Generative AI in EFL Speaking Instruction: Teachers' Reflections on Effectiveness and Implementation Barriers

Xiaojing Huang*, Xu Han, Anqi Dou
Hainan Vocational University of Science and Technology, Haikou, China
*Corresponding Author.

Abstract: This study explores the use of generative AI tools in enhancing English as a Foreign Language (EFL) speaking skills, focusing on the experiences of 15 college English teachers from various universities in Hainan, China. Using semi-structured interviews and focus group discussions, the research identifies both benefits and challenges in integrating AI-driven applications for speaking instruction. The findings indicate that generative AI tools, such as AI agents, provide immediate personalized feedback, which enhances student engagement and allows for extensive speaking practice. However, the study also highlights significant barriers, including the inaccuracy of AI-generated feedback and the lack of adequate teacher training. This paper contributes to the growing body of literature on AI in education by providing practical recommendations for effectively integrating AI tools into EFL instruction, emphasizing the importance of blended learning and targeted professional development for teachers.

Keywords: Generative AI; EFL Speaking Instruction; AI-driven Feedback; Teacher Reflections; Implementation Barriers

1. Introduction

In recent years, the integration of generative artificial intelligence (AI) in education has introduced new possibilities for enhancing teaching and learning, particularly in language education. For English as a Foreign Language (EFL) learners, developing speaking proficiency is a significant challenge, as it requires real-time interaction, immediate feedback, and access to authentic communicative contexts-elements that are often limited in traditional classroom settings [1]. Studies have shown that limited exposure to real-time conversational practice significantly hinders EFL learners' speaking proficiency [2]. Generative AI, such as AI-driven conversational agents, offers unique opportunities to overcome these barriers by providing personalized, adaptive practice environments [3]. These tools can simulate real-world interactions, giving students more chances to practice speaking in a flexible, low-pressure setting, thus addressing the gap in traditional EFL speaking instruction.

However, the integration of these AI tools into language instruction is not without challenges. Teachers play a crucial role in successfully incorporating these technologies, yet they often face obstacles such as technical limitations and a lack of adequate training on how to use AI effectively [4]. Understanding teachers' perspectives on both the potential benefits and the barriers is essential to inform successful implementation strategies.

This study aims to explore college English teachers' reflections on the effectiveness of generative AI tools for improving EFL speaking skills, focusing on both the benefits and the challenges they encounter. By understanding these experiences, the research provides practical insights that can guide educators in effectively using AI to enhance EFL speaking proficiency, contributing to the evolving discussion on the role of AI in language education.

2. Literature Review

Generative AI has gained increasing attention in educational contexts due to its potential to create adaptive, personalized learning experiences [5]. In the field of language education, AI-driven tools have been shown to enhance various aspects of language acquisition, including vocabulary, grammar, and most notably speaking skills. For instance, Chen's research indicates that AI tools can significantly improve speaking fluency by

providing students with consistent practice opportunities that traditional classrooms often lack [2].

Research by Jinming and Daniel suggests that AI-powered applications such as chatbots and virtual agents provide EFL learners with opportunities for real-time conversational practice, which is often limited in traditional classroom environments [6]. These tools help reduce language anxiety by allowing students to practice in a simulated environment without the pressure of a live audience, which contributes to increased speaking confidence.

Moreover, AI's ability to offer immediate, tailored feedback on pronunciation and fluency allows learners to monitor their progress and adjust their speaking strategies accordingly [7]. Unlike traditional teacher feedback, which may be infrequent due to high student-to-teacher ratios, AI feedback can be provided consistently and in real-time, ensuring that learners receive the guidance they need when they need it.

Traditional language learning environments often lack the resources and opportunities for students to practice speaking in authentic contexts, leading to a proficiency gap between receptive (listening and reading) and productive (speaking and writing) skills [8]. For example, authentic contexts might include scenarios such as role-playing conversations with native speakers or engaging in simulations that mimic real-life situations, which are rarely available in conventional classrooms.

Generative AI has been proposed as a solution to these issues by providing students with extensive speaking opportunities and real-time feedback in simulated environments. Examples of platforms that have been used include AI-driven chatbots like Doubao and conversational agents integrated into language learning apps, providing a practical solution to address these challenges.

