

Adapting AI Usage for Students' Engagement in Speaking Instruction

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Abstract: This study is to investigate how artificial intelligence (AI) is modified as a training tool to improve student participation in speaking teaching, ascertain its impact on speaking abilities and English language learning outcomes, and ascertain students' opinions of AI use in an EFL setting. Students enrolled in the English Language Education program in their fourth semester serve as participants in this qualitative study. Semi-structured interviews and classroom observations were used to gather data, which was then examined using the Miles and Huberman interactive analysis approach. The findings show that AI is modified as a flexible and interactive speaking practice tool through conversation simulations, tailored learning, and immediate feedback. Students' fluency, pronunciation, grammar knowledge, self-confidence, motivation, and involvement in speaking practice all improve when AI is used. Furthermore, AI also helps in increasing vocabulary and listening comprehension. Students have a positive perception of AI use because it is practical, flexible, and helps alleviate anxiety when speaking English. Students also know the limitations of AI, such as the lack of emotional interaction and the risk of depending on technology. In conclusion, AI has huge potential to assist speaking instruction in an EFL context by providing a more adaptive, interactive, and student-centered learning experience.

Keywords: Artificial Intelligence, Speaking Skills, Student Engagement, EFL, English Language Learning

Introduction

AI, or artificial intelligence, is now one of the most widely used tools to aid in learning. AI is also used as a tool to assist in learning English as a foreign language (EFL), particularly in improving speaking skills. The adaptation of AI as a training tool offers new opportunities for students to practice speaking in a more interactive, flexible, and motivation and confidence-boosting manner. The use of AI in an EFL context can create a more engaging learning environment through conversation simulations, immediate feedback, and personalized exercises (Saputra & Widiastuty, 2024). AI provides convenience for students because it is easily accessible and non-judgmental, allowing students to practice without limits, reducing fear of criticism, and boosting confidence, making AI more efficient than traditional methods (Trinh & Phi Ho, 2022). Furthermore, the flexibility to practice anytime without time or location constraints has been shown to enhance

learner autonomy and engagement, aligning with broader trends in EFL research, so the students are more comfortable using AI (Dennis, 2024).

Mostly English language students in their fourth semester at IAIN certainly use AI to help boost their confidence, motivation, and enthusiasm for improving their speaking skills. AI is more efficient for improving speaking skills because it is not limited by time or location; however, it still has some shortcomings in its application. To demonstrate this, the researcher has prepared an interview script regarding the benefits and challenges of using AI, based on the interview data collected by the researcher.:

The interview results revealed mixed findings regarding the integration of AI to enhance learning motivation and enthusiasm for learning English, particularly to improve speaking skills. While each student derived significant benefits from using AI, they also encountered similar issues. For example, Student 1 felt that AI was helpful because it aided in conversation practice, but faced connectivity problems due to an unreliable internet provider, which limited their access to the AI. Meanwhile, Students 2 through 7 benefited from the AI integration; they all felt assisted by the AI because it helped them overcome confidence issues when speaking with others. However, their challenge lay in the AI's repetitive and unnatural responses, so they developed strategies to address these issues.

Several related studies, such as the research from the journal "International Proceedings of Tulungagung University 2024" (Saputra & Widiastuty, 2024), indicate that the use of AI improves speaking skills, increases motivation, and enhances pronunciation due to conversation simulations; however, it is limited by AI responses that lack emotional depth. Additionally, a study from the Vietnamese journal "International Journal of Language Instruction" (Trinh & Phi Ho, 2022) highlights issues related to inadequate internet infrastructure. Thus, the challenges associated with AI usage are, in fact, quite similar and can be observed. Additionally, a study published in the Vietnamese journal "International Journal of Language Instruction" (Trinh & Phi Ho, 2022) highlights issues related to inadequate internet infrastructure. Thus, the challenges associated with AI usage are evident both in the research findings and in the interview results.

In this increasingly advanced digital age, the use of artificial intelligence (AI) is no longer a taboo or unfamiliar phenomenon; rather, it has become an integral and commonplace part of people's daily lives, particularly among college students. As an innovative learning tool, AI offers great potential for students in the English Language Studies program to enhance their engagement and motivation, especially in mastering speaking skills. Unlike conventional approaches that rely on reading texts, memorizing vocabulary, and hands-on practice, which are often hindered by limitations of time, space, and human interaction, AI is capable of delivering a learning experience that is far more efficient, practical, and flexible. This makes AI a highly sought-after solution, as it addresses the drastic decline in learning interest caused by traditional methods that tend to be rigid and monotonous. Despite its practicality, the application of AI in English language learning still faces several significant challenges. One of the main limitations lies in the conversation feature, which tends to be repetitive and unnatural, making it feel less human and unable to replicate the nuances of authentic interaction between native speakers. Additionally, access to AI is still hindered by uneven digital infrastructure, particularly limited internet connectivity in various regions, which prevents some students from utilizing this technology optimally and to its full potential.

