengthens learner autonomy and emotional comfort but also changes the rhythm of feedback practices that occur during learning, such as class participation and participants' sense of identity. Certainly, with several main themes, namely the main challenges faced by EFL participants, the use of AI-based interactive tools, and shifts in social and pedagogical interaction patterns, there is a movement towards more participant-centered technology integration. At the same time, students expressed concerns about the limitations of chatbots in understanding social subtleties and applying appropriate language in context, as reflected in Hymes, (1978), idea of communicative competence. These constraints highlight the need for a balanced learning environment where AI functions as a supporting tool rather than a substitute for real human interaction.

This study explored EFL students' perceptions and experiences of using ChatGPT as a supplementary tool for developing English speaking and listening skills at Muhammadiyah University Mataram. The findings suggest that participants perceived ChatGPT as a useful learning resource that supported greater learner confidence, autonomous practice, and immediate feedback during English language learning. Participants also acknowledged that, although ChatGPT was helpful for grammar, vocabulary, pronunciation, and listening support, it was less effective in addressing the sociolinguistic and contextual features of authentic human communication. Overall, the findings indicate that ChatGPT is perceived as a valuable complement to lecturer-guided instruction rather than a replacement for classroom interaction.

This study has several limitations. First, the findings are based on a small sample of 13 participants from a single university, which limits the transferability of the results to other educational contexts. Second, the study relied primarily on self-reported questionnaire responses and interview data; therefore, the findings reflect participants' perceptions rather than objectively measured improvements in speaking or listening proficiency. Third, the study focused on students' experiences during a relatively limited period of AI use and did not examine the long-term effects of ChatGPT on language learning outcomes.

Future research should involve larger and more diverse samples from multiple institutions, incorporate objective assessments of speaking and listening performance, and employ longitudinal or experimental designs to investigate how sustained use of AI-based conversational tools influences English language learning over time.

REFERENCES

- Aja, C., Ellisafny, P., Ilmu, F., Universitas, B., & Introduction, A. (2013). Aspects of Communicative Competence. *Humanika*, 17(1972), 208–217. <https://doi.org/https://doi.org/10.14710/humanika.17.1>
- Alrasheedi, S. (2024). The Effect Of Using Ai Applications To Develop Efl Listening Comprehension Skills Among University Students. *Conhecimento & Diversidade*, 16, 601–637. <https://doi.org/https://doi.org/10.18316/rcd.v16i44.12346>
- Alshwiah, A. (2024). Students' perceptions of an artificially intelligent chatbot as a support tool to develop their research skills. *Qualitative Research Journal*. <https://doi.org/10.1108/QRJ-06-2024-0117>
- AlTwijri, L., & Alghizzi, T. M. (2024). Investigating the integration of artificial intelligence in English as foreign language classes for enhancing learners' affective factors: A systematic review. *Heliyon*, 10(10), e31053. <https://doi.org/10.1016/j.heliyon.2024.e31053>
- Anh, N. H. (2024). Harnessing AI-Based Tools for Enhancing English Speaking Proficiency: Impacts, Challenges, and Long-Term Engagement. *International Journal of AI in Language Education*, 1(2), 18–29. <https://doi.org/https://doi.org/10.54855/ijaile.24122>
- Apriliani, D. (2024). Penggunaan artificial intelligence dalam pembelajaran bahasa Indonesia. *DIKBASTRA: Jurnal Pendidikan Bahasa Dan Sastra*, 7(1), 15–21. <https://doi.org/10.22437/dikbastra.v7i1.33262>
- Ayedoun, E., Hayashi, Y., & Seta, K. (2019). Adding Communicative and Affective Strategies to an Embodied Conversational Agent to Enhance Second Language Learners' Willingness to Communicate. *International Journal of Artificial Intelligence in Education*, 29(1), 29–57. <https://doi.org/10.1007/s40593-018-0171-6>
- Braun, V. (2006). *Using thematic analysis in psychology*. 1–41.
- Bui, N., Collier, J., Ozturk, Y. E., & Song, D. (2025). The Effects of Conversational Agents on Human Learning and How We Used Them: A Systematic Review of Studies Conducted Before Generative AI. *TechTrends*, 69(3), 628–644. <https://doi.org/10.1007/s11528-025-01066-0>
- Chang, D. H., Lin, M. P. C., Hajian, S., & Wang, Q. Q. (2023). Educational Design Principles of Using AI Chatbot That Supports Self-Regulated Learning in Education: Goal Setting, Feedback, and Personalization. *Sustainability (Switzerland)*, 15(17). <https://doi.org/10.3390/su151712921>
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268. https://doi.org/https://doi.org/10.1207/S15327965PLI1104_01
- Fryer, L., & Carpenter, R. (2006). EMerging Techonologies. Bots as language Learning Tools. *Language Learning & Technology*, 10(3), 8–14.
- Gilakjani, A. P. (2012). The significance of pronunciation in English language teaching. *English Language Teaching*, 5(4), 96–107. <https://doi.org/10.5539/elt.v5n4p96>
- Han, D.-E. (2020). The Effects of Voice-based AI Chatbots on Korean EFL Middle School Students' Speaking Competence and Affective Domains. *Asia-Pacific Journal of Convergent Research Interchange*, 6(7), 71–80. <https://doi.org/10.47116/apjcri.2020.07.07>
- Hoang, N. T., Ngoc Han, D., & Le, D. H. (2023). Exploring Chatbot AI in improving vocational students' English pronunciation. *AsiaCALL Online Journal*, 14(2), 140–155. <https://doi.org/10.54855/acoj.231429>
- Ilyas, H. P. (2025). *Insights on Integrating Critical Thinking with EFL Instructions in Indonesian Higher Education*. Indonesian Journal of English Language Teaching and Applied Linguistics,. <https://doi.org/http://dx.doi.org/10.21093/ijeltal.v10i2.2044>
- Jabber, K. W., & Mahmood, A. A. (2020). Non-verbal communication between two non-native english speakers: Iraqi and chinese. *Theory and Practice in Language Studies*, 10(2), 189–196. <https://doi.org/10.17507/tpls.1002.06>
- Kovalyova, A. (2023). Usability of AI-Powered Chatbot Applications for EFL Conversation Practice. *JACET Journal*, 67, 51–68.
- Kundu, A., & Bej, T. (2025). Transforming EFL Teaching with AI: A Systematic Review of Empirical Studies. *International Journal of Artificial Intelligence in Education*.

