INTERACTION: Jurnal Pendidikan Bahasa Vol. 12, No.3; September 2025
P-ISSN: 2406-9558; E-ISSN: 2406-9566

EFL Students' Perceptions of AI Chatbots in Learning Speaking Skills

Siti Maysuroh
sitimaysuroh@hamzanwadi.ac.id

Zahratul Fikni
zahratulfiknii@gmail.com

Siti Aisyah
aisyahbtfuad1607@gmail.com

Universitas Hamzanwadi

ABSTRACT

The increasing integration of artificial intelligence in education raises questions about how students perceive and engage with AI tools for language learning. This study aimed to explore the perceptions of English education students at Hamzanwadi University regarding the use of ChatGPT in practicing English speaking skills. Using a qualitative descriptive design, data were collected through open-ended questionnaires, classroom observations, and individual interviews with 20 sixth-semester students. The findings revealed that most students held positive perceptions of ChatGPT, citing its accessibility, privacy, and non-judgmental nature as key benefits that enhanced their speaking practice. Furthermore, students reported increased motivation, confidence, and engagement during their interactions with the chatbot, especially due to its 24/7 availability and supportive feedback environment. However, some participants noted limitations in the quality of ChatGPT's feedback, which occasionally lacked depth or contextual understanding. The findings contribute to AI-assisted language learning literature by emphasizing the potential of ChatGPT to support speaking fluency and learner autonomy, especially when complemented by teacher guidance. This research suggests that integrating ChatGPT into EFL classrooms can create low-anxiety, personalized speaking opportunities, while also highlighting the need for pedagogical scaffolding to optimize its use.

Keywords: Perception; AI Chatbots; Speaking Skills

INTRODUCTION

The development of English-speaking skills remains a persistent challenge for learners in the English as a Foreign Language (EFL) context. Speaking is a core skill for real-life communication, academic performance, and professional opportunities, yet many students experience significant barriers in mastering it. Unlike reading and writing, which are often emphasized in formal instruction, speaking requires continuous practice, spontaneous interaction, and confidence to express ideas in real time. Unfortunately, EFL learners frequently lack

opportunities to engage in authentic communication, particularly in contexts where English is not widely used outside the classroom. This lack of exposure, combined with the fear of making mistakes and low self-confidence, often results in students who can perform well in written tasks but hesitate when asked to communicate orally.

The problem is especially relevant in countries like Indonesia, where English is taught primarily as a foreign language and learners have minimal access to real-life communicative situations. In many classrooms, teachers still rely heavily on teacher-centered approaches, with limited time allocated for meaningful speaking practice. Even when group discussions or presentations are conducted, they may not provide the individualized attention students need to improve fluency and accuracy. Consequently, many learners graduate from secondary or even tertiary education with strong grammatical knowledge but weak speaking skills, leaving them unprepared for the demands of global communication.

The urgency of addressing this problem cannot be overstated. English continues to function as the international lingua franca, playing a central role in academic research, international business, cross-cultural exchange, and global mobility. Students who lack speaking proficiency are disadvantaged both in higher education and in the job market, where employers increasingly value effective oral communication. Furthermore, as Indonesian universities aim to strengthen their international presence, the ability of students to communicate in English becomes even more critical. Without deliberate interventions that target speaking skills, students may continue to face barriers to academic and professional advancement.

To bridge this gap, researchers and educators have turned toward technological innovations, particularly Artificial Intelligence (AI), as supplementary tools in language learning. ChatGPT, a generative AI chatbot developed by OpenAI, has recently gained attention for its ability to simulate human-like conversation. Unlike earlier digital tools that focused on drills or limited dialogue, ChatGPT can engage learners in flexible, context-rich conversations that adapt to user input. Its intuitive interface makes it accessible to students with varying levels of digital literacy. At the same time, its real-time feedback provides learners with opportunities to practice language in a supportive, low-stakes environment. These features make it a promising supplement to traditional EFL instruction, especially for speaking skills, which demand practice beyond classroom walls.