Teachers play a critical role in determining how effectively AI tools are used in the classroom. Research by Raygan & Moradkhani indicates that teachers' ability to integrate technology effectively is directly linked to their attitudes and comfort levels with these tools [9]. Similarly, Kim's findings highlight that educators' attitudes toward AI integration significantly influence the success of AI-driven learning activities [10]. Factors such as availability of training and perceived ease of use can significantly impact these attitudes, suggesting that institutional support is crucial for successful AI adoption.

Teachers who are confident in using technology and recognize its potential benefits are more likely to integrate AI tools effectively into their teaching practices. This confidence enables them to use AI to handle repetitive tasks, thereby allowing them to focus on more complex and impactful aspects of teaching. As a result, confident teachers can create a more efficient learning environment, maximizing the advantages of AI integration.

Research by Chen (2024) highlights several challenges teachers face when using AI for speaking instruction. These challenges include technical difficulties, such as misinterpretation of student input by AI systems, and a lack of structured training programs to help teachers integrate these tools meaningfully into their curricula [2]. Addressing these issues is critical for maximizing the benefits of AI in language education.

3. Methodology

This study employs a qualitative research approach to explore college English teachers' perceptions of using generative AI to enhance EFL speaking skills. A qualitative approach is particularly suitable for this study as it allows for an in-depth exploration of personal experiences and perceptions, which are essential for understanding the nuances of teachers' attitudes.

To ensure the validity and reliability of the findings, data were collected using multiple methods including semi-structured interviews, focus group discussions, and document analysis, thereby facilitating triangulation. Semi-structured interviews provide depth, focus groups offer different perspectives, and document analysis corroborates the findings, enhancing the overall validity of the study.

The participants for this study were 15 college English teachers from various universities in Hainan province, China, all with at least five years of EFL teaching experience and familiarity with AI-driven tools such as chatbots and virtual assistants. These participants were selected for their significant teaching experience and familiarity with AI tools, ensuring they could provide informed insights into the use of AI in language

instruction.

These educators were selected through purposive sampling to ensure that they had direct experience with AI tools in the context of speaking instruction. Purposive sampling was used to target participants who are most likely to provide relevant and insightful information on the topic, ensuring a focus on experienced users of AI tools.

Data were collected through semi-structured interviews, focus group discussions, and document analysis. The semi-structured interviews lasted approximately 45-60 minutes each, and the focus group discussions were conducted with groups of 3-5 teachers.

Semi-structured interviews served as the primary method of data collection, allowing participants to reflect on their experiences while ensuring consistency in addressing key research questions. One key interview question was, 'How do you perceive the impact of AI tools on your students' speaking proficiency?'

Focus group discussions were conducted with small groups of 3 to 5 teachers, fostering a dynamic exchange of ideas and providing additional context to the individual interviews. These discussions allowed for the exploration of shared experiences and collective insights that individual interviews might not capture.

These discussions were particularly useful for generating insights into collective experiences and challenges that individual interviews may not fully capture. For instance, a common challenge that emerged was the difficulty in maintaining student engagement during AI-assisted speaking exercises.

Document analysis provided further evidence of how generative AI tools were being applied in classroom settings and allowed for the comparison of teachers' perceptions with actual teaching practices. Documents analyzed included lesson plans, AI feedback reports, and classroom observation notes, providing a comprehensive understanding of the practical application of AI tools.

All interviews and focus group sessions were recorded with participants' consent and transcribed verbatim. Transcripts were analyzed using thematic analysis, facilitated by NVivo software, to identify recurring themes and patterns in teachers' perceptions.

4. Data Collection and Findings

The data collection for this study employed three primary methods: semi-structured interviews, focus group discussions, and document analysis. Thematic analysis, facilitated by NVivo software, was used to analyze the collected data, allowing for an in-depth examination of recurring themes and patterns. This section presents detailed findings derived from the analysis, highlighting teachers' nuanced experiences, varied perceptions, and the strategies they adopted when integrating generative AI tools into their EFL classrooms.

4.1 Perceived Benefits

The findings indicated several perceived benefits of using generative AI tools for EFL speaking instruction. A key advantage noted by teachers was the capability of AI tools to deliver immediate and personalized feedback. Teachers reported that this feature significantly enhanced students' confidence in speaking activities. One teacher emphasized that students were more inclined to participate in speaking exercises when they knew they would receive constructive, real-time feedback without feeling judged. This personalized feedback allowed students to correct their mistakes on the spot, which in turn accelerated their learning progress. The immediacy of the AI feedback was contrasted with traditional teacher feedback, which, due to time constraints, often came with delays and lacked the same level of individualization.

