
| RESEARCH ARTICLE

Moroccan Secondary School Students' Perceptions and Attitudes toward Using ChatGPT-Assisted Feedback to Improve English Speaking Skills

Hamza Farhane

Department of English, Faculty of Letters and Human Sciences, Dhar Elmahraz, Sidi Mohammed Ben Abdellah University, Fez, Morocco

Corresponding Author: Hamza Farhane, **E-mail:** hamzafarhane96@gmail.com

| ABSTRACT

This study investigates Moroccan secondary school students' perceptions of ChatGPT-assisted feedback in developing English speaking skills. It adopts a qualitative research design and is grounded in the need to better understand how learners in underexplored EFL contexts engage with generative AI tools for oral language development. The participants were 22 second-year Baccalaureate students (aged 17–18) from a public secondary school in Sidi Bennour, Casablanca-Settat region, selected purposively based on prior experience using ChatGPT during a classroom-based intervention. Data were collected through two focus group discussions conducted in classroom settings and facilitated in English and Moroccan Arabic (Darija). The discussions were audio-recorded, transcribed verbatim, and translated into English. The data were analyzed using thematic analysis following Braun and Clarke's (2006) six-step framework, with an inductive coding approach. The findings indicate that students perceived ChatGPT as a useful tool for enhancing speaking practice by increasing confidence, reducing speaking anxiety, and supporting idea generation and vocabulary use through interactive feedback. However, participants also expressed concerns regarding the accuracy of responses, the risk of overreliance, and the limited authenticity of human-like interaction. The study concludes that ChatGPT can serve as a supportive tool for speaking development in EFL contexts when used critically and under guided pedagogical conditions. It contributes to the growing body of research on AI-assisted language learning by providing empirical evidence from Moroccan secondary school learners.

| KEYWORDS

ChatGPT, EFL speaking skills, qualitative research, secondary education, AI-assisted feedback, Morocco

| ARTICLE INFORMATION

ACCEPTED: 30 May 2026

PUBLISHED: 15 June 2026

DOI: 10.32996/jeltal.2026.8.8.2

1. Introduction

The rapid advancement of Artificial Intelligence (AI) has transformed numerous aspects of education, creating new opportunities for teaching and learning. From the early development of computer-based instruction systems to contemporary AI-powered applications, technological innovations have increasingly supported personalized, adaptive, and interactive learning experiences. Recent developments in Natural Language Processing (NLP) and machine learning have enabled AI systems to understand, generate, and respond to human language in ways that facilitate meaningful educational interactions. Consequently, AI-powered tools have become increasingly integrated into educational settings, providing learners with personalized support, immediate feedback, and flexible learning opportunities (OECD, 2023; Vieriu & Petrea, 2025).

Among the various AI technologies currently available, ChatGPT, developed by OpenAI, has emerged as one of the most widely used and accessible generative AI tools. Its popularity can be attributed to its ease of use, free accessibility, and ability to generate human-like responses across a wide range of topics (Baidoo-Anu & Owusu Ansah, 2023). ChatGPT offers learners instant and personalized feedback, enabling them to receive explanations, corrections, and guidance tailored to their individual

learning needs (AlGhamdi, 2024; Rahman, 2024; Anggawirya et al., 2021). Furthermore, ChatGPT provides students with opportunities to engage in language practice, access information, and receive feedback based on previous conversational interactions, making it a potentially valuable tool for language acquisition (Yao, 2024; Moon et al., 2025; Wang, 2025).

The significance of such technological developments is particularly evident in English language learning. English continues to occupy a prominent position as a global language and serves as an essential medium of communication in education, business, tourism, and international collaboration (Issa, 2024). As a lingua franca, English proficiency provides learners with greater academic, professional, and social opportunities in an increasingly interconnected world (Kırmızı & Er, 2024). Consequently, educational institutions devote considerable attention to developing students' English language competence, particularly productive skills such as speaking, which are critical for effective communication (Yıldız, 2024).

Despite its importance, speaking remains one of the most challenging language skills for EFL learners to develop. Limited opportunities for authentic communication, low confidence, and speaking anxiety often hinder students' oral performance. Meaningful interaction and continuous practice have been identified as essential factors in improving speaking proficiency and reducing communication apprehension (Üstünbaş, 2024). However, many EFL learners remain reluctant to participate actively in speaking activities due to fear of making mistakes or being negatively evaluated.

In this regard, ChatGPT offers promising possibilities for supporting speaking development. Research suggests that AI chatbots can help learners improve their English fluency, grammar, vocabulary, confidence, and overall language proficiency while reducing fear and anxiety associated with speaking (Woo & Choi, 2021). ChatGPT enables learners to engage in conversations in a non-threatening environment where they can practice language use, ask questions, and receive immediate feedback. It can provide guidance on pronunciation, coherence, relevance, transitions, and the logical organization of ideas, allowing learners to refine their oral communication skills in an accessible and supportive manner (Power, 2024). Additionally, ChatGPT can deliver feedback that is adapted to learners' proficiency levels and is available anytime and anywhere, thereby extending opportunities for practice beyond the classroom.

Several recent studies have highlighted the positive role of ChatGPT in speaking instruction. Learners often report feeling less anxious and more comfortable when practicing speaking with AI because they are not subject to the social pressures associated with interacting with teachers or peers (Almineeai et al., 2025; Hayashi & Sato, 2024; Ericsson & Johansson, 2024). Furthermore, ChatGPT can make speaking activities more engaging by facilitating focused conversations and providing concise, relevant responses to learners' prompts (Syaripuddin et al., 2025). These features have been associated with increased learner motivation, greater participation, and enhanced opportunities for pronunciation practice and feedback (Fathi et al., 2024; Gutai et al., 2024; Yıldız, 2024; Yaumi et al., 2024; Adinda et al., 2025).

Nevertheless, the integration of ChatGPT into language learning is not without challenges. Concerns have been raised regarding students' increasing dependence on AI-generated responses, particularly when learners rely on AI-produced content instead of engaging in independent thinking and language production (Cotton et al., 2023; Lo, 2023). Such dependence may lead to superficial learning experiences and reduced cognitive engagement, potentially affecting students' creativity, critical thinking, and ability to contribute meaningfully to discussions (Chan, 2023; Rudolph et al., 2023; Lin & Chen, 2024; Zhai et al., 2024). In addition, educators face difficulties in distinguishing authentic student performance from AI-assisted output, raising questions about assessment validity and academic integrity (Lund & Wang, 2023; Kasneci et al., 2023; Yaumi et al., 2023; Karubaba & Rahman, 2025).

Although a growing body of research has examined the educational potential of ChatGPT, much of the existing literature has focused on university students or has been conducted in contexts such as Saudi Arabia, Malaysia, China, Iraq, Türkiye, and other international settings (Ansari, Ahmad, & Bhutta, 2023; Liu, 2024; Jayasinghe, 2024). Comparatively little is known about how Moroccan secondary school students perceive the use of ChatGPT-assisted feedback for developing English speaking skills. Understanding learners' perceptions and attitudes is particularly important because the successful integration of educational technologies depends not only on their pedagogical potential but also on students' willingness to adopt and use them effectively.