Therefore, strategic adaptation and a clear, systematic integration framework are required for the utilization of AI. This approach is expected to maximize the potential of AI as a learning tool, while also optimizing the interest and academic performance of students in the English Language Studies Program in honing their speaking skills amid the increasingly complex challenges of the digital age. This study aims to conduct an in-depth examination of these dynamics, thereby providing practical recommendations for the development of a more inclusive and effective AI-based pedagogy.

Previous researchers have conducted studies using artificial intelligence (AI) that could improve motivation, learning English, and speaking skills (Erina, 2025; Dennis, 2024; Trinh & Phi Ho, 2022; Wang & Wen, 2025). Another study has talked about how to apply AI in EFL speaking so it can improve as much as possible (Moybeka et al., 2025; Wahyuningsih & Afandi, 2020; Sutrah et al., 2025; Klaewkla et al., 2025). Researchers such as Azzahra et al. (2024), Mufid & Muassomah (2025), Zou et al. 2024; Alsalem (2024) have conducted research on perceptions from students and teachers when they are using engagement speaking skills. Some researchers (Cường, 2024; Suhaimi et al., 2024; Stošić & Malyuga, 2024; Alghamdy, 2023; Dennis, 2024) have talked about how ethics can be used to improve speaking skills.

Another study has talked about the challenges and impacts of using artificial intelligence (AI) in learning English for speaking skills (Saputra & Widiastuty, 2024; Moybeka et al., 2025; Muthmainnah. et al. 2022; Wahyuningsih & Afandi, 2020; Han & Zhao, 2023; Trinh & Phi Ho, 2022; Sutrah et al., 2025; Stošić & Malyuga, 2024; Xing & Saeed, 2025). Some studies have talked about ethics when using AI in EFL, especially in speaking skills.

Based on the above phenomenon, many studies related to the use of AI in EFL, specifically to improve students' speaking skills, are limited in their focus on motivation, perception, challenge, impact, ethics, and implications, with most using quantitative/mixed methods methodologies. Therefore, this study focuses on the adaptation of AI in English foreign learning using qualitative research methods. To this end, this research is titled "Adaptation using AI for engagement of students' speaking skills, especially in 4th-semester students in TBI". This study aims to integrate AI as a training tool for students in EFL to effectively and efficiently improve their speaking skills so that their speaking skills can be better.

Based on the above phenomenon, the following research question was formulated:

1. How can artificial intelligence (AI) be effectively adapted as a training tool to enhance student engagement in developing speaking skills in EFL classrooms?
2. In what ways does the qualitative adaptation of AI use contribute to improving students' speaking skills and overall English language learning outcomes in an EFL context?
3. What are the positive perceptions of EFL students regarding the use of AI technology to improve speaking skills and motivation for learning English?

Methods

Research Design

This study employs a qualitative approach using an exploratory case study design to gain an in-depth understanding of how artificial intelligence (AI) is utilized to enhance student engagement and speaking skills among fourth-semester students in the TBI (English Language Education) program within the context of EFL (English as a Foreign Language). This approach was chosen because it allows the researcher to explore phenomena contextually, particularly the interaction between technology, pedagogy, and students' learning experiences.

The case study design focuses on a single specific context (a fourth-semester speaking class) to generate a holistic understanding of AI adaptation practices in learning. This research is also interpretive in nature, where meaning is constructed from the participants' perspectives regarding the use of AI in their learning process.

Research Setting and Participants

The study was conducted in the English Language Education program at IAIN CURUP among fourth-semester students enrolled in the "Speaking for Formal Settings" course. Participants were selected using purposive sampling, based on the following criteria:

1. Active fourth-semester students,
2. Experience using AI in speaking instruction,
3. Students in teaching the speaking course who integrate AI in the class

The number of participants was adjusted to meet the need for data depth (generally 10 students, with data saturation serving as the criterion for stopping data collection).

Data Collection Techniques

To answer the three research questions, this study employed several data collection techniques:

In-depth Interviews

1. Semi-structured interviews were conducted to explore:
2. AI adaptation strategies in speaking instruction (RQ1),
3. The impact of AI use on speaking skill improvement (RQ2),
4. Students' and instructors' positive perceptions of AI use (RQ3).

Classroom Observation

1. Observations were conducted to directly observe:
2. Student interactions with AI,
3. Engagement levels during speaking activities,
4. The implementation of AI in instructional practice.
5. Data Analysis Technique

Data Analysis Technique

The data in this study were analyzed using the interactive analysis model developed by Matthew B. Miles and A. Michael Huberman (Miles, Huberman, & Saldaña, 2014). This model was chosen because it is suitable for qualitative research focused on exploring experiences, perceptions, and adaptation processes related to the use of AI in English-speaking instruction. Data analysis was conducted interactively and continuously from the data collection process through to the drawing of conclusions. The stages of data analysis consisted of:

Data Collection (Data Collection)

Data was collected through semi-structured interviews and classroom observations. Interviews were conducted to explore students' experiences, perceptions, and views regarding the use of AI in English-speaking instruction. Meanwhile, observations were conducted to directly observe how AI was integrated into speaking learning activities in the classroom, including student engagement during the learning process.