<https://doi.org/10.1007/s40593-025-00470-0>

- Munir, B., Sulaiman, U., Nur, M., & Rasyid, A. (2025). EFL Student ' s Experiences with AI Chatbots : A Critical Discourse Analysis. *LANGKAWI Journal*, 11(1), 177–189. <https://doi.org/http://dx.doi.org/10.31332/lk w.v0i0.11438>
- Pambudi, N., Aisyah, M. P., Diana, Y., & Heriani, D. (2024). *Bahasa Inggris terkini: panduan praktis untuk era teknologi di lingkungan perguruan tinggi: buku referensi*. PT. Media Penerbit Indonesia.
- Passey, D. (2013). Learning Overcoming Cognitive , Physical , Emotional and Geographic Challenges. *Routledge*. <https://doi.org/https://doi.org/10.4324/9780203073742>
- Qassrawi, R. M. (2024). *AI-Powered Applications for Improving EFL Students ' Speaking Proficiency in Higher Education*. 06(05), 535–549.
- Ramalingam, S., Yunus, M. M., & Hashim, H. (2022). Blended Learning Strategies for Sustainable English as a Second Language Education: A Systematic Review. *Sustainability (Switzerland)*, 14(13), 1–17. <https://doi.org/10.3390/su14138051>
- Richards, J. C. (2015). Key issues in language teaching [Book Review]. *English Australia Journal*, 32(1), 113–116.
- Shadiev, R., & Yang, M. (2020). Enhanced language learning and teaching. *Sustainability (Switzerland)*, 12(2).
- Sitorus, M. (2024). Analisis Pengaruh Penggunaan AI Pada Pembelajaran University. *Jurnal Ilmu Komputer, Sistem Informasi Dan Teknologi*, 1(2), 90–101.
- Tran, N., Thi, D., Hoang, N., Gillespie, R., Thi, T., & Yen, H. (2024). Enhancing EFL learners ' speaking and listening skills through authentic online conversations with video conferencing tools. *Innovation in Language Learning and Teaching*, 1229, 1–11. <https://doi.org/10.1080/17501229.2024.2334809>
- Utami, S. (2024). Canva Magic AI Sebagai Terobosan Baru Dalam Membantu Mahasiswa Menulis Bahasa Inggris. In *Optimalisasi Pembelajaran Bahasa Inggris Menyambut Indonesia Emas 2045* (Vol. 1, Issue September 2024).
- Vincent, J., Md Yunus, M., & Mohd Said, N. E. (2025). Using AI Platforms to Improve Listening and Speaking Skills in ESL Primary Students. *International Journal of Academic Research in Progressive Education and Development*, 14(1), 1829–1843. <https://doi.org/10.6007/ijarped/v14-i1/24848>
- Vygotsky, L. S., & Cole, M. (1978). *Mind in society: Development of higher psychological processes*. Harvard university press.
- Wan, Y., & Moorhouse, B. L. (2025). Using Call Annie as a generative artificial intelligence speaking partner for language learners. *RELC Journal*, 56(2), 489–498.
- Wang, C., Zou, B., Du, Y., & Wang, Z. (2024). The impact of different conversational generative AI chatbots on EFL learners: An analysis of willingness to communicate, foreign language speaking anxiety, and self-perceived communicative competence. *System*, 127, 103533. <https://doi.org/https://doi.org/10.1016/j.system.2024.103533>
- Wang, W., Zhao, P., & Zou, B. (2025). The Acceptance and Effectiveness of an AI EFL Speaking App among Low-Proficiency Chinese Nursing Students: An IMTA-Based Mixed-Methods Study. *An IMTA-Based Mixed-Methods Study*. Available at SSRN 5431248. <https://doi.org/http://dx.doi.org/10.2139/ssrn.5431248>
- Zawacki-richter, O., Marin, V. I., & Bond, M. (2019). Systematic review of research on artificial intelligence applications in higher education – where are the educators ? *International Journal of Educational Technology in Higher Education*. <https://doi.org/https://doi.org/10.1186/s41239-019-0171-0>