Therefore, this study seeks to explore Moroccan secondary school students' perceptions and attitudes toward using ChatGPT-assisted feedback to improve English speaking skills. By examining students' experiences, perceived benefits, and concerns regarding the use of ChatGPT in speaking practice, the study aims to contribute to the growing body of research on AI-assisted language learning within the Moroccan educational context.

The main research question guiding this study is:

RQ: What are Moroccan secondary school students' perceptions and attitudes toward using ChatGPT-assisted feedback to improve their English speaking skills?

This study is significant for several reasons. First, it contributes to the emerging literature on AI-assisted language learning by providing evidence from the Moroccan secondary school context, which remains underrepresented in existing research. Second, it offers insights into how students perceive the usefulness of ChatGPT-assisted feedback for speaking development, thereby informing teachers and curriculum designers about its pedagogical potential. Finally, the findings may support policymakers and educators in making informed decisions regarding the responsible integration of AI-powered technologies into English language education.

2. Literature Review

2.1. ChatGPT in EFL Learning Contexts: Language Development and Instructional Impact

Recent research has increasingly explored the integration of ChatGPT within EFL contexts as a tool for enhancing language learning, teaching, and assessment. Meniado (2023) highlights that ChatGPT can support language learning by providing comprehensible input and feedback, thereby promoting fluency development, although limitations such as inaccurate responses and technical constraints remain a concern. Similarly, Song and Song (2023) found that students receiving AI-assisted instruction demonstrated significant improvements in writing performance and motivation compared to those in traditional learning environments.

In the same line, Haggag (2023) reports that ChatGPT-based instructional programs contribute to notable improvements in learners' descriptive writing and grammatical accuracy. Shaikh et al. (2023) further confirm that students perceive ChatGPT as an effective tool for learning formal English, while Fauzi et al. (2023) emphasize its role in increasing learning efficiency, motivation, and access to learning resources in higher education settings. Collectively, these studies suggest that ChatGPT is increasingly recognized as a valuable tool for supporting EFL learners' linguistic development, particularly in writing-related skills.

2.2. ChatGPT and EFL Speaking Development: Opportunities and Limitations

A growing body of literature has examined ChatGPT's potential in enhancing EFL speaking skills by providing learners with opportunities for interaction beyond the classroom. Ye et al. (2022) note that speaking practice outside class remains limited, making AI-based tools a valuable alternative. In this regard, chatbots such as ChatGPT and Microsoft Xiaoying offer learners flexible opportunities for conversational practice regardless of time and place (Alafnan et al., 2023).

Empirical studies further support these claims. Yang et al. (2022) found that AI chatbots can enhance student engagement in speaking tasks and achieve high task success rates, while Jin et al. (2019) identified certain technical challenges, particularly related to voice recognition and handling longer utterances. In addition, Young and Shishido (2023) demonstrate that ChatGPT-generated dialogues can be appropriate for beginner and intermediate learners, suggesting its pedagogical value in structured speaking practice.

2.3. Learners' Perceptions and Attitudes toward ChatGPT in Language Learning

Research on learners' perceptions reveals generally positive but nuanced attitudes toward ChatGPT integration in EFL learning. Darma et al. (2023) report that students recognize both the benefits and drawbacks of ChatGPT, including its role in enhancing language proficiency, critical thinking, and problem-solving, alongside concerns about academic integrity and over-reliance. Similarly, Song and Song (2023), through qualitative interviews, found that learners acknowledge the innovative instructional role of ChatGPT while simultaneously expressing concerns about contextual accuracy and dependency.

Broader studies also reflect mixed perceptions of AI tools. Taecharunroj (2023), analyzing large-scale social media data, identifies both optimism regarding ChatGPT's capabilities and concerns about its societal implications. Keleş and Aydın (2021) similarly report that university students hold both positive and negative attitudes toward AI use in education. Earlier research by Bii et al. (2013) indicates that learners generally maintain favorable attitudes toward chatbot-assisted learning due to its perceived educational value.

In the context of speaking, Gallacher et al. (2018) highlight that although learners view chatbot interaction as innovative, they often perceive it as lacking authenticity and natural conversational richness. These findings collectively suggest that learner attitudes toward ChatGPT are complex and shaped by both perceived pedagogical benefits and concerns about authenticity, dependence, and interaction quality.

2.4. Self-Efficacy, Speaking Skills, and the Role of AI in EFL Learning

Self-efficacy has been widely recognized as a key factor influencing learners' language development, particularly in speaking skills. Drawing on Bandura's framework, research highlights that learners' confidence is shaped by multiple social and

environmental factors, including parents, peers, teachers, classroom environment, and virtual assistants (Wiboolyasarini & Jinowat, 2024; Wright, 2024). Empirical studies confirm these influences, showing that parental support (Albanese et al., 2019), peer interactions (Bellò et al., 2018), teacher encouragement (Hajovsky et al., 2020), and classroom environment (Beri & Stanikzai, 2018) all contribute to the development of students' self-efficacy beliefs.

In addition, emerging research highlights the role of AI-based tools in shaping learners' SE. Amin (2023) suggests that virtual assistants can positively influence learners' educational experiences, while Jamoom and Bahron (2024) and Mulyono et al. (2019) argue that AI-driven tools support individualized learning by providing immediate feedback and monitoring learner progress.

Within EFL contexts, ChatGPT has been increasingly recognized as a tool that may enhance speaking self-efficacy by offering interactive practice opportunities, personalized feedback, and reduced anxiety environments. Studies further show that AI-assisted instruction contributes to improvements in motivation, fluency, and oral performance (Ali et al., 2023; Balci, 2024; Yamaoka, 2024). Research on ChatGPT as a speaking tutor indicates that it can reduce speaking anxiety and improve fluency by providing continuous feedback and conversational support (Limo et al., 2023; Jeon et al., 2023; Hellmich et al., 2024). These findings suggest that ChatGPT has the potential not only to support linguistic development but also to positively influence learners' psychological readiness to engage in speaking activities.

2.5. ChatGPT in Skill Development and Contextual Studies

Research further demonstrates that ChatGPT contributes to both macro- and micro-skills development across different EFL contexts. Lin and Chen (2024) show that ChatGPT can support reading instruction through test generation and feedback provision, while Aryadoust et al. (2024) highlight its effectiveness in enhancing listening comprehension through audio transformation and question generation. In speaking contexts, Syaripuddin (2024) finds that learners improve oral proficiency through ChatGPT-assisted tutoring, while Fitria (2023) emphasizes its value in academic writing development.

At the micro-skill level, studies report improvements in grammar (El-Said, 2024), vocabulary (Farr, 2024), and pronunciation (Kim & Park, 2023). Additionally, ChatGPT has been shown to enhance learner motivation and overall language proficiency across different contexts (Ali et al., 2023; Balci, 2024; Yamaoka, 2024). Context-specific studies, particularly in Iraq, further confirm its pedagogical potential in improving reading, grammar, speaking, and 21st-century skills (Kara, 2024; Kucuk, 2023; Bilgin & Yildiz, 2024; Aldahhan & Razak, 2024).

Despite these advances, existing literature still indicates a lack of empirical research focusing specifically on ChatGPT's role in developing speaking self-efficacy and learner perceptions in secondary school contexts, particularly in underexplored settings.