Data Reduction (Data Reduction)

In this stage, the researcher selects, focuses, simplifies, and organizes the raw data obtained from interviews and observations. Data relevant to the research focus, such as the use of AI as a speaking practice tool, increased student engagement, improved speaking skills, and students' perceptions of AI, are selected and categorized into initial codes. Data reduction was conducted continuously throughout the study to help the researcher focus on the data most relevant to the research questions.

Data Display

The reduced data was then presented in the form of data coding tables, thematic matrices, and descriptive narratives to help the researcher understand patterns and relationships among the data. Data presentation is based on the main themes that emerged from the analysis, such as:

1. AI as an adaptive training tool,
2. Flexible learning environment,
3. Improvement in speaking performance,
4. Confidence and motivation enhancement,

5. Positive perceptions toward AI integration.

Through this data presentation, researchers can compare the results of interviews and observations, making data interpretation more focused and systematic.

Conclusion Drawing and Verification

The final stage involves drawing conclusions based on the patterns, themes, and relationships identified in the data. The research conclusions focus on how AI is adapted for speaking instruction, its contribution to improving students' speaking skills, and students' perceptions of AI use in an EFL context. Furthermore, the conclusions are continuously verified by comparing interview and observation data to ensure the consistency, validity, and credibility of the research findings. Additionally, the interpretation of the research results is linked to language learning and educational technology theories, such as Self-Determination Theory (SDT) and Sociocultural Theory, to strengthen the research analysis.

Trustworthiness of the Study

To ensure the quality of the research, the following criteria for trustworthiness were applied:

1. Credibility: Data triangulation and member checking,
2. Transferability: A detailed description of the research context,
3. Dependability: An audit trail of the research process,
4. Confirmability: Researcher reflexivity

Ethical Considerations

1. This study takes ethical considerations into account, including:
2. Participant consent (informed consent),
3. Confidentiality of data and participant identities,
4. Participants' right to withdraw from the study at any time.

Results and Discussion

Result s

The Adaptation of AI as a Training Tool to Enhance Student Engagement in Speaking Instruction

This section presents the findings of a study on how artificial intelligence (AI) is adapted as a training tool to enhance student engagement in the development of speaking skills within the context of EFL instruction. Data were collected through in-depth interviews and classroom observations, which were then analyzed using a thematic analysis approach. Interviews were used to explore students' experiences, perceptions, and practices regarding AI use, while observations were conducted to examine the actual implementation of AI during the learning process.

The analysis results indicate that AI contributes to creating a more flexible, personalized, and interactive speaking learning experience. Students utilize AI to receive instant feedback, practice independently, and conduct conversation simulations. However, the observation results suggest that the integration of AI into formal learning is not yet fully optimized, as AI is more frequently used as a tool for preparing materials rather than as a direct interactive speaking medium. The findings of this study are classified into several main themes that represent the forms of AI adaptation and its influence on student engagement in speaking instruction.

Table 1. RQ1 Data Codification Table

Main Theme	Category	Initial Code	Evidence	Participant	Observation Finding
AI as Adaptive	Instant Feedback	Immediate correction, grammar	"AI immediately points out my	R2, R4, R1	Students did not directly use AI for live

Training Tool		correction, pronunciation correction	mistakes and gives corrections directly." / "AI tells me it should be 'I went yesterday' instead of 'I go yesterday.'" / "AI corrects my pronunciation when I say difficult words incorrectly."		speaking correction in class; AI was mostly used to prepare presentation materials.
	Personalized Learning	Level adjustment, weakness-focused learning, adaptive material	"AI tailors the practice to my level." / "I can focus on my weak points when practicing with AI." / "AI adjusts the difficulty based on my speaking ability."	R2, R4, R3	AI-generated materials were adjusted to beginner-level instructions based on students' abilities.
Flexible & Autonomous Learning Environment	Flexible Practice Environment	Anytime access, independent learning, unrestricted practice	"I can practice anytime without waiting for a partner." / "I use AI almost every day outside class." / "AI always responds even late at night."	R2, R4	Students were allowed to use AI freely during learning activities, particularly for creating outlines and preparing presentation materials.
	Low Anxiety Environment	Reduced anxiety, no fear of mistakes, comfortable learning atmosphere	"I don't feel judged or embarrassed when speaking with AI." / "My	R3, R2, R4	Students appeared more comfortable using AI individually,

