Examining the Impact of AI-Assisted Preparation on Vietnamese EFL Learners' Willingness to Communicate in English

Dao Le Trong Nhan[1*]

[1] Saigon University, Vietnam
[*]Corresponding author's email: dltnhan@sgu.edu.vn
[*] https://orcid.org/0009-0004-7924-4741
https://doi.org/10.54855/979-8-9870112-9-4_6

Received: 06/09/2025 Revision: 26/01/2026 Accepted: 06/02/2026 Online: 24/02/2026

ABSTRACT

Recent developments in artificial intelligence (AI) have enhanced its ability to support learners' spoken communication. However, research on the viability of text-based chatbots as aids for speaking preparation remains limited. The study aims to investigate whether a ChatGPT-supported preparation process for speaking enhances 42 Vietnamese English-major students' willingness to communicate (WTC) in spoken English during a classroom session and to explore its benefits and challenges. Using a mixed-methods design with surveys and thematic analysis, the study found that students' WTC improved significantly after the ChatGPT-assisted preparation process. However, no significant correlation was identified between students' post-WTC and post-survey self-confidence. Despite having concerns about AI-generated content, students mostly utilized ChatGPT for brainstorming and language assistance. Additionally, idea quality and language usage were perceived to be enhanced after using AI. These findings highlight the potential of AI as a complementary learning tool to support spoken communication, with teacher guidance and support.

Keywords: AI tool, oral communication, willingness to communicate, EFL learners

Introduction

Chatbots powered by AI can respond instantaneously and simultaneously to multiple user requests with remarkable accuracy, thanks to their access to vast amounts of trained data. Studies have illustrated that incorporating AI into English learning classes might be beneficial for learners' individualized learning experience (Dai & Liu, 2024), emotions (Yang & Zhao, 2024), critical thinking and autonomy (Xu & Liu, 2025), and interactive speaking performance as well as perceived interactions with peers and teachers in a flipped-learning context (Jeon & Lee, 2024). Despite having numerous advantages, issues with artificial intelligence pertaining to a reduction in creativity, critical thinking (Dai & Liu, 2024), ethical issues (Gayed, 2025), and contextualization (Li & Zhao, 2025) persist. Furthermore, while research had demonstrated the prospect of employing AI to support the development of EFL learners (Dai & Liu, 2024; Jeon & Lee, 2024; Xu & Liu, 2025; Yang & Zhao, 2024), there seems to be a gap of empirical

CITATION | Dao, L. T. N. (2026). Examining the Impact of AI-Assisted Preparation on Vietnamese EFL Learners' Willingness to Communicate in English. *ICTE Conference Proceedings, 9*, 86-106. ISSN: 2834-0000, ISBN: 979-8-9870112-9-4. DOI: https://doi.org/10.54855/979-8-9870112-9-4_6

studies investigating whether these positive aspects of AI could be utilized for the enhancement of students' willingness to communicate, particularly in spoken English, and whether the incorporation of AI could alleviate some of the problems associated with students' willingness to communicate, such as anxiety, learning environments, or self-confidence (Darasawang & Reinders, 2021; Elahi Shirvan et al., 2019; Khajavy et al., 2018).

These issues would remain obstacles to students improving their speaking skills unless resolved. With limited studies investigating AI and learners' willingness to communicate in a classroom environment, the present study aims to address this gap by analysing whether the employment of AI chatbot, particularly ChatGPT as a preparatory tool for speaking, could enhance students' willingness to communicate in English in a classroom context. It also explores learners' use of ChatGPT, their perceived improvements, and issues that arose during its use, to provide comprehensive insights that enable practical recommendations for incorporating AI technologies to facilitate students' WTC in the classroom. In the present study, WTC refers to WTC in English, measured via communicative behaviours, as in how students would respond to certain classroom activities, along with another common influential factor, self-confidence (SC), which includes communication anxiety and self-perceived competence (MacIntyre et al., 1998; Chaisiri, 2023; Kim & Su, 2024; Zhang et al., 2024). The study aims to answer the following research questions:

1. To what extent does preparation with ChatGPT improve students' willingness to communicate in English?
2. What are the beneficial impacts of ChatGPT-assisted preparation on students' speech?
3. What difficulties are encountered by students when utilizing ChatGPT for speaking preparation?