3. Methods

3.1 Research Design, Participants and Sampling

This study adopted a qualitative exploratory research design to investigate Moroccan secondary school students' perceptions and attitudes toward ChatGPT-assisted feedback in improving English speaking skills. A qualitative approach was considered appropriate as it enables an in-depth exploration of learners' subjective experiences, beliefs, and interpretations regarding the use of generative AI in language learning. The exploratory nature of the study is justified by the limited empirical research focusing on Moroccan secondary school learners' engagement with ChatGPT, particularly in relation to speaking skill development.

The study involved 22 secondary school students aged between 17 and 18 years, enrolled in the second year of the baccalaureate program at a public high school in Sidi Bennour, located in the Casablanca-Settat region of Morocco. Participants were selected using purposive sampling based on prior experience using ChatGPT. All participants had previously interacted with ChatGPT as part of a prior learning experience, ensuring that they were familiar with the tool and capable of providing informed reflections on its use in English speaking development.

The sample size was considered appropriate for qualitative inquiry, which prioritizes depth of understanding over generalizability. The selection of 22 participants allowed for rich and diverse perspectives to emerge regarding students' perceptions and attitudes toward ChatGPT-assisted feedback.

3.2 Data Collection Tools

Data were collected through two focus group discussions, each consisting of 11 students. This method was chosen to encourage interaction among participants and generate rich data through shared discussion of experiences and opinions. Each focus group lasted approximately 45 minutes and was conducted in a classroom setting within the school during non-instructional hours.

The discussions were guided by open-ended questions focusing on students' perceptions of ChatGPT-assisted feedback, its impact on their speaking skills, motivation, and engagement, as well as potential challenges and ethical concerns. Probing questions were used to encourage deeper elaboration and clarification of responses.

3.3 Data Collection Procedures

The focus group discussions were conducted in both English and Moroccan Arabic (Darija), with Darija being used most of the time to ensure clarity and allow participants to express their ideas comfortably and naturally. All discussions were audio-recorded with participants' consent. The recordings were later transcribed verbatim and translated into English for analysis, ensuring that the authenticity of students' responses was preserved.

Participants were informed that their participation was voluntary, that confidentiality and anonymity would be maintained, and that they had the right to withdraw from the study at any time without consequences. Ethical approval was obtained from the school administration prior to data collection.

The researcher, a teacher at the school, was directly involved in the data collection process. This positionality provided contextual familiarity with the learning environment; however, measures such as reflexivity and peer debriefing were employed to minimize potential bias in data interpretation. Another teacher/researcher reviewed the analysis process to enhance credibility and ensure the trustworthiness of the findings.

3.4 Data Analysis Method

Data were analyzed using thematic analysis following Braun and Clarke's (2006) six-step framework, which includes familiarization with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final report. The analysis was conducted manually without the use of qualitative data analysis software.

An inductive approach was adopted, allowing themes to emerge directly from the data rather than being imposed a priori. This ensured that students' own expressions and meanings guided the analytical process. Thematic patterns were identified across the two focus groups to capture shared and divergent perspectives regarding ChatGPT-assisted feedback in speaking development.

4. Results

This section presents the thematic findings derived from the analysis of data collected through two focus group discussions involving 22 Moroccan secondary school students. Using Braun and Clarke's (2006) thematic analysis framework, the data were examined to explore students' perceptions and attitudes toward using ChatGPT-assisted feedback to improve English speaking skills. Four major themes emerged from the analysis: (1) Enhanced Speaking Confidence and Reduced Speaking Anxiety, (2) Improvement in Speaking Performance through Personalized and Immediate Feedback, (3) Increased Motivation, Enjoyment, and Autonomous Practice, and (4) Limitations and Concerns Regarding ChatGPT-Assisted Feedback. The themes are illustrated through representative student quotations translated from Moroccan Arabic and English.

4.1 Students' Perceptions and Attitudes toward ChatGPT-Assisted Feedback

Theme 1: Enhanced Speaking Confidence and Reduced Speaking Anxiety

One of the most frequently discussed benefits of ChatGPT-assisted feedback was its positive influence on students' confidence when speaking English. Many participants reported that interacting with ChatGPT provided a non-judgmental environment where they felt comfortable making mistakes and practicing without fear of embarrassment. Students explained that unlike classroom situations, where they sometimes feared negative evaluation from peers, ChatGPT allowed them to experiment with language freely.

"When I speak in class, I sometimes worry that my classmates will laugh if I make mistakes. With ChatGPT, I can practice as much as I want without feeling embarrassed." Student 4

"I became more confident because ChatGPT always responded and corrected my mistakes without making me feel uncomfortable." Student 11

Several students also noted that repeated practice with ChatGPT helped reduce speaking anxiety and encouraged them to participate more actively in classroom discussions.

"Before using ChatGPT, I avoided speaking English because I was afraid of making mistakes. After practicing with it for some time, I started feeling more comfortable speaking in front of others." Student 17

These findings suggest that ChatGPT-assisted feedback contributed to a supportive learning environment that encouraged students to take greater risks in oral communication and gradually overcome speaking-related anxiety.

Theme 2: Improvement in Speaking Performance through Personalized and Immediate Feedback

Students consistently highlighted the value of receiving immediate and personalized feedback on their spoken English. Many participants explained that ChatGPT helped them identify errors in pronunciation, grammar, vocabulary use, and sentence structure, allowing them to improve their speaking performance over time.

"What I liked most was that I received feedback immediately after speaking. I could see my mistakes and try again right away." Student 6

"ChatGPT helped me notice grammar mistakes that I usually make when speaking English. After receiving feedback several times, I started avoiding those mistakes." Student 14

Several students also reported improvements in pronunciation and vocabulary development.

"Sometimes ChatGPT suggested better words or expressions. This helped me speak more clearly and use new vocabulary." Student 2

"The feedback on pronunciation was very useful because it showed me words that I was pronouncing incorrectly." Student 20

Students perceived the individualized nature of the feedback as particularly beneficial because it addressed their specific needs and weaknesses rather than providing general comments.

Theme 3: Increased Motivation, Enjoyment, and Autonomous Practice

Another prominent theme concerned the motivational value of ChatGPT-assisted feedback. Students frequently described speaking practice with ChatGPT as engaging, enjoyable, and convenient. The accessibility of the tool encouraged them to practice English more frequently outside the classroom.

"I enjoyed speaking with ChatGPT because it felt like having a conversation partner whenever I wanted." Student 8

"Sometimes I practiced at night or during weekends. I could use it whenever I had free time, which made it easier to improve my speaking." Student 15

Participants also reported that ChatGPT promoted learner autonomy by enabling them to practice independently without relying entirely on teachers or classmates.

"It helped me become more independent. If I wanted to improve my speaking, I could practice by myself without waiting for classroom activities." Student 1

"The more I practiced with ChatGPT, the more motivated I became because I could see my progress." Student 19

These responses indicate that ChatGPT-assisted feedback encouraged students to take greater responsibility for their own language development while maintaining a high level of engagement and interest.

Theme 4: Limitations and Concerns Regarding ChatGPT-Assisted Feedback

Despite the generally positive attitudes expressed by participants, students also identified several limitations associated with ChatGPT-assisted feedback. One of the most common concerns was the preference for human interaction. Although students appreciated ChatGPT's support, many believed that teachers remained essential for effective language learning.