Existing research has begun to explore the role of ChatGPT and similar AI tools in language education. For instance, Liu et al. (2023) examined how ChatGPT can support academic writing, demonstrating improvements in structure and coherence. Yang and Lee (2023) investigated its role in enhancing reading comprehension, showing that learners benefited from personalized feedback and interactive questioning. Alharbi (2024) highlighted the tool's contribution to vocabulary acquisition and learner autonomy in Saudi EFL contexts. In relation to speaking, Rahman and Fitri (2023) studied the use of AI chatbots for oral drills but focused

largely on automated assessment rather than on learners' perceptions. Closer to the Indonesian context, Putra (2024) explored AI integration in blended learning courses, but the primary focus was not on speaking practice.

These studies reveal both overlaps and gaps with the current research. Like previous works, this study acknowledges the educational potential of AI in enhancing language learning, particularly its alignment with learner-centered pedagogies. However, most of the existing research has concentrated on reading, writing, or vocabulary, with speaking practice receiving comparatively little attention. Even when speaking has been addressed, it has often been through experimental or quantitative approaches that measure test outcomes rather than capturing learners' lived experiences and perceptions. The novelty of this study lies in its qualitative focus, which seeks to understand how learners themselves perceive the use of ChatGPT for speaking practice. Such an approach provides richer insights into motivation, confidence, challenges, and opportunities that cannot be captured through test scores alone.

The uniqueness of this research is further emphasized when considering the Indonesian context. While AI tools are increasingly being integrated into classrooms worldwide, little is known about how Indonesian EFL learners, particularly those training to become English teachers, perceive these tools. English education students represent a critical group, as their experiences with ChatGPT may influence not only their own proficiency but also how they choose to incorporate AI in their future teaching. Exploring their perceptions provides a double contribution: understanding learner attitudes and informing teacher preparation programs that may integrate AI in the future.

By highlighting students' voices, this research positions learners as active participants rather than passive recipients of technology. It responds to the gap in current literature by focusing specifically on speaking, in contrast to the dominant focus on writing and reading. Moreover, it underscores the importance of context, recognizing that learners' digital readiness, cultural attitudes toward technology, and institutional support shape how tools like ChatGPT are used. These aspects of novelty contribute positively to the broader field of AI-assisted language learning, offering insights that can guide educators, policymakers, and future researchers.

The study is also highly visible and doable. ChatGPT is freely or affordably accessible to most students with an internet connection, making it realistic for use in Indonesian classrooms. Hamzanwadi University provides a practical site for this research, as English education students are motivated to improve their speaking skills and are open to experimenting with new learning tools. The qualitative approach ensures that data collection through interviews and observations can capture nuanced perspectives without requiring extensive technical infrastructure. Furthermore, the increasing institutional interest in integrating AI into education aligns well with the goals of this research, ensuring that its findings will be both relevant and applicable.

Therefore, this study aims to investigate how English education students at Hamzanwadi University perceive the use of ChatGPT for English speaking practice. Specifically, it explores their attitudes, experiences, and challenges in engaging with AI as a language learning tool. By doing so, the study contributes to filling an important research gap, advancing both theoretical and practical understanding of how generative AI can be leveraged to enhance speaking skills in EFL contexts. This paper is structured into the following sections: introduction, literature review, research method, results and discussion, and conclusion.

LITERATURE REVIEW

Previous Related Study

Several previous studies have investigated the role of AI chatbots in English language learning, especially in the context of EFL speaking practice. Liu and Ma (2023) conducted a quantitative study involving 405 university students to measure the use of ChatGPT in informal English learning based on the Technology Acceptance Model (TAM). The results showed that students generally perceived ChatGPT as easy to use, useful, and beneficial for autonomous learning. However, the study did not specifically focus on speaking skills or explore learners' qualitative experiences.