Literature review

Willingness to communicate

The term willingness to communicate, as defined by MacIntyre et al. (1998), denotes a readiness to engage in communication with others on a specific occasion. In the context of English learning, it is vital for EFL learners to practice English frequently, as through trial and error, they can gradually become more proficient in the language. For this reason, willingness to communicate (WTC) has been a frequent topic of discussion among educators, with numerous studies investigating this phenomenon (Chaisiri, 2023; Fathi et al., 2024; Zhang et al., 2024).

Willingness to communicate originally was associated with communication in L1 (MacIntyre et al., 1998). In the context of L1 communication, WTC was defined as individuals' probability of engaging in and communicating with others when opportunities arose (MacIntyre et al., 1998). However, compared to L2 WTC, the L1 WTC was mostly concerned with trait-like variables, which were essentially personality traits that remained stable regardless of the situation. This disparity was probably due to the social contexts in which the language is being used and the speaker's level of linguistic competence. While L1 users are most likely to be already competent in their own language, as they grow up with it and employ it on a daily basis, the competency level of L2 users can vary, meaning that there can be situations in which certain groups of L2 users may be more inclined to communicate in the second language compared to others. With its roots in L1, WTC in L2 was expanded to include both written and oral forms of communication, and WTC was believed to be influenced by situational-based and enduring, or stable, variables (MacIntyre et al., 1998). The renewed concept of L2WTC in the context of

communicating in a second language was supported by several studies, as the probability of engaging in L2 communication could be influenced by a wide range of factors, including an individual's proficiency (Sato, 2023; Welesilassie & Nikolov, 2024), relations with interlocutors (Tavakoli & Davoudi, 2017), learners' grit (Ebn-Abbasi & Nushi, 2022), sex and age (MacIntyre et al., 2002), or learning environment (Alam et al., 2022).

Factors influencing students' L2 WTC

To illustrate the interrelations of factors affecting learners' L2 WTC, MacIntyre et al. (1998) proposed a heuristic model of WTC with six layers. The first three layers (I, II, III) were regarded as transient, or situation-specific elements, whereas the remaining layers (IV, V, VI) were linked to stable, or enduring, traits.

The very first layer refers to the authentic use of L2, which results from various interactions among underlying variables, including enduring and situational ones. As a direct influence of the actual L2 use, the second layer pertains to the WTC, which is a behavioural intention found by past studies to possess either direct or indirect relationships with multiple ranges of variables from other layers, including motivational factors (Ebn-Abbasi & Nushi, 2022; Solhi, 2024), self-confidence, particularly anxiety and self-perceived competence (Elahi Shirvan et al., 2019; Fallah, 2014; Lee & Hsieh, 2019; MacIntyre et al., 2002), and teacher-student interactions (Fallah, 2014; Hu & Wang, 2023; Tavakoli & Davoudi, 2017). Layer three involves situated antecedents of communication, consisting of a desire to communicate with a specific person and state communicative self-confidence (MacIntyre et al., 1998). While sharing similar concepts of a combination of anxiety and self-perceived competence, the state communicative self-confidence in layer three was distinguishable from the L2 self-confidence (Layer four) as a situation-specific rather than a stable characteristic. Similarly, the communicative competence (Layer five) refers to a range of competencies, including linguistic, discourse, actional, sociocultural, and strategic competence. The last layer encompasses the dynamic relations between societal and individual elements, which served as a foundation for the upper layers.