			anxiety decreases when practicing with AI." / "I feel safer and more relaxed practicing with AI."		although classroom engagement remained moderate.
AI as Speaking Partner (Simulation)	Conversation Simulation	Role-play interaction, interactive dialogue, real-life simulation	"AI acts like an interviewer during practice." / "AI keeps the conversation flowing naturally." / "I use AI to simulate real-life situations."	R4, R2, R3	Some students used AI as a speaking partner outside of classroom hours.
	Flexible Speaking Partner	Virtual interaction partner, continuous responses	"It feels like talking to a virtual friend." / "AI responds continuously, so I can keep practicing."	R2, R4	The interaction intensity between students and AI in class was still relatively low.
Pedagogical Integration of AI	Integration in Classroom Activities	AI-based assignments, presentation preparation, and supplementary learning tool	"The lecturer assigns AI-based dialogue tasks." / "I use AI to prepare presentations before class." / "AI helps me organize speaking material."	R2, R5, R9	AI was mainly integrated as a supporting tool for creating outlines and presentation materials.
	Limited Classroom Integration	Partial implementation, limited speaking integration	"AI hasn't been fully integrated into speaking lessons yet." / "Most students still use AI	R1, R10	Students combined approximately 30% AI-generated work and 70% personal work.

			outside class rather than during speaking practice.”		
Enhanced Student Engagement	Active Engagement	Increased practice frequency, stronger involvement	“I practice speaking more often because of AI.” / “AI boosts my engagement during practice.”	R8, R1	Students’ active speaking engagement using AI in class was categorized as moderate.
	Behavioral Engagement	Repetition practice, language exploration	“I repeat topics many times until I feel confident.” / “I try new expressions and vocabulary with AI.”	R4, R7	Students showed moderate responsiveness but lacked intensive interaction with AI during class.
	Emotional Engagement	Motivation enhancement, enjoyable learning	“Practice feels less monotonous with AI.” / “It feels more like a game than a task.”	R2, R4	Some students appeared unfocused and showed limited enthusiasm toward AI use in classroom settings.

AI as Adaptive Training Tool

The results of interviews and observations indicate that AI is being adopted as an adaptive training tool because it provides instant feedback and tailors exercises to students’ abilities. Students feel that AI helps them identify errors in grammar, pronunciation, and sentence structure directly. Additionally, AI is also considered capable of providing more personalized exercises tailored to each student’s skill level. However, the observation results show that in formal learning settings, the adaptive functions of AI are still predominantly used to assist in preparing presentation materials rather than for direct speaking correction.

Interview data indicate that AI serves as a powerful adaptive corrective tool that helps students improve their speaking skills independently through immediate feedback and personalized practice. Meanwhile, observational findings suggest that the implementation of AI in formal education remains primarily focused on academic support functions, such as lesson preparation. These two sets of data complement each other and demonstrate that AI holds great potential as a medium for adaptive speaking training, although its application in formal speaking activities is not yet optimal.

Flexible & Autonomous Learning Environment

Students view AI as a highly flexible learning tool because it can be used anytime, without restrictions on time or location. AI allows students to practice speaking on their own without having to rely on a study partner or instructor. In addition, students also feel that AI creates a more comfortable learning environment because they do not feel afraid of being judged when they make mistakes while speaking English.

These findings indicate that AI supports the creation of an *autonomous learning environment* that provides students with a high degree of flexibility in managing their own learning process. Students become more independent in practicing speaking and feel more comfortable using English because AI creates a low-pressure learning environment. Thus, the flexibility offered by AI is a key factor in increasing student engagement in speaking instruction.

AI as Speaking Partner (Simulation)

AI is also used as a conversation simulation partner to help students practice communicating more naturally and interactively. Students find that AI can maintain the flow of a conversation by continuously providing responses and follow-up questions. This makes students feel as though they are speaking with a real conversation partner and helps them practice speaking more spontaneously.

Interview data indicate that AI functions effectively as a virtual conversation partner that supports realistic communication simulations. Students have the opportunity to practice spontaneity and confidence in speaking through interactions that resemble everyday conversations. However, observational findings suggest that students still use this conversation simulation feature more frequently on their own outside of class than during formal learning activities.

Pedagogical Integration of AI

The integration of AI into speaking instruction is beginning to emerge through the use of AI-based assignments and presentation preparation activities. Instructors are starting to use AI as a supplementary learning tool to help students organize their ideas and prepare speaking materials. However, AI is not yet being fully utilized as the primary tool for interactive speaking practice in the classroom.

The data indicate that the integration of AI in speaking instruction is still at the stage of supplementary pedagogical integration. AI has been used as a tool to support the preparation of speaking assignments and materials, but it has not yet been fully utilized to facilitate direct speaking interactions in the classroom. This suggests that the effectiveness of AI use is heavily influenced by the pedagogical integration strategies employed by instructors.