In a different context, Muniady and Selvanathan (2024) conducted a mixed-method case study at a public university in Malaysia to examine how ChatGPT could support ESL learners' speaking skills. Their findings indicated that ChatGPT improved speaking performance and classroom participation, although students also encountered technical and adaptation challenges. This study is relevant due to its similar focus on speaking development, but it was conducted in a flipped classroom setting and combined both quantitative and qualitative methods.

More specifically, Fathi, Rahimi, and Derakhshan (2024) investigated the impact of AI-mediated interactive speaking activities using the Andy English Chatbot on EFL learners' oral performance and willingness to communicate (WTC). Their mixed-method study showed that students in the AI group outperformed those in face-to-face interaction settings in terms of fluency, grammar, vocabulary, and confidence. Participants also expressed positive attitudes toward AI-supported instruction. While this study used a different chatbot, its findings reinforce the potential of AI tools to enhance speaking practice and learner motivation.

Compared to the studies above, the present research uniquely applies a qualitative approach to explore Indonesian EFL students' perceptions of using ChatGPT specifically for speaking skill development. It contributes to the existing literature by providing context-rich insights into learners' personal experiences, interaction patterns, and feedback interpretations when using AI for oral practice.

EFL Students' Perceptions of AI Chatbots in Learning Speaking Skills

Speaking is widely acknowledged as a complex yet essential skill in English as a Foreign Language (EFL) learning. It represents the learner's ability to produce meaningful and fluent language in real-time communication and is often seen as a measure of proficiency (Brown, 1994; Burns & Joyce, 1997). However, in EFL contexts, learners often struggle to develop speaking competence due to psychological barriers, limited access to authentic practice, and traditional instructional approaches that do not sufficiently address real-life interaction (Ur, 1996; Harmer, 2001; Richards, 2008). These challenges necessitate new strategies to promote fluency, reduce speaking anxiety, and provide accessible opportunities for verbal practice.

The emergence of Artificial Intelligence (AI), particularly AI-powered chatbots, offers innovative ways to address these challenges. AI chatbots are intelligent systems that simulate human conversation using natural language processing, and they have gained traction as digital tools to support language learning (Adamopoulou & Moussiades, 2020; Huang et al., 2023). In EFL classrooms, chatbots like ChatGPT enable learners to engage in spontaneous, judgment-free interaction, thus reducing anxiety and building confidence (Fathi et al., 2024). These tools also support learner autonomy, allow self-paced learning, and provide instant feedback, making them suitable for speaking practice outside traditional settings (Labadze et al., 2023; Kasneci et al., 2023).

Nevertheless, AI chatbots present some limitations, such as the risk of misinformation (hallucination), lack of nuanced feedback, and inability to assess paralinguistic features such as intonation and facial expressions (Bender & Koller, 2020; Sharadgah & Sa'dī, 2022). Moreover, their effective use requires digital literacy and critical thinking. Despite these concerns, the pedagogical potential of AI chatbots remains significant, particularly when integrated with teacher guidance to complement traditional methods.

Several previous studies support the integration of ChatGPT in EFL instruction. Liu and Ma (2023) found that students perceived ChatGPT as a useful and easy-to-use tool for informal language learning, fostering autonomy and engagement. Muniady and Selvanathan (2024) demonstrated that ChatGPT improved speaking confidence and participation in a flipped classroom context, although some limitations, such as delayed feedback, were noted. While these studies affirm the usefulness of ChatGPT, they largely employed quantitative or mixed methods and were conducted outside the Indonesian context. This indicates a research gap and the need for further investigation in diverse educational settings.

To guide the current study, this research draws upon constructivist learning theory by Piaget (1972) and Vygotsky (1978), which emphasizes active knowledge construction and the importance of interaction in learning. ChatGPT aligns with these principles by providing interactive learning environments where students can

experiment, receive feedback, and build their language skills within the Zone of Proximal Development (ZPD). Furthermore, the concept of AI-Assisted Language Learning (AIALL) proposed by Huang et al. (2023) reinforces how AI tools can support fluency, confidence, and learner agency in language acquisition.