"ChatGPT is helpful, but I still prefer interacting with my teacher because teachers can explain things differently and understand students better." Student 10

"Sometimes I wanted more detailed explanations, and I felt that a teacher could provide better guidance than ChatGPT." Student 7

Students also reported occasional issues related to the accuracy and clarity of feedback.

"There were times when the feedback was too long or difficult to understand, especially when I asked complicated questions." Student 13

"Sometimes I was not sure if the feedback was completely correct, so I checked with my teacher." Student 5

A few participants additionally expressed concerns about becoming overly dependent on AI tools.

"If students use ChatGPT for everything, they might stop trying to think and speak by themselves." Student 22

"It is useful, but we should not depend on it all the time because we still need to practice with real people." Student 9

These concerns demonstrate that while students generally viewed ChatGPT-assisted feedback positively, they also recognized the importance of balancing AI-supported learning with teacher guidance and authentic human interaction.

The findings reveal that Moroccan secondary school students generally hold positive perceptions and attitudes toward ChatGPT-assisted feedback for improving English speaking skills. Students emphasized its role in increasing confidence, reducing speaking anxiety, providing immediate and personalized feedback, and promoting motivation and autonomous learning. At the same time, they acknowledged several limitations, including the need for human interaction, occasional concerns about feedback quality, and the risk of overreliance on AI tools. Overall, the findings suggest that students view ChatGPT as a valuable supplementary resource for speaking development rather than a replacement for teachers or traditional classroom instruction.

Discussion

4.1 ChatGPT and Reduction of Speaking Anxiety

The findings of this study indicate that ChatGPT plays an important role in reducing speaking anxiety among EFL learners. Students reported feeling more comfortable and less afraid of making mistakes when interacting with ChatGPT, which aligns with previous research emphasizing the affective benefits of AI-supported speaking practice. Similar results were reported by studies indicating that ChatGPT can help learners overcome psychological barriers and reduce speaking anxiety by providing a non-judgmental environment for practice (Alshammari, 2024; Almineeai et al., 2025; Shi, 2024; Pratiwi et al., 2024; Khan & Ann, 2025).

Celik et al. (2025) further support this finding, noting that a large proportion of students reported becoming more assertive after receiving feedback from ChatGPT. Likewise, Alsalem (2024) found that ChatGPT positively contributes to reducing English-speaking anxiety by creating a supportive learning environment. Bin-Hady and Al-Humari (2024) also emphasize that AI chatbots help manage learners' emotional challenges by providing continuous feedback and reducing anxiety in speaking tasks. These findings are consistent with the present study, where students expressed that ChatGPT allowed them to speak without fear of embarrassment, reinforcing its role as an emotional scaffold in language learning.

4.2 ChatGPT and Motivation in Speaking Development

The results also show that ChatGPT significantly enhances learners' motivation to practice English speaking. Students in this study reported increased willingness to engage in speaking tasks due to the interactive and responsive nature of ChatGPT. This aligns with prior research highlighting the motivational benefits of AI tools. For example, studies have shown that ChatGPT increases engagement and motivation by providing accessible and understandable responses (Celik, 2025; Alshammari, 2024; Alsalem, 2024; Slamet, 2024). Similarly, Colak (2024) reported statistically significant increases in motivation after ChatGPT-based intervention, while Laili et al. (2025) found that a large percentage of students felt more motivated and confident after using ChatGPT. Moreover, Muniandy and Selvanathan (2024) reported that students expressed increased interest in speaking English when supported by ChatGPT, reinforcing its motivational potential.

4.3 Flexibility, Accessibility, and Independent Learning

Another key finding of this study is that ChatGPT provides learners with flexible opportunities to practice speaking outside the classroom. Students emphasized the ability to practice anytime and anywhere, which supports autonomous learning. This is consistent with previous studies that highlight ChatGPT's flexibility in language learning contexts. For instance, Celik et al. (2025) reported that students appreciated the flexibility of accessing ChatGPT without time constraints. Similarly, Yıldız (2024) found that learners valued the ability to practice speaking outside class at any time. Sarwanti et al. (2024) also noted that students could seek clarification beyond classroom hours, reinforcing the tool's accessibility.

In addition, Shi (2024) and Klimova et al. (2024) describe ChatGPT as enabling scenario-based interaction and instant responses, while Alafnan et al. (2023) emphasize its role as a virtual companion for flexible oral practice. These findings strongly align with the present study, where students highlighted ChatGPT as a tool that supports independent learning and reduces dependence on classroom time.

4.4 Lack of Authentic Human Interaction

Despite its advantages, students in this study also expressed concerns about the lack of authentic human interaction when using ChatGPT for speaking practice. They indicated that while ChatGPT is useful, it cannot fully replace real conversational partners. This finding is consistent with previous research emphasizing the limitations of AI in replicating human interaction. Khzouz et al. (2024) and Shi (2024) note that ChatGPT lacks emotional communication and real-life interactional depth. Similarly, Laili et al. (2025) found that many students still preferred human interaction over AI-based speaking practice. Alsalem (2024) also reported a stronger preference for human partners compared to ChatGPT, despite its usefulness. Van (2024) further supports this by noting that some learners perceive ChatGPT as less effective because it is not a real person. These findings correspond with the present study, where students acknowledged the usefulness of ChatGPT but still valued human interaction as more authentic and meaningful.

4.5 Overreliance and Learning Risks

The findings also reveal concerns regarding potential overreliance on ChatGPT, where students may depend excessively on the tool instead of developing independent speaking skills. This is consistent with previous studies highlighting similar risks. Laili et al. (2025) reported concerns about dependency on ChatGPT in learning contexts. Similarly, Pratiwi et al. (2024) and Khan & Ann (2025) noted that overuse of ChatGPT may reduce learners' ability to engage in real-world communication. Susanto et al. (2025) also found that a considerable proportion of students expressed concerns about overreliance, while Liu et al. (2024) reported issues related to reduced creativity and motivation due to excessive dependence on AI tools. Sarwanti et al. (2024) similarly highlighted fears that ChatGPT may limit peer interaction and collaborative learning.

4.6 Improvement in Speaking Skills and Confidence

Finally, the results indicate that ChatGPT contributes to improving students' speaking confidence, fluency, and grammatical accuracy. Students reported that regular interaction with ChatGPT helped them express ideas more clearly and reduce hesitation. This is supported by several studies showing improvements in speaking performance through AI-supported learning. Farr (2024) and Kara (2024) found that ChatGPT helps learners overcome stress and improve language accuracy, leading to more confident speaking. Bilgin and Yildiz (2024) also highlighted improvements in 21st-century skills, including communication and problem-solving abilities.

Similarly, Abdelaal and Al Sawy (2024) and Escarlos and Tan (2017) found that AI chatbots enhance speaking self-efficacy through individualized feedback in low-anxiety environments. El-Said (2024) further noted that ChatGPT increases learner engagement by providing understandable and immediate responses. These findings strongly support the present study, where

students reported increased confidence and perceived improvement in their speaking abilities after using ChatGPT-assisted feedback.