Enhanced Student Engagement

Students reported that the use of AI increased their motivation, practice frequency, and engagement in speaking practice. AI makes the learning process feel more engaging, interactive, and less monotonous compared to traditional speaking practice methods. However, observations indicate that student engagement with AI in the classroom remains at a moderate level, as some students still appear to lack focus during learning activities.

The interviews revealed that AI enhances students' behavioral and emotional engagement by boosting motivation, facilitating practice through repetition, and fostering a sense of comfort in learning to speak. However, observational findings indicate that this increased engagement has not yet fully manifested in the context of formal classroom learning. This suggests that AI is more effective at boosting engagement when used flexibly and independently than when its implementation is limited to formal classroom activities.

The Contribution of AI Adaptation to Improving Students' Speaking Skills and English Language Learning Outcomes

This section presents research findings regarding the contribution of AI use to improving students' speaking skills and English language learning outcomes in an EFL context. Data were collected through in-depth interviews with students who used AI as a speaking practice tool both inside and outside the classroom. Analysis was conducted using a thematic analysis approach to identify patterns in students' experiences regarding changes in language proficiency following AI use.

The research findings indicate that the use of AI makes a positive contribution to various aspects of students' speaking skills, such as improved fluency, pronunciation accuracy, and confidence. Additionally, AI also influences students' affective and learning behavioral aspects, including learning motivation, active participation, and self-directed learning. Beyond its impact on speaking, the use of AI also aids in the development of other language competencies, such as vocabulary and listening comprehension. These findings are classified into several main themes that illustrate AI's contribution to overall English language learning outcomes.

Table 2. RQ2 Data Codification Table

Main Theme	Category	Initial Code	Evidence	Participant
Improvement in Speaking Performance	Fluency Development	Repetitive practice, longer speech production, and spontaneous speaking	"I practice speaking many times with AI, so I become more fluent." / "Now I can speak longer without stopping too much." / "I practice speaking more spontaneously with AI."	R2, R4, R7
	Pronunciation Accuracy	Pronunciation correction, sound improvement, pronunciation modeling	"AI corrects my pronunciation directly." / "My pronunciation of difficult sounds improved." / "AI pronunciation examples help me pronounce words more accurately."	R1, R4, R2
	Grammatical Accuracy	Grammar correction, structure awareness, and tense accuracy	"AI highlights grammar mistakes in my sentences." / "I become more aware of correct grammar." / "I remember to use the past tense correctly because of AI corrections."	R3, R5, R4
Affective Development in Learning	Confidence Enhancement	Increased confidence, courage to speak, fear-free practice	"AI boosts my confidence when speaking English." / "I feel braver speaking to real people after practicing with AI." / "I can practice without fear of making mistakes."	R8, R4, R2

	Motivation Growth	Intrinsic motivation, visible progress, enjoyable practice	"I feel motivated to practice speaking every day." / "I can immediately see my progress." / "Practicing with AI feels enjoyable."	R3, R2, R4
Behavioral Engagement in Speaking	Active Participation	Increased practice frequency, independent learning, and self-initiative	"I practice speaking more often than before." / "I use AI almost every day outside class." / "I practice speaking even without assignments."	R5, R4, R7
	Behavioral Engagement	Repetition practice, exploration of expressions, and active experimentation	"I repeat speaking topics many times." / "I try new expressions and vocabulary with AI." / "AI encourages me to experiment with speaking."	R4, R7, R2
Expansion of Language Competence	Vocabulary Development	Vocabulary acquisition, new expressions, and paraphrasing ability	"I learned many new vocabulary items from AI." / "AI suggests new words and expressions." / "AI helps me learn synonyms."	R1, R9, R7
	Listening Improvement	Audio comprehension, accent exposure, and response comprehension	"I become more familiar with listening to English responses." / "I learn different accents." / "I understand spoken responses better now."	R2, R1, R9
Integrated Learning Outcomes	Multi-skill Development	Integrated language improvement, holistic learning, skill transfer	"All my English skills improve together when using AI." / "AI improves speaking, vocabulary, and listening simultaneously." / "Even my writing improves because of AI feedback."	R4, R3, R4

Improvement in Speaking Performance

The interview results indicate that the use of AI significantly contributes to improving students' speaking performance, particularly in terms of *fluency*, *pronunciation accuracy*, and *grammatical accuracy*. Students feel that repeated practice using AI helps them speak more fluently, more spontaneously, and with greater confidence when expressing their ideas. In addition, AI also helps students correct their pronunciation and grammatical errors through immediate feedback during speaking practice.

The data shows that AI directly contributes to improving students' speaking skills. The instant feedback provided by AI allows students to make immediate and repeated corrections, thereby helping them improve their fluency, pronunciation, and grammar simultaneously. As such,

AI serves as a speaking practice tool that supports the comprehensive development of linguistic skills.