Teachers also highlighted how AI-driven tools fostered a more supportive and non-threatening learning environment. One participant pointed out that students who were often reluctant to speak in front of their peers felt more comfortable interacting with AI. The anonymity and non-human nature of AI agents helped reduce anxiety and encouraged students to practice more frequently, which was particularly beneficial for lower-proficiency learners who might otherwise avoid speaking tasks. This reduction in speaking anxiety was consistently mentioned across several interviews and focus group discussions as a critical factor contributing to improved oral proficiency.

Moreover, the use of generative AI tools led to increased student engagement. Teachers observed that incorporating AI made speaking activities more interactive and enjoyable. One teacher noted, "The AI-driven scenarios

provide a level of interactivity that traditional methods simply cannot match, making students eager to participate." The AI's ability to simulate real-life conversational contexts was especially valuable, as it provided students with diverse scenarios that mimicked authentic communication situations. This diversity not only made learning more engaging but also ensured that students were exposed to a wide range of vocabulary and conversational styles, better preparing them for real-world interactions.

Additionally, teachers reported that AI tools offered a scalable solution to personalized learning. In classrooms with high student-to-teacher ratios, it was often challenging for teachers to provide individualized attention. The use of AI tools allowed teachers to assign speaking exercises that students could complete independently, while receiving tailored feedback based on their individual responses. This helped bridge the gap between students of varying proficiency levels, enabling each learner to progress at their own pace.

4.2 Challenges of Integration

Despite the numerous benefits, teachers also faced significant challenges in integrating AI tools into their teaching practices. One of the most commonly mentioned challenges was the inaccuracy of AI-generated feedback. Many teachers reported instances where AI tools failed to understand context-specific language or provided incorrect corrections. This issue was particularly evident in nuanced language use, such as idiomatic expressions or culturally specific references, where AI struggled to grasp the intended meaning. One teacher expressed frustration, stating, "The AI sometimes gives corrections that are just wrong, especially when it comes to idioms, and this confuses my students more than it helps them." Such inaccuracies not only hindered learning but also risked undermining students' trust in the technology, making it crucial for teachers to closely monitor AI interactions and step in when necessary.

Another major challenge was the lack of adequate training for teachers. The findings indicated that many educators felt insufficiently prepared to fully exploit the potential of AI tools. Teachers highlighted the need for structured professional development programs that focus on practical strategies for integrating AI into language instruction. Without such training, teachers found it challenging to navigate the functionalities of AI tools, often limiting their use to basic features rather than exploring more advanced applications that could further benefit students. One teacher commented, "We need hands-on workshops that show us not only how to use these tools but also how to adapt them to different learning contexts." The absence of such training programs was seen as a major barrier, leading to inconsistent and sometimes ineffective use of AI in the classroom.

Technical limitations also posed challenges. Teachers reported difficulties with the technological infrastructure, including unreliable internet connections and limited access to necessary devices. These issues were especially problematic in less-resourced institutions, where even basic technological support was sometimes lacking. One participant mentioned that inconsistent access to devices meant that some students were unable to engage with AI tools as frequently as others, leading to disparities in learning opportunities within the same class. Such logistical issues necessitated additional planning and adaptation by teachers, further complicating the integration process.

4.3 Pedagogical Strategies

To address these challenges, teachers adopted a range of pedagogical strategies to effectively integrate AI tools into their EFL classrooms. A common strategy was using AI as a supplementary tool rather than the primary mode of instruction. Teachers emphasized the importance of maintaining human oversight, using AI tools to facilitate practice while ensuring that they provided critical feedback and guidance to address any misconceptions. For example, one teacher used AI-driven role-play exercises to allow students to practice conversational skills, but always followed up with a class discussion to clarify errors and elaborate on more complex language points that the AI may have missed.

Teachers also made deliberate modifications to AI activities to better align with their students' proficiency levels and learning needs. One teacher described how they adapted chatbot role-play scenarios to make them more contextually relevant by incorporating topics

that were familiar to the students, such as local events or everyday activities. This contextualization not only made the exercises more engaging but also ensured that the language practice was meaningful and applicable to the students' real-life experiences. By tailoring the content, teachers were able to create a learning experience that resonated with students, thereby increasing their willingness to participate actively.