Within this framework, the study focuses on three main variables: speaking skills, students' perceptions, and the use of AI chatbots in language learning. Speaking skills, particularly in the context of EFL, are recognized as a productive ability that integrates linguistic, cognitive, and social components. Harmer (2001) describes speaking as a real-time, interactive process involving fluency, accuracy, vocabulary, and pronunciation, while also demanding sociolinguistic and discourse competence. In EFL settings, speaking becomes even more challenging due to limited authentic interaction and students' psychological barriers, such as anxiety and low self-confidence. Richards (2008) notes that EFL learners often experience inhibition and reduced participation, which may hinder oral development and decrease motivation.

Students' perception is another critical variable in this study, particularly because it shapes how they respond to educational technologies. Perception involves the way students interpret and make meaning from their learning experiences. According to Huang et al. (2023), positive perceptions of technology in language education can enhance students' willingness to communicate and foster greater engagement. Conversely, negative perceptions may reduce learners' confidence and limit their use of available tools. Understanding students' perceptions provides educators with valuable insight into how learning tools such as chatbots are received and can inform instructional decisions.

The third variable is the use of AI chatbots as a technological intervention. AI chatbots like ChatGPT, powered by natural language processing, offer new opportunities for language learning by simulating human-like conversations. These tools support learner autonomy, provide instant feedback, and enable speaking practice in low-pressure environments. Fathi, Rahimi, and Derakhshan (2024) found that AI-mediated interaction significantly improved learners' speaking fluency and their willingness to communicate. Similarly, Huang et al. (2023) emphasized that AI chatbots contribute to the development of speaking skills by offering interactive and personalized learning experiences. Still, some limitations remain, such as the inability to assess paralinguistic features like intonation and body language, as well as risks related to AI hallucinations or misinformation (Kasneci et al., 2023).

The interaction between these three variables, students' speaking skills, their perceptions, and the use of AI chatbots, forms the foundation of this study. Drawing from constructivist learning theory, particularly the ideas of Piaget (1972) and Vygotsky (1978), the study assumes that learners actively construct knowledge through meaningful engagement and interaction. AI chatbots function as digital mediators that support learners within their Zone of Proximal Development (ZPD),

helping them practice speaking in ways that are personalized, autonomous, and contextually relevant.

This literature review integrates theoretical perspectives with empirical findings, underscoring the importance of exploring EFL students' perceptions of AI chatbots in speaking practice. In contexts like Indonesia, where opportunities for authentic communicative practice are often limited, the use of AI-powered tools such as ChatGPT presents both possibilities and challenges. This study aims to contribute to the growing body of research on AI-mediated language learning by examining how students perceive and engage with AI chatbots as part of their speaking development.

METHOD

Design and Samples

This study employed a qualitative descriptive design to explore how English education students perceived the use of ChatGPT as a tool for English-speaking practice. The participants were twenty-sixth-semester students from Class A of the English Education Study Program at Hamzanwadi University. They were selected through purposive sampling based on their prior experience with or interest in using ChatGPT for speaking tasks. These students had completed relevant speaking courses and were capable of providing insights based on their autonomous and classroom-based interactions with AI chatbots. Data were collected during the even semester of the 2024/2025 academic year through classroom observation, an open-ended questionnaire, and individual interviews.

Instrument and Procedure

This study employed three primary instruments to collect qualitative data: an open-ended questionnaire, a classroom observation sheet, and a semi-structured interview guide. Each instrument served to capture different dimensions of the students' experiences and perceptions of using ChatGPT in English-speaking practice. The open-ended questionnaire consisted of two sections: (1) Likert-scale items that measured students' motivation, confidence, and perceptions of usefulness, and (2) open-ended questions that invited detailed responses regarding their experiences. The questionnaire was administered following a video stimulus and a speaking session using ChatGPT. Its purpose was to elicit students' initial impressions and reflective insights immediately after the practice activity.