Affective Development in Learning

The use of AI not only impacts students' technical speaking skills but also their affective aspects, such as self-confidence and motivation to learn. Students feel more comfortable practicing with AI because they are not afraid of making mistakes. In addition, AI makes the learning process more engaging, so students are more motivated to practice speaking regularly.

These findings indicate that AI helps create a learning environment that supports students' affective development. Feeling safe and comfortable during speaking practice boosts students' confidence in speaking English. In addition, a more engaging and interactive learning experience also enhances students' intrinsic motivation to study consistently.

Behavioral Engagement in Speaking

The use of AI also influences students' learning behavior. Students have become more active in practicing speaking, repeating exercises more often, and are more independent in developing their English skills. AI encourages students to learn beyond the requirements of academic assignments and increases their engagement in the learning process.

The data shows that AI supports the development of self-regulated learning behavior. Students become more proactive in managing their own learning process and show greater initiative in practicing speaking on their own. Thus, AI not only improves language skills but also enhances students' engagement in the learning process.

Expansion of Language Competence

Students also feel that the use of AI helps develop other language skills, such as vocabulary and listening comprehension. AI provides many examples of new vocabulary, synonyms, and variations in expression that enrich students' language skills.

These findings indicate that AI has a holistic impact on learning. AI not only improves speaking skills but also expands students' vocabulary and enhances their listening skills. Thus, the use of AI supports the development of English language proficiency in a more comprehensive manner.

Integrated Learning Outcomes

Students feel that the use of AI has a positive impact on various language skills simultaneously. They have seen improvements not only in speaking but also in listening, vocabulary, and even writing.

This data shows that AI supports integrated language learning, a process that develops various skills simultaneously. AI enables students to learn languages in a more contextual, interactive, and integrated way, resulting in more comprehensive English language learning outcomes.

Positive Perceptions of Students and Instructors Regarding the Use of AI to Improve Speaking Skills and Motivation in Learning English

This section presents the results of a study on the positive perceptions of students and instructors regarding the use of AI technology in English-speaking instruction within an EFL context. Data were collected through in-depth interviews with students who had used AI as a medium for speaking practice and as a learning aid for English. Analysis was conducted using a thematic analysis approach to identify patterns in students' perceptions regarding the benefits, ease of use, learning motivation, pedagogical value, and challenges of using AI in speaking instruction.

The research findings indicate that students hold predominantly positive perceptions toward the use of AI. AI is viewed as a beneficial, flexible, and user-friendly learning tool capable

of boosting students' self-confidence and learning motivation. Additionally, AI is considered to have pedagogical value as it assists instructors and students in the speaking learning process. Nevertheless, students remain aware of some limitations of AI, such as a lack of emotional interaction and the potential for technological dependency. These findings are classified into several main themes that describe students' perceptions of the use of AI in English-speaking instruction.

Table 3. RQ3 Data Codification Table

Main Theme	Category	Initial code	Evidence	Participant
Perceived Usefulness of AI	Learning Support	Speaking practice support, effective language input, and presentation preparation	"AI is very helpful for speaking practice." / "AI provides effective language input and sentence examples." / "I use AI to prepare presentations and organize my ideas before speaking."	R6, R1, R5
	Skill Development	Speaking improvement, learning efficiency, and language enhancement	"AI improves my speaking ability significantly." / "Learning becomes more efficient when using AI." / "AI helps me improve my overall English skills."	R3, R9, R4
Ease & Flexibility of Use	Accessibility	Anytime access, unlimited availability, flexible usage	"I can practice speaking anytime with AI." / "AI always responds even late at night." / "AI is flexible because I can use it anywhere and anytime."	R2, R4, R5
	Usability	Ease of use, user-friendly interaction, and a practical learning tool	"AI is easy to use and accessible." / "I only need to type or speak, and AI responds immediately." / "Using AI feels practical for learning English."	R8, R3, R2
Confidence & Motivation Enhancement	Confidence Enhancement	Increased confidence, reduced fear, speaking courage	"I feel more confident speaking English after using AI." / "I am not afraid of making mistakes when practicing with AI." / "AI makes me braver to speak in front of others."	R3, R2, R4

	Motivation Growth	Increased motivation, enjoyable learning, consistent practice	"I feel motivated to practice English every day." / "Learning with AI feels more interesting and less boring." / "AI encourages me to practice more consistently."	R3, R2, R8
Teacher Acceptance & Pedagogical Value	Pedagogical Support	Supporting learning tool, AI-based assignments, and interactive learning	"AI is a useful supporting tool for learning to speak." / "The lecturer sometimes gives assignments using AI." / "AI makes learning more interactive and modern."	R9, R4, R9
	Educational Value	Modern teaching support, supplementary learning media, and classroom assistance	"AI supports teachers in preparing speaking activities." / "AI can be used as an additional learning resource." / "AI helps students practice more independently outside class."	R5, R3, R2
Awareness of Challenges	Lack of Human Interaction	Less natural interaction, preference for human communication, limited social interaction	"Interaction with AI feels less natural than talking to real people." / "AI cannot fully replace human interaction." / "I still prefer speaking with real people in some situations."	R8, R3, R10
	Emotional & Technical Limitation	Lack of empathy, misunderstanding context, and over-reliance on risk	"AI lacks emotional connection when communicating." / "Sometimes AI misunderstands the context of what I say." / "There is a risk that students become too dependent on AI."	R1, R3, R5

Perceived Usefulness of AI

The interview results indicate that students view AI as a highly beneficial learning tool for practicing speaking and developing their overall English language skills. AI helps students find sentence examples, speaking ideas, and prepare for presentations more quickly and effectively.