Conclusion

This study explored Moroccan secondary school students' perceptions and attitudes toward ChatGPT-assisted feedback in developing English speaking skills, with a specific focus on learners' speaking difficulties and their prior experience using the tool. Based on focus group discussions, the findings reveal that ChatGPT is generally perceived as a supportive tool that helps learners reduce speaking anxiety, increase motivation, and practice English more flexibly outside the classroom. Students particularly valued its role in providing immediate feedback, offering opportunities for repeated practice, and creating a low-pressure environment where they could speak without fear of judgment. However, the study also highlighted important limitations. Students expressed concerns about the lack of authentic human interaction, occasional overreliance on the tool, and the fact that ChatGPT cannot fully replicate real communicative experiences. Overall, the findings suggest that ChatGPT functions best as a complementary learning support rather than a replacement for teacher-led instruction or peer interaction in speaking development.

Implications

The findings of this study have several pedagogical implications for EFL teaching in Moroccan secondary schools. First, integrating ChatGPT into speaking instruction can help create additional opportunities for learners to practice English beyond classroom constraints, particularly in contexts where exposure to English is limited. Teachers can guide students on how to use ChatGPT effectively as a speaking partner, especially for practicing dialogues, rehearsing oral tasks, and building confidence. Second, the results suggest that ChatGPT can be used to reduce speaking anxiety, which remains a major barrier for Moroccan EFL learners. Therefore, teachers may consider incorporating AI-based speaking activities as a pre-speaking stage to help students prepare before performing in front of peers or in assessments. Finally, the study highlights the importance of digital literacy instruction. Students need guidance not only in using ChatGPT but also in critically evaluating its output to avoid blind reliance and to ensure meaningful learning.

Limitations of the Study

This study has several limitations that should be acknowledged. First, the sample size was relatively small (22 students), which limits the generalizability of the findings to other educational contexts in Morocco or beyond. Second, participants were selected based on prior experience with ChatGPT, which may have introduced a degree of bias, as these students were already familiar and potentially more positively inclined toward the tool. Third, data were collected only through focus group discussions, meaning that the findings rely solely on self-reported perceptions without triangulation from classroom observation or quantitative speaking performance measures. Additionally, the researcher's dual role as a teacher in the school may have influenced participants' responses despite efforts to ensure confidentiality and reduce bias.

Recommendations for Future Research

Future research could expand on this study in several ways. First, larger-scale studies involving multiple schools and regions in Morocco are recommended to provide more representative findings. Second, future studies could adopt mixed-method or experimental designs to combine student perceptions with measurable speaking performance outcomes, offering a more comprehensive understanding of ChatGPT's impact. Additionally, longitudinal studies are needed to examine whether students' perceptions and reliance on ChatGPT change over time with continued exposure. Future research could also explore teachers' perspectives on integrating ChatGPT into speaking instruction, as well as comparative studies between AI-supported and traditional speaking practice methods. Finally, more attention should be given to strategies that balance AI use with authentic human interaction to ensure sustainable speaking development.

Author's Brief Biography:

Hamza Farhane holds a PhD in Applied Linguistics from the Faculty of Letters and Human Sciences, Dhar Elmahraz, Sidi Mohammed Ben Abdellah University, Fez, Morocco. His research interests include English language teaching (ELT) and the integration of artificial intelligence (AI) in education. He serves as an adjunct professor at the Higher School of Education and Training (ESEF) in Berrechid, Morocco.

Acknowledgement

Artificial Intelligence Statement: AI and AI-assisted technologies were not used

Ethics Approval Statement: This study was conducted in accordance with the principles outlined in the Belmont Report and the Declaration of Helsinki. The research involved minimal risk to participants and was limited to standard educational practices within the classroom.

Disclosure Statement

The authors declare that there is no conflict of interest regarding the publication of this article. No financial, personal, or professional relationships have influenced the research, analysis, or conclusions presented in this work.

Funding Statement

This research paper was not funded by any institutio

References

- [1] Abdelaal, N., & Al Sawy, I. (2024). Perceptions, challenges, and prospects: University professors' use of artificial intelligence in education. *Australian Journal of Applied Linguistics*, 7(1), 1309. <https://doi.org/10.29140/ajal.v7n1.1309>
- [2] Adinda, R., Sosrohadi, S., Syafitri, B. A., & Andini, C. (2025). Cognitive And Cultural Barriers In Synonym Acquisition: A Psycholinguistic Study Of Indonesian Learners Of Korean. *TPM–Testing, Psychometrics, Methodology in Applied Psychology*, 32(4), 881-888.
- [3] AlAfnan, M., Dishari, S., Jovic, M. & Lomidze, K. (2023). ChatGPT as an educational tool: Opportunities, challenges, and recommendations for communication, business writing, and composition courses. *Journal of Artificial Intelligence and Technology*, 3(2). DOI: <https://doi.org/10.37965/jait.2023.0184>
- [4] Albanese, A. M., Russo, G. R., & Geller, P. A. (2019). The role of parental self-efficacy in parent and child well-being: A systematic review of associated outcomes. *Child: Care, Health and Development*, 45(3), 333–363. <https://doi.org/10.1111/cch.12661>
- [5] Aldahhan, A., & Razak, N. A. (2024). The impact of digital platforms on students' communicative competence of Iraqi undergraduate EFL students. *Migration Letters*, 21(7), 1007–1015
- [6] AlGhamdi, R. (2024). Exploring the impact of ChatGPT-generated feedback on technical writing skills of computing students: A blinded study. *Education and Information Technologies*, 29(14), 18901–18926. <https://doi.org/10.1007/s10639-024-12594-2>
- [7] Ali, J. K. M., Shamsan, M. A. A., Hezam, T. A., & Mohammed, A. A. Q. (2023). Impact of ChatGPT on learning motivation: Teachers and students' voices. *Journal of English Studies in Arabia Felix*, 2(1), 41–49. <https://doi.org/10.56540/jesaf.v2i1.51>
- [8] Almineeai, A. M., Alrashed, M. A., Hezam, T. A., Alharthi, A. F., & Alharthi, S. F. (2025). The impact of ChatGPT on EFL medical track students' affective filter. *Journal of Language Teaching and Research*, 16(1), 158–167. <https://doi.org/10.17507/jltr.1601.17>
- [9] Alsalem, M. S. (2024). EFL Students' perception and attitude towards the use of ChatGPT to promote English speaking skills in the Saudi context. *Arab World English Journal*, 15(4), 73–84. <https://doi.org/10.24093/awej/vol15no4.5>
- [10] Alshammari, J. (2024). Revolutionizing EFL learning through ChatGPT: A qualitative study. *Revista Amazonia Investiga*, 13(82), 208–221. <https://doi.org/10.34069/ai/2024.82.10.17>
- [11] Amin, M. Y. M. (2023). AI and Chat GPT in language teaching: Enhancing EFL classroom support and transforming assessment techniques. *International Journal of Higher Education Pedagogies*, 4(4), 1–15. <https://doi.org/10.33422/ijhep.v4i4.554>
- [12] Anggawirya, A. M., Prihandoko, L. A., & Rahman, F. (2021, December). Teacher's role on teaching English during pandemic in a blended classroom. In *International Joined Conference on Social Science (ICSS 2021)* (pp. 458-463). Atlantis Press.
- [13] Ansari, A. N., Ahmad, S., & Bhutta, S. M. (2023). Mapping the global evidence around the use of ChatGPT in higher education: A systematic scoping review. *Education and Information Technologies*, 29(9), 11281–11321. <https://doi.org/10.1007/s10639-023-12223-4>