The classroom observation sheet was used during the speaking session with ChatGPT. It enabled the researcher to document students' verbal expressions, non-verbal behaviors, and interaction patterns during their engagement with the AI chatbot. The observation focused on signs of engagement, emotional responses, and fluency performance in a naturalistic classroom setting. The interview guide

consisted of several open-ended prompts used for follow-up conversations conducted through virtual chat. Two to three students were purposively selected based on their questionnaire responses to elaborate on their individual motivations, emotional responses, perceived benefits, and encountered challenges. These semi-structured interviews provided deeper context and personal narratives that complemented the written and observed data.

The data collection procedure was conducted in two stages. In the first meeting, students were shown a video stimulus illustrating how ChatGPT could be used for speaking practice. They subsequently engaged in speaking activities using ChatGPT, during which the researcher conducted classroom observations. At the end of the session, they completed the questionnaire. In the second meeting, individual virtual interviews were conducted with selected students to triangulate and enrich the findings.

Data Analysis

The data in this study were analyzed using a thematic analysis approach to interpret the students' perceptions of using ChatGPT in English-speaking practice. Thematic analysis is a widely used method in qualitative research that involves identifying, analyzing, and reporting patterns or themes within the data. This process began with the transcription of all data sources, including responses from open-ended questionnaires, field notes from classroom observations, and transcripts of individual interviews conducted via virtual chat.

After transcription, the researcher read the data repeatedly to become familiar with its content. Important phrases and ideas were highlighted to identify meaningful units. These units were then assigned initial codes representing specific thoughts or experiences expressed by the participants. Through constant comparison, similar codes were grouped into broader categories. From these categories, the researcher developed key themes that represented the core perceptions shared by the participants.

To ensure the validity of the analysis, the data were triangulated by comparing findings from multiple sources: questionnaires, classroom observations, and interviews. This method enhanced the credibility of the results by confirming that themes were consistently observed across different types of data. Furthermore, the interpretation of the data was informed by the theoretical frameworks of Constructivism (Piaget, 1972; Vygotsky, 1978) and AI-Assisted Language Learning (Huang et al., 2023), allowing for deeper insight into how students constructed their understanding through interaction with AI tools.

The final themes captured both the positive and critical aspects of students' experiences, such as increased speaking confidence, flexible engagement, and challenges in receiving personalized feedback. These themes were then discussed in relation to the research questions and the broader literature, providing a

comprehensive view of the impact of ChatGPT in supporting speaking practice among EFL students.

RESULTS AND DISCUSSION

The findings of this study reveal that the integration of ChatGPT in speaking practice has generally been perceived positively by the English education students at Hamzanwadi University. The data were obtained through classroom observation, open-ended questionnaires, and individual interviews, and were analyzed thematically. The following discussion presents key themes emerging from the research and relates them to previous studies and theoretical frameworks.

Psychological Safety in AI-Mediated Speaking Practice

One of the most prominent findings was that students perceived ChatGPT as providing a safe and non-judgmental environment for practicing their English-speaking skills. In traditional classrooms, students often hesitate to participate actively due to fear of making mistakes or being judged by peers. With ChatGPT, they felt more comfortable experimenting with new vocabulary and structures without embarrassment. Observations confirmed this, showing increased verbal participation, relaxed non-verbal behavior, and greater engagement during AI-mediated sessions. These findings align with Derakhshan (2025), who emphasized that AI-supported learning platforms enhance emotional engagement by creating psychologically safe spaces for learners. In this way, ChatGPT reduced affective barriers, an essential factor in improving learners' willingness to communicate.

Motivation, Confidence, and Learner Autonomy

Closely connected to the sense of safety was a notable increase in students' motivation and confidence. Many participants described how ChatGPT's accessibility, being available anytime and anywhere, allowed them to practice repeatedly at their own pace. This autonomy encouraged more frequent language use and supported the development of speaking fluency outside the classroom. Some students even noted that the novelty of using advanced technology added to their enthusiasm. These affective gains echo the findings of Wang et al. (2024), who observed higher willingness to communicate (WTC), reduced foreign language speaking anxiety (FLSA), and improved self-perceived communicative competence (SPCC) among students using generative AI tools. Antony and Ramnath (2023) also highlighted that AI chatbots promote learner autonomy and engagement, supporting the results of this study.