Students also feel that using AI makes the learning process more efficient because they can get immediate assistance without always having to rely on their instructors.

The data indicates that students have a positive perception of the benefits of AI as a tool for speaking practice. AI is seen as capable of enhancing learning efficiency and supporting broader language development. As such, AI is regarded as a learning support tool that offers both practical and academic benefits to EFL students.

Ease & Flexibility of Use

Students also view AI as a flexible and user-friendly learning tool. AI is accessible anytime and anywhere, allowing students to practice speaking according to their own needs. In addition, the AI's simple interface makes students feel more comfortable and at ease when using the technology to learn English.

These findings indicate that ease of use and flexibility are key factors driving students' acceptance of AI in speaking instruction. AI enables students to learn more independently and tailor their learning activities to their needs and available time.

Confidence & Motivation Enhancement

The use of AI also has a positive impact on students' confidence and motivation to learn. Students feel more confident speaking English after practicing with AI because they can practice without fear of making mistakes. In addition, AI makes the learning process more engaging and less monotonous, so students are more motivated to study consistently.

The data shows that AI helps create a more comfortable and enjoyable learning experience for students. A stress-free learning environment boosts students' confidence, while a more interactive learning experience increases their intrinsic motivation to continue practicing their speaking skills.

Teacher Acceptance & Pedagogical Value

Students believe that AI also has pedagogical value in speaking instruction. AI helps instructors assign more interactive tasks and helps students better prepare their speaking materials. Furthermore, AI is seen as a modern learning support tool that aligns with current developments in educational technology.

These findings indicate that students view AI as a learning tool with positive pedagogical value. AI not only assists students but also supports instructors in creating more interactive and flexible speaking lessons. Thus, AI is regarded as part of modern learning innovation in the context of EFL.

Awareness of Challenge

Although students have a positive perception of AI, they are also aware of some of the limitations of using this technology. Students feel that interactions with AI are still less natural than speaking with a human. In addition, students are also aware of the risk of becoming dependent on AI if it is used excessively.

The data shows that students have a fairly balanced perspective on the use of AI. Although AI is considered beneficial, students remain aware of the technology's limitations, particularly in terms of social and emotional interaction. This awareness of the challenges indicates that students understand that AI should be used as a tool to support learning, not as a complete replacement for human interaction.

Discussion

This study aims to explore how AI is adapted as a speaking training tool, how it contributes to improving students' English proficiency, and how students perceive the use of AI in speaking

instruction in an EFL context. Based on the research findings, there are several key points that can be discussed in relation to previous research.

AI as an Adaptive Training Tool in Speaking Learning

The research findings indicate that AI serves as an *adaptive training tool* that helps students receive *instant feedback, personalized learning, a flexible learning environment, and conversation simulations* that support student engagement in speaking practice. Students felt that AI helped them improve their grammar, pronunciation, and sentence structure directly through automatic corrections and repeated practice. This finding is evident from students' experiences, who stated that AI immediately corrected errors such as the use of the past tense and the pronunciation of difficult words.

These findings align with previous research that found AI integration *enhances students' intrinsic and extrinsic motivation* through personalized learning and instant feedback (Moybeka et al., 2023). This study also supports research indicating that AI helps students boost their motivation and self-confidence because the material can be tailored to individual students' needs and abilities (Mufid & Muassomah, 2023).

In addition, the research findings indicate that AI creates a flexible, *low-anxiety learning environment*. Students feel more comfortable speaking with AI because they are not afraid of being judged when they make mistakes. This environment helps students become more confident and more active in practicing their speaking skills. This finding supports research indicating that AI can reduce students' anxiety when speaking English by providing a safe, non-judgmental practice environment (Wang & Wen, 2024).

However, observational results suggest that the integration of AI into formal learning remains suboptimal, as AI is primarily used as a tool for creating presentation materials rather than as a direct interactive speaking medium. This finding supports research confirming that the effectiveness of AI is significantly influenced by how the technology is pedagogically integrated into the learning process (Han & Zhao, 2024). In other words, AI will not have a maximum impact if it is used merely as an additional tool without a clear learning strategy.