- [14] Aryadoust, V., Zakaria, A., & Jia, Y. (2024). Investigating the affordances of OpenAI's large language model in developing listening assessments. *Computers and Education: Artificial Intelligence*, 6, 100204. <https://doi.org/10.1016/j.caeai.2024.100204>
- [15] Baidoo-Anu, D., & Ansah, L. O. (2023). Education in the era of generative artificial intelligence (AI): Understanding the potential benefits of ChatGPT in promoting teaching and learning. *Journal of AI*, 7(1), 52–62. <https://doi.org/10.61969/jai.1337500>
- [16] Balci, Ö. (2024). The role of ChatGPT in English as a Foreign Language (EFL) learning and teaching: A systematic review. *International Journal of Current Educational Studies*, 3(1), 1–15. <https://doi.org/10.5281/zenodo.12544675>
- [17] Bellò, B., Mattana, V., & Loi, M. (2018). The power of peers: A new look at the impact of creativity, social context and self-efficacy on entrepreneurial intentions. *International Journal of Entrepreneurial Behavior & Research*, 24(1), 214–233. <https://doi.org/10.1108/ijeb-07-2016-0205>
- [18] Beri, N., & Stanikzai, M. I. (2018). Self-efficacy beliefs, student engagement and learning in the classroom: A review paper. *American International Journal of Research in Humanities, Arts and Social Sciences*, 22(1), 213–222.
- [19] Bii, P. (2013). Chatbot technology: A possible means of unlocking student potential to learn how to learn. *Educational Research*, 4(2), 218–221. <http://www.interestjournals.org/ER>
- [20] Bin-Hady, W. R. A., Ali, J. K. M., & Al-Humari, M. A. (2024b). The effect of ChatGPT on EFL students' social and emotional learning. *Journal of Research in Innovative Teaching & Learning*, 17(2), 243–255. <https://doi.org/10.1108/jrit-02-2024-0036>
- [21] Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77–101.
- [22] Celik, B., Yildiz, Y., & Kara, S. (2025). Using ChatGPT as a virtual speaking tutor to boost EFL learners' speaking self-efficacy. *Australian Journal of Applied Linguistics*, 8(1), 1–17. <https://doi.org/10.29140/ajal.v8n1.102418>
- [23] Chan, C. K. Y. (2023). A comprehensive AI policy education framework for university teaching and learning. *International Journal of Educational Technology in Higher Education*, 20(38), 1–25. <https://doi.org/10.1186/s41239-023-00408-3>
- [24] Colak, M. K. (2024). Enhancing speaking skills through task repetition and ChatGPT integration in remedial EFL lessons: An action research approach. *Focus on ELT Journal*, 6(4), 1–16. <https://doi.org/10.14744/felt.6.4.1>
- [25] Cotton, D. R. E., Cotton, P. A., & Shipway, J. R. (2023b). Chatting and cheating: Ensuring academic integrity in the era of ChatGPT. *Innovations in Education and Teaching International*, 61(2), 228–239. <https://doi.org/10.1080/14703297.2023.2190148>
- [26] Darma, R. N., Syahid, A., Fatma, Ayu, P., Ahmad B., & Rini L. N. (2023). The student's perception of Using ChatGPT for EFL Students. *Jurnal Ilmu Pendidikan Nasional (JIPNAS)*, 1(3), 143–146. <https://doi.org/10.59435/jipnas.v1i3.193>
- [27] El-Said, M. A. (2024). Using ChatGPT to enhance the third preparatory students' performance in English grammar. *CDELTA Occasional Papers in the Development of English Education*, 86(1), 291–316. <https://doi.org/10.21608/opde.2024.362826>
- [28] El-Said, M. A. (2024). Using ChatGPT to enhance the third preparatory students' performance in English grammar. *CDELTA Occasional Papers in the Development of English Education*, 86(1), 291–316. <https://doi.org/10.21608/opde.2024.362826>
- [29] Ericsson, E., & Johansson, S. (2023). English speaking practice with conversational AI: Lower secondary students' educational experiences over time. *Computers and Education Artificial Intelligence*, 5, 1–13. <https://doi.org/10.1016/j.caeai.2023.100164>
- [30] Escarlos, G. S., & Tan, D. (2017). Motives, attitudes and performance of teacher education students. *International Journal of Scientific & Technology Research*, 6(10), 20–25.
- [31] Farr, C. (2024). Unmasking ChatGPT: The Challenges of using artificial intelligence for learning vocabulary in English as an additional language (Doctoral dissertation, Canada). <http://hdl.handle.net/1828/15835>
- [32] Fathi, J., Rahimi, M., & Derakhshan, A. (2024). Improving EFL learners' speaking skills and willingness to communicate via artificial intelligence-mediated interactions. *System*, 121, 10–15. <https://doi.org/10.1016/j.system.2024.103254>
- [33] Fauzi, F., Tuhuteru, L., Sampe, F., Ausat, A., & Hatta, H. (2023). Analysing the role of ChatGPT in improving student productivity in higher education. *Journal on Education*, 5(4). <https://doi.org/10.31004/joe.v5i4.2563>
- [34] Fitria, T. N. (2023). Artificial intelligence (AI) technology in OpenAI ChatGPT application: A review of ChatGPT in writing English essay. *ELT Forum: Journal of English Language Teaching*, 12(1), 44–58. <https://doi.org/10.15294/elt.v12i1.64069>
- [35] Gallacher, A., Thompson, A., & Howarth, M. (2018). "My robot is an idiot!" – Students' perceptions of AI in the L2 classroom. In *Future-proof CALL: language learning as exploration and encounters – short papers from EUROCALL 2018*. <https://doi.org/10.14705/rpnet.2018.26.815>
- [36] Gutai, G., Klímová, B., & Lora, A. P. (2024). A review study of the use of ChatGPT in EFL classes: systematic review. *Journal of Language and Cultural Education*, 12(2), 1–10. <https://doi.org/10.2478/jolace-2024-0007>
- [37] Haggag, M. (2023). A program based on chat generative pre-trained text transformer (Chatgpt) for enhancing EFL majors' descriptive paragraph writing skills and their English grammar use. <http://dx.doi.org/10.21608/mfes.2023.315599>
- [38] Hajovsky, D. B., Chesnut, S. R., & Jensen, K. M. (2020). The role of teachers' self-efficacy beliefs in the development of teacher-student relationships. *Journal of School Psychology*, 82, 141–158. <https://doi.org/10.1016/j.jsp.2020.09.001>
- [39] Hayashi, K., & Sato, T. (2024). The effectiveness of ChatGPT in enhancing English language proficiency and reducing second language anxiety (L2). *WorldCALL2023*, 14(7), 201–208. <https://www.researchgate.net/publication/377752603>