Feedback Limitations and the Need for Teacher Mediation

Despite the positive responses, several students raised concerns about ChatGPT's feedback. They felt it was often too general or insufficiently detailed to help them correct specific errors effectively. For example, grammatical mistakes were

sometimes corrected without explanation, and feedback on pronunciation or discourse patterns was absent. Some students sought clarification from peers or teachers, showing that ChatGPT alone was not enough for deep learning. This limitation is consistent with Mohamed (2024), who warned that while ChatGPT supports surface-level learning, it lacks the depth required for critical thinking and personalized guidance. Thus, while ChatGPT can serve as a supplementary practice tool, teacher mediation remains essential for scaffolding students' learning within their Zone of Proximal Development (Vygotsky, 1978).

Interactivity and Emotional Engagement

Another theme was the mixed perception of ChatGPT's interactivity. Students valued its ability to maintain conversations and generate prompts, simulating human-like exchanges that encouraged them to keep speaking. However, many acknowledged that the absence of emotional interaction limited ChatGPT's effectiveness. Unlike human partners, ChatGPT could not convey empathy, humor, or cultural nuance. For some learners, this lack of emotional connection reduced its value as a speaking partner. These findings are consistent with Huang et al. (2024), who noted that while AI tools support flexibility and personalization, they are most effective when complemented by human interaction and social support.

Digital Literacy and Critical Thinking

The study also highlighted the role of digital literacy. While most students found ChatGPT easy to use, some reported difficulties in creating effective prompts or interpreting AI-generated responses. Without sufficient digital skills, students risked misusing or misinterpreting the tool's feedback. This underscores the need to integrate digital literacy training into EFL instruction. Kasneci et al. (2023) stressed that critical thinking and digital literacy are prerequisites for maximizing the benefits of AI in education, a finding echoed in this study.

This study contributes by contextualizing how AI chatbots are received in an Indonesian university classroom. While previous studies such as Liu and Ma (2023) and Muniady and Selvanathan (2024) explored ChatGPT's potential to improve confidence and engagement, they were largely conducted outside Indonesia and relied on quantitative or mixed methods. By contrast, this study employs qualitative methods and focuses specifically on speaking practice, a skill that combines linguistic knowledge with motivation, confidence, and real-time interaction. The use of thematic analysis and triangulation strengthens the validity of findings, offering richer insights into AI's pedagogical potential.

The results suggest that ChatGPT is valued as an accessible, safe, and motivating platform for speaking practice. However, its limitations—such as generic feedback and lack of emotional engagement—mean that it should be integrated as a complementary tool rather than a substitute for teacher-led instruction. For educators, this highlights the need to balance AI-mediated practice with human

guidance and peer interaction, ensuring that learners benefit from both technological innovation and authentic communication.

The integration of ChatGPT into speaking practice offers significant pedagogical promise by reducing anxiety, fostering motivation, and providing flexible opportunities for practice. At the same time, its shortcomings reinforce the importance of teacher mediation, emotional interaction, and digital literacy. Future research could expand on these findings by examining long-term impacts, testing ChatGPT with different proficiency levels, and exploring hybrid models that combine AI tools with collaborative human-centered learning.

CONCLUSION

This study explored English education students' perceptions of using ChatGPT to support speaking skill development. Based on data from questionnaires, classroom observation, and interviews, the findings revealed that ChatGPT was positively received as a supportive, flexible, and non-judgmental tool. Most students felt more confident and motivated when using ChatGPT, and they appreciated its 24/7 availability for self-paced speaking practice. In terms of affective impact, students experienced increased engagement and were willing to communicate more openly during AI-assisted sessions. Although some limitations were noted, particularly the lack of nuanced feedback, ChatGPT still provided valuable corrective input that encouraged learners to reflect and self-improve. ChatGPT has demonstrated its potential as a supplementary tool in EFL speaking instruction. While it cannot replace teacher-led feedback, it offers meaningful opportunities for independent practice and helps reduce speaking anxiety in language learning environments.