Another strategy involved blending AI use with collaborative learning activities. Teachers found that pairing students to work together on AI-driven tasks fostered peer support and enhanced learning outcomes. One teacher mentioned that students often helped each other understand the AI feedback, which not only facilitated deeper comprehension but also encouraged a collaborative classroom environment. This blending of AI with peer interaction helped to mitigate some of the limitations of AI tools, such as their inability to provide culturally nuanced explanations, by leveraging the collective knowledge of the student group.

Teachers also stressed the importance of setting clear expectations for AI use. They explicitly communicated to students that AI was a tool to aid practice, not a replacement for teacher feedback or peer interaction. This helped manage students' expectations and ensured that they remained engaged with the broader aspects of the learning process, rather than becoming overly reliant on technology. Teachers highlighted that this balanced approach was key to fostering a supportive learning environment where AI was seen as one component of a comprehensive educational strategy.

The findings from this analysis demonstrate that while generative AI tools hold considerable potential for enhancing EFL speaking skills, their effective integration requires thoughtful pedagogical approaches, continuous professional development, and a supportive technological infrastructure. Teachers' insights underscore the importance of using AI as an adjunct to traditional teaching methods rather than as a standalone solution. The need for well-designed training programs and the careful contextualization of AI activities are crucial elements for maximizing the benefits of AI in language learning while minimizing its limitations.

5. Conclusion and Discussion

This study explored the use of generative AI tools in enhancing EFL speaking skills among college English teachers. The findings of this study contribute to the existing body of literature by providing new empirical evidence on the practical application and teacher experiences with generative AI in EFL instruction. Specifically, the study adds insights into how these tools can be integrated into classroom practice to benefit both teachers and learners.

The findings indicate that AI tools have the potential to significantly enhance students' speaking proficiency by providing immediate feedback and creating engaging learning experiences. Teachers reported that students demonstrated increased confidence and enthusiasm during speaking activities when using AI tools, primarily due to the immediate, personalized feedback that allowed for quick corrections and improved language accuracy. This suggests that generative AI can be a powerful tool for fostering a supportive and interactive learning environment that encourages students to actively participate and practice their speaking skills.

However, several challenges remain, particularly regarding the accuracy of AI feedback and the need for adequate teacher training. The inaccuracies in AI-generated feedback, especially concerning nuanced or idiomatic expressions, present a significant barrier to effective language learning. Addressing these issues through advancements in AI technology could further enhance the quality of language instruction. Additionally, providing structured professional development programs for teachers could help overcome the challenges related to AI integration, equipping teachers with the skills needed to maximize the benefits of these tools.

Teachers play a crucial role in the successful integration of AI tools into language teaching. To facilitate effective AI use, teacher training programs should be designed to include hands-on workshops that focus on practical applications of AI in language instruction. Such training should emphasize both the strengths and limitations of AI tools, ensuring that teachers are well-prepared to implement them effectively while mitigating potential drawbacks. This underscores the importance of

teacher readiness and support in the adoption of AI-driven educational technologies.

This study contributes to the growing body of literature on the role of AI in language education by providing insights into both the benefits and the challenges faced by teachers. A unique insight from this study is the detailed exploration of the practical challenges teachers face in adapting AI tools to meet the specific needs of their students, which has often been overlooked in previous research. The findings also highlight the alignment and divergence between teacher expectations and actual classroom experiences with AI, offering a nuanced understanding of the practical realities of AI integration.

Future research should explore additional strategies for overcoming the challenges identified in this study. Specifically, there is a need to develop more sophisticated AI feedback mechanisms that can better understand contextual and idiomatic language use. Moreover, future studies could focus on designing comprehensive teacher training programs that emphasize adaptive pedagogical strategies for effectively integrating AI tools into diverse learning contexts. By addressing these areas, future research can contribute to more effective and widespread use of AI in language education.

The findings highlight the need for a balanced approach that integrates AI tools with traditional teaching methods. A balanced approach involves using AI-driven activities to supplement traditional teacher-led instruction, ensuring that students benefit from both personalized technology-driven feedback and human expertise. For instance, while AI can facilitate repetitive speaking practice, teachers can provide the cultural and contextual insights that AI currently lacks, thus offering a more holistic learning experience. This balanced methodology is essential for maximizing the strengths of both AI and human instruction, ultimately leading to a more effective EFL learning environment.

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