- [40] Hellmich, E. A., Vinall, K., Brandt, Z. M., Chen, S., & Sparks, M. M. (2024). ChatGPT in language education: Centering learner voices. *Technology in Language Teaching & Learning*, 6(3), 1741. <https://doi.org/10.29140/tlvtl.v6n3.1741>
- [41] Issa, F. M. (2024). Using infographics as an educational technology tool in EFL writing: University of Baghdad case study. *Arab World English Journal*, 15(1), 166–181. <https://dx.doi.org/10.24093/awej/vol15no1.11>
- [42] Jamoom, O. A., & Bahron, N. O. (2024). From hesitation to fluency: Unraveling speaking barriers in EFL context. *International Journal of English Literature and Social Sciences*, 9(5), 102–110. <https://ijels.journallit.com/index.php/ijels/article/view/234>
- [43] Jayasinghe, S. (2024). Promoting active learning with ChatGPT: A constructivist approach in Sri Lankan higher education. *Journal of Applied Learning and Teaching*, 7(2), 141–151. <https://doi.org/10.37074/jalt.2024.7.2.26>
- [44] Jeon, J., Lee, S., & Choe, H. (2023). Beyond ChatGPT: A conceptual framework and systematic review of speech-recognition chatbots for language learning. *Computers & Education*, 104898. <https://doi.org/10.1016/j.compedu.2023.104898>
- [45] Jin, Y., Kim, H., Shin, D., & Lee, J. (2019). A study on adopting AI-Based chatbot in elementary English-speaking classes. *Semantic Scholar*, Corpus ID: 219881343
- [46] Kara, S. (2024). Enhancing students' writing competence and 21st-century skills simultaneously via infographics. *Australian Journal of Applied Linguistics*, 7(3), 2044–2044. <https://doi.org/10.29140/ajal.v7n3.2044>
- [47] Karubaba, S., & Rahman, F. (2025). Code-Switching and Code-Mixing in Indonesian EFL Classrooms: Teacher-Student Interactions in North Biak. *Dialectica Online Publishing Journal*, 1(1), 107–115.
- [48] Kasneci, E., Sessler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., Gasser, U., Groh, G., Günemann, S., Hüllermeier, E., Krusche, S., Kutyniok, G., Michaeli, T., Nerdel, C., Pfeffer, J., Poquet, O., Sailer, M., Schmidt, A., Seidel, T., . . . Kasneci, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences*, 103, 1–13. <https://doi.org/10.1016/j.lindif.2023.102274>
- [49] Keleş, P. U., & Aydın, S. (2021). University students' perceptions about artificial intelligence. *Shanlax International Journal of Education*, 9(S1-May). <https://doi.org/10.34293/education.v9is1-may.4014>
- [50] Khan, A. R. B. Z., & Ann, O. W. (2025). The use of artificial intelligence (AI): ChatGPT and mastery of English-speaking skills. *International Journal of Research and Innovation in Social Science*, IX(IV), 6430–6438. <https://doi.org/10.47772/ijriss.2025.90400465>
- [51] Khzouz, A., Salaita, O., Al-Issawi, J. M., AlTaher, B. B., & Alkhenizan, H. H. (2024). Exploring ChatGPT practices and user experiences in learning English skills. *Theory and Practice in Language Studies*, 14(12), 3959–3969. <https://doi.org/10.17507/tpls.1412.31>
- [52] Kim, S., & Park, S. H. (2023). Young Korean EFL learners' perception of role-playing scripts: ChatGPT vs. textbooks. *Korean Journal of English Language and Linguistics*, 23(2), 1136–1153
- [53] Kırmızı, Ö., & Er, H. K. (2024). An examination of the interaction patterns and argumentative quality in collaborative writing. *Novitas-ROYAL (Research on Youth and Language)*, 18(2), 254–269. <https://doi.org/10.5281/zenodo.13924255>
- [54] Kucuk, T. (2023). Students' perceptions of the use of ICT tools in language preparatory school. *Arab World English Journal*, 14(4), 197–212. <https://dx.doi.org/10.24093/awej/vol14no4.12>
- [55] Laili, R. N., Wirawati, W. A., & Nashir, M. (2025). Student's perception on the use of artificial intelligence (ai) ChatGPT in English language learning: Benefits and challenges in higher education. *Edu Cendikia Jurnal Ilmiah Kependidikan*, 4(03), 1389–1403. <https://doi.org/10.47709/educendikia.v4i03.5272>
- [56] Limo, F. A. F., Tiza, D. R. H., Roque, M. M., Herrera, E. E., Murillo, J. P. M., Huallpa, & Gonzáles, J. L. A. (2023). Personalized tutoring: ChatGPT as a virtual tutor for personalized learning experiences. *Przestrzeń Społeczna (Social Space)*, 23(1), 293–312. <https://socialspacejournal.eu/menu-script/index.php/ssj/article/view/176>
- [57] Lin, H., & Chen, Q. (2024). Artificial intelligence (AI)-integrated educational applications and college students' creativity and academic emotions: Students and teachers' perceptions and attitudes. *BMC Psychology*, 12, 1–16. <https://doi.org/10.1186/s40359-024-01979-0>
- [58] Liu, J. (2024). ChatGPT: perspectives from human–computer interaction and psychology. *Frontiers in Artificial Intelligence*, 7, 1–24. <https://doi.org/10.3389/frai.2024.1418869>
- [59] Lo, C. K. (2023). What is the impact of CHATGPT on education? A rapid review of the literature. *Education Sciences*, 13(4), 1–15. <https://doi.org/10.3390/educsci13040410>
- [60] Lund, B. D., & Wang, T. (2023). Chatting about ChatGPT: How may AI and GPT impact academia and libraries? *Library Hi Tech News*, 40(3), 26–29. <https://doi.org/10.1108/lhtn-01-2023-0009>
- [61] Meniado, J. (2023). The impact of ChatGPT on English language teaching, learning, and assessment: A rapid review of literature. *Arab World English Journal*, 14(4), 3–18. <https://doi.org/10.24093/awej/vol14no4.1>
- [62] Moon, H., Chung, Y., & Randolph, A. W. (2025). Teaching and learning languages with ChatGPT: Challenges and opportunities in multilingual classrooms in higher education. *IJELTAL (Indonesian Journal of English Language Teaching and Applied Linguistics)*, 10(1), 207–223. <https://doi.org/10.21093/ijeltal.v10i1.1991>
- [63] Mulyono, H., Sari, R. N., & Ningsih, S. K. (2019). Factors contributing to EFL students' speaking anxiety. *Register Journal*, 12(1), 13–27. <http://dx.doi.org/10.18326/rgt.v12i1.13-27>