REFERENCES

Adamopoulou, E., & Moussiades, L. (2020). An overview of chatbot technology. In I. Maglogiannis, L. Iliadis, & E. Pimenidis (Eds.), *Artificial intelligence applications and innovations* (pp. 373–383). Springer. https://doi.org/10.1007/978-3-030-49186-4_31

Bender, E. M., & Koller, A. (2020). Climbing towards NLU: On meaning, form, and understanding in the age of data. In *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics* (pp. 5185–5198). Association for Computational Linguistics. https://aclanthology.org/2020.acl-main.463

Brown, H. D. (1994). *Teaching by principles: An interactive approach to language pedagogy*. Prentice Hall Regents.

Burns, A., & Joyce, H. (1997). *Focus on speaking*—National Centre for English Language Teaching and Research.

Derakhshan, A. (2025). EFL students' perceptions about the role of generative artificial intelligence (GAI)-mediated instruction in their emotional engagement and goal orientation: A motivational climate theory (MCT)

perspective in focus. *Learning and Motivation, 90,* 102114. https://doi.org/10.1016/j.lmot.2025.102114

Fathi, J., Rahimi, M., & Derakhshan, A. (2024). Improving EFL learners' speaking skills and willingness to communicate via artificial intelligence-mediated interactions. *System, 121,* 103254. https://doi.org/10.1016/j.system.2024.103254

Harmer, J. (2001). *The practice of English language teaching* (3rd ed.). Longman.

Huang, W., Hew, K. F., & Fryer, L. K. (2023). Chatbots for language learning—Are they really useful? A systematic review of chatbot-supported language learning. *Journal of Computer Assisted Learning, 39*(1), 1–20. https://doi.org/10.1111/jcal.12610

Huang, W., Zhang, Z., & Zeng, Y. (2024). Research on university students' intention to use AI assistance in cross-cultural learning. *ICEB 2024 Proceedings (Zhuhai, China),* 36. https://aisel.aisnet.org/iceb2024/36

Labadze, L., Dundua, T., & Mkervalishvili, N. (2023). Chatbots as virtual learning assistants: Transforming education with AI. *International Journal of Educational Technology in Higher Education, 20*(1), 1–17. https://doi.org/10.1186/s41239-023-00426-1

Liu, G., & Ma, C. (2023). Measuring EFL learners' use of ChatGPT in informal digital learning of English based on the technology acceptance model. *Innovation in Language Learning and Teaching, 18*(2), 125–138. https://doi.org/10.1080/17501229.2023.2240316

Mohamed, A. M. (2024). Exploring the potential of an AI-based chatbot (ChatGPT) in enhancing English as a foreign language (EFL) teaching: Perceptions of EFL faculty members. *Education and Information Technologies, 29,* 3195–3217. https://doi.org/10.1007/s10639-023-11917-z

Muniady, J., & Selvanathan, M. (2024). ChatGPT. A partnering tool to improve ESL learners' speaking skills: Case study in a public university, Malaysia. *Teaching Public Administration.* https://doi.org/10.1177/01447394241230152

Piaget, J. (1972). *The psychology of the child*. Basic Books.

Richards, J. C. (2008). *Teaching listening and speaking: From theory to practice*. Cambridge University Press.

You are, P. (1996). *A course in language teaching: Practice and theory*. Cambridge University Press.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Wang, C., Zou, B., Du, Y., & Wang, Z. (2024). The impact of different conversational generative AI chatbots on EFL learners: An analysis of willingness to communicate, foreign language speaking anxiety, and self-perceived communicative competence. *System, 127,* 103533. https://doi.org/10.1016/j.system.2024.103533