Contribution of AI to Speaking Skills and Language Learning Outcomes

The research findings indicate that the use of AI contributes positively to improvements in students' *fluency, pronunciation accuracy, grammar awareness, and overall English proficiency*. Students feel more fluent when speaking because they can practice repeatedly and spontaneously using AI as a conversation partner. Additionally, students also experience improved pronunciation because AI provides pronunciation examples and immediate corrections.

These findings align with research showing that the use of AI-SRT technology significantly improves *pronunciation accuracy* and speaking skills among EFL students through automated feedback and interactive practice (Dennis, 2023). These results also reinforce studies indicating that AI helps improve pronunciation, fluency, and vocabulary through flexible and repetitive interaction (Xing & Saeed, 2024).

In addition to improving speaking skills, this study also shows that AI has an impact on students' affective aspects, such as motivation and self-confidence. Students feel more confident speaking English because they have many opportunities to practice without social pressure. Some students even admitted to becoming more active in speaking in class after regularly practicing with AI.

These findings support research showing that integrating AI into speaking instruction can improve students' fluency, confidence, and intrinsic motivation while reducing anxiety during communication (Hastuti, 2024). This study is also consistent with research indicating that AI-based interactive practice environments can boost students' confidence and motivation in learning to speak (Alsalem, 2024).

Furthermore, the results indicate that AI aids in the development of other language skills, such as vocabulary and listening comprehension. Students acquire a wealth of new vocabulary, become familiar with various English accents, and grow more accustomed to listening to English responses through interactions with AI. These findings support research stating that AI effectively improves students' vocabulary, listening comprehension, and pronunciation accuracy in English language learning (Azzahra et al., 2024).

Positive Perceptions and Challenges of AI in Speaking Learning

The research findings indicate that the majority of students have a positive perception of the use of AI in speaking instruction. Students view AI as a learning tool that is flexible, user-friendly, interactive, and capable of providing unlimited practice opportunities. Students also feel that AI makes the learning process more engaging and less monotonous.

These findings support research indicating that AI enhances *learning engagement* and helps students practice speaking independently in a flexible learning environment (Cường, 2024). Furthermore, this study aligns with research showing that AI boosts student motivation by offering greater learning flexibility compared to conventional classroom instruction (Wang & Zou, 2024).

Although students have a positive perception of AI, this study also found that they are aware of AI's limitations. Students recognize that AI is not yet capable of fully replacing human interaction due to a lack of emotional aspects, social expressions, and the nuances of natural communication. Some students also noted that AI responses sometimes feel too rigid or less natural compared to communication with real humans.

These findings support research stating that AI has limitations in understanding emotional interactions and complex human communication (Saputra & Widiastuty, 2024). Additionally, other studies also confirm that the use of AI can pose the risk of reduced authentic human interaction if not used in a balanced manner (Alghamdy, 2024).

On the other hand, students also recognize the potential for dependency on AI if it is overused. Therefore, students emphasize that AI should be used as a *supporting tool* rather than a substitute for direct interaction with instructors or real speaking partners. This view supports research stating that the successful use of AI depends heavily on how the technology supports the teacher's role, rather than replacing it (Sutrah et al., 2023).

Overall, the results of this study indicate that AI holds great potential for supporting English-speaking instruction in an EFL context. AI can create a learning experience that is more flexible, personalized, interactive, and low-anxiety, thereby helping to increase student engagement in the speaking learning process. Additionally, the use of AI also makes a positive contribution to improving speaking skills, learning motivation, self-confidence, and the overall development of English language proficiency.

However, this study also indicates that the effectiveness of AI implementation remains heavily influenced by how the technology is integrated into formal education. AI cannot yet fully replace human interaction due to its limitations in emotional aspects, natural communication, and social context. Therefore, the use of AI in speaking instruction should be positioned as a pedagogical tool that complements the role of instructors and human interaction in the English language learning process.

Conclusion

This study demonstrates that the use of Artificial Intelligence (AI) plays a significant role in supporting English-speaking skills among fourth-semester English Education students. AI is utilized as a training tool that assists students through instant feedback, personalized learning, a flexible learning environment, and interactive conversation simulations. These features help students become more active and independent in their speaking practice. The results also indicate that the use of AI positively contributes to improving students' speaking skills, particularly in terms of fluency, pronunciation, grammar awareness, self-confidence, learning motivation, and active

participation. Additionally, AI aids in developing other English language skills such as vocabulary and listening comprehension, thereby supporting a more comprehensive language learning experience.

Students also have a positive perception of AI use because it is considered practical, flexible, easy to use, and capable of creating a more engaging learning experience while reducing anxiety when speaking English. However, students recognize that AI still has limitations in terms of emotional interaction and has the potential to lead to dependency if used excessively. Overall, this study concludes that AI has great potential as a tool to support speaking instruction in an EFL context. However, its effectiveness still depends on how instructors integrate AI pedagogically so that it supports a balanced approach to learning that combines technology and human interaction.

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