- [64] Muniandy, J., & Selvanathan, M. (2024). ChatGPT, a partnering tool to improve ESL learners' speaking skills: Case study in a public university, Malaysia. *Teaching Public Administration*, 43(1), 4–20. <https://doi.org/10.1177/01447394241230152V>
- [65] OECD. (2023). *Digital education outlook 2023*. OECD Publishing. <https://doi.org/10.1787/c74f03de-en>
- [66] Power, R. (2024). Evaluating graduate education students' self-efficacy with the use of artificial intelligence agents: A case study. *Journal of Educational Informatics*, 5(1), 3–19. <https://journalofeducationalinformatics.ca/index.php/JEI/article/view/269>
- [67] Pratiwi, N., Efendy, A. G., Rini, H. C., & Ahmed, N. A. (2024). Speaking practice using ChatGPT's voice conversation: A review on potentials and concerns. *Journal of Language Intelligence and Culture*, 6(1), 59–72. <https://doi.org/10.35719/jlic.v6i1.149>
- [68] Rahman, F. (2024). Cyber Literature and ChatGPT in the Global of IoT Connectivity. In *4th International Conference on Linguistics and Culture (ICLC-4 2023)* (pp. 344–348). Atlantis Press
- [69] Rudolph, J., Tan, S., & Tan, S. (2023). ChatGPT: Bullshit spewer or the end of traditional assessments in higher education? *Journal of Applied Learning & Teaching*, 6(1), 342–356. <https://doi.org/10.37074/jalt.2023.6.1.9> Advantages, Challenges and Prospects of ChatGPT in Oral English Teaching
- [70] Sarwanti, S., Sariosih, Y., Rahmatika, L., Islam, M. M., & Riantina, E. M. (2024). Are they literate on ChatGPT? University language students' awareness, benefits and challenges in higher education learning. *Online Learning*, 28(3), 105–130. <https://doi.org/10.24059/olj.v28i3.4599>
- [71] Shaikh, S., Yayilgan, S. Y., Klimova, B., & Pikhart, M. (2023). Assessing the usability of ChatGPT for formal English language learning. *European Journal of Investigation in Health, Psychology and Education*, 13(9), 1937–1960. <https://doi.org/10.3390/ejihpe13090140>
- [72] Shi, X. (2024). Advantages, challenges and prospects of ChatGPT in oral English teaching. *Transactions on Social Science Education and Humanities Research*, 4, 99–109. <https://doi.org/10.62051/c49b2t84>
- [73] Slamet, J. (2024). Potential of ChatGPT as a digital language learning assistant: EFL teachers' and students' perceptions. *Discover Artificial Intelligence*, 4(1), 1–15. <https://doi.org/10.1007/s44163-024-00143-2>
- [74] Song, C., & Song, Y. (2023). Enhancing academic writing skills and motivation: assessing the efficacy of ChatGPT in AI-assisted language learning for EFL students. *Frontiers in Psychology*, 14. <https://doi.org/10.3389/fpsyg.2023.1260843>
- [75] Susanto, A., Febrianto, N. a. R., Normawati, N. A., Nur, N. a. S. S., & Siboro, N. E. (2025). EFL students' perceptions of the impact of ChatGPT usage on critical thinking skills. *Surakarta English and Literature Journal*, 8(1), 103–117. <https://doi.org/10.52429/selju.v8i1.300>
- [76] Syaripuddin, R. (2024). Enhancing EFL students' oral proficiency: The ChatGPT-assisted debate clinic method. *JELITA*, 5(2), 627–639. <https://doi.org/10.56185/jelita.v5i2.651>
- [77] Syaripuddin, R., Rasyid, A., Darwis, A., Suhria, S., & Hasanuddin, N. (2025). Unlocking the power of ChatGPT: Students' interest in the asian parliamentary debate classroom. *jurnal.uhn.ac.id*, 6(2), 86–96. <https://jurnal.uhn.ac.id/index.php/jetal/article/view/1690>
- [78] Taecharungroj, V. (2023). "What can ChatGPT do?" Analyzing early reactions to the innovative AI chatbot on Twitter. *Big Data and Cognitive Computing*, 7(1). <https://doi.org/10.3390/bdcc7010035>
- [79] Üstünbaş, Ü. (2024). Hey, GPT, can we have a chat?: A case study on EFL learners' AI speaking practice. *International Journal of Modern Education Studies*, 8(1), 91–107. <https://doi.org/10.51383/ijonmes.2024.318>
- [80] Van Horn, K. (2024). ChatGPT in English language learning: Exploring perceptions and promoting autonomy in a university EFL context. *Teaching English as a Second or Foreign Language--TESL-EJ*, 28(1), 1–26. <https://doi.org/10.55593/ej.28109a8>
- [81] Vieriu, A. M., & Petrea, G. (2025). The impact of artificial intelligence (AI) on students' academic development. *Education Sciences*, 15(3), 1–12. <https://doi.org/10.3390/educsci15030343>
- [82] Wang, Y. (2025). A study on the efficacy of ChatGPT-4 in enhancing students' English communication skills. *SAGE Open*, 15(1), 1–17. <https://doi.org/10.1177/21582440241310644>
- [83] Wiboolyasarini, W., & Jinowat, N. (2024). Exploring teachers' experiences in bilingual education for young learners: Implications for dual-language learning apps design. *Iranian Journal of Language Teaching Research*, 12(1), 45–64. <https://doi.org/10.30466/ijltr.2024.121417>
- [84] Woo, J. H., & Choi, H. (2021). Systematic review for AI-based language learning tools. *Computers and Society (cs.CY); Artificial Intelligence (cs.AI)*, arXiv:2111. <https://doi.org/10.48550/arXiv.2111.04455>
- [85] Yamaoka, K. (2024). ChatGPT's motivational effects on Japanese university EFL learners: A qualitative analysis. *International Journal of TESOL Studies*, 6(3), 1–12. <https://doi.org/10.58304/ijts.20240303>
- [86] Yang, H. Kim, H. Lee, J. & Shin, D. (2022). Implementation of an AI chatbot as an English conversation partner in EFL speaking classes. *ReCALL*, 34 (3), 327–343. <https://doi.org/10.1017/S0958344022000039>
- [87] Yao, J. (2024). The application of generative artificial intelligence in education: Potential, challenges, and strategies. *SHS Web of Conferences*, 200, 1–4. <https://doi.org/10.1051/shsconf/202420002008>

- [88] Yaumi, M. T. A. H., Rahman, F., & Sahib, H. (2023). Exploring WhatsApp as Teaching and Learning Activities during Covid-19/New Normal era: A Semiotic Technology Analysis. *International Journal of Current Science Research and Review*, 6(12), 7627-7634.
- [89] Yaumi, M. T. A. H., Rahman, F., & Sahib, H. (2024). Bridging Language and Technology through Semiotic Technology. *International Journal of Social Science Research and Review*, 7(1), 52-61.
- [90] Ye, Y., Deng, J., Liang, Q., & Liu, X. (2022). Using a smartphone-based chatbot in EFL learners' oral tasks. *International Journal of Mobile and Blended Learning*, 14(1), 1–17. <https://doi.org/10.4018/ijmbl.299405>
- [91] Yıldız, C. (2024). ChatGPT integration in EFL education: A path to improved speaking self-efficacy. *Novitas-ROYAL (Research on Youth and Language)*, 18(2), 167–182. <https://doi.org/10.5281/zenodo.13861137>
- [92] Young, J. & Shishido, M. (2023). Investigating OpenAI's ChatGPT potentials in generating chatbot's dialogue for English as a Foreign Language learning. *International Journal of Advanced Computer Science and Applications (IJACSA)*, 14(6). <https://dx.doi.org/10.14569/IJACSA.2023.0140607>
- [93] Zhai, C., Wibowo, S. & Li, L.D (2024). The effects of over-reliance on AI dialogue systems on students' cognitive abilities: a systematic review. *Smart Learn. Environ*, 11, 1-37. <https://doi.org/10.1186/s40561-024-00316-7>