Although the enhancement of learners' L2 WTC was often attributed to the interaction among several variables, self-confidence, which combined the concept of communication anxiety with self-perceived competence (MacIntyre et al., 1998), was often a significant factor contributing to improvements in communication willingness in the second language. Peng and Woodrow (2010) conducted a large-scale study to examine the relations between various variables and students' WTC in English, and the results indicated that confidence was the most significant predictor of WTC. Their study's findings were consistent with those of Riasati (2018), who examined Iranian EFL learners' WTC and found that anxiety, self-perceived competence, and motivation were the determining factors influencing students' WTC. Moreover, anxiety emerged as the most significant predictor among the three, followed by motivation and self-perceived competence. This implies that, when considered as a singular construct, self-confidence, which involves communication anxiety and self-perceived competence (MacIntyre et al., 1998), was likely the most substantial predictor of learners' WTC. In line with those studies, Yashima (2002) also reported that learners' self-confidence had a strong and direct impact on L2 WTC, highlighting the significance of this communicative variable. While motivation did not have a direct impact on L2 WTC in previous studies, Fallah's (2014) findings demonstrated a contrary result, indicating a significant and direct impact of motivation on L2 WTC, along with another key predictor, self-confidence. From a different perspective, Solhi (2024) found that L2 WTC was adversely affected by learners' levels of anxiety and demotivation both in-person and online learning contexts, suggesting that a reduction of these negative emotions would lead to improved L2 WTC. While L2 anxiety had a direct impact on

both face-to-face and online learning (Solhi, 2024), it was a stronger predictor for the online context. These results suggested that the variable of communication anxiety, part of the self-confidence construct, may be influenced by the learning context. Thus, further research may be necessary to determine whether this negative emotion may have significant impact on L2 WTC when AI chatbots were incorporated into language learning in the classroom context.

Nevertheless, those past research, regardless of the context, underscored the consistent prevalence of self-confidence or anxiety in particular as the primary influential factor of learners' L2 WTC. Furthermore, another significant predictor, motivation, was frequently shown to indirectly influence learners' L2 WTC through self-confidence, thereby reinforcing its importance and relevance in assessing learners' willingness to engage in communication in the second language. In the present study, the variable of self-confidence was operationalized as a singular construct, consisting of communication anxiety and self-perceived competence, that has an impact on learners' WTC (MacIntyre et al., 1998). Willingness to communicate, based on MacIntyre et al. (1998), was defined as the probability of learners to engage in communication with one or more individuals at a specific occasion. However, the growth of technology, particularly the fast-paced advancement of AI chatbots, may influence the impact of self-confidence on in-person L2 WTC due to the convenient access to knowledge and support at any time.

Benefits and challenges of AI in language education

Dai and Liu (2024) sought to investigate the perception of Chinese EFL students of various ages and academic backgrounds regarding the use of AI in EFL classrooms and discovered that AI helped to facilitate their autonomy, motivation, self-confidence, and interest, which were comparable to the results gathered from a university context, indicating potential improvement in motivation and learners' autonomy at other educational levels (Vo & Tran, 2025). Similarly, their findings were corroborated by Jeon and Lee (2024), despite their focus being limited to elementary school students learning English. Their study indicated that integrating AI into instructions could enhance students' interactive speaking performance and their perceived interactions with peers and instructors. The students were also reported to experience increased motivation to interact owing to the stress-free environment provided by practicing with the chatbot, with only a small group indicating a desire to interact with human partners after using the chatbot. This suggests the potential to enhance interactions with human interlocutors under certain settings, as motivation was also found to be a factor influencing learners' L2 WTC (Peng & Woodrow, 2010; Riasati, 2018).

The advantages of AI were similarly evident from the perspective of instructors, who generally viewed AI tools positively, though some expressed feelings of unpreparedness or a lack of guidance (Gayed, 2025). Furthermore, AI could be utilized in various ways to support students (Gayed, 2025), or to create exam preparation materials with great efficiency (Alkhateeb et al., 2025). On a grander scale, Li and Zhao (2025) conducted a thorough analysis of 28 empirical studies regarding the advantages and challenges of employing AI-powered technologies in the EFL context. Their research revealed that, in addition to facilitating positive emotions, AI tools might improve EFL learners' fluency and provide real-time feedback. In general, these studies collectively demonstrated the potential of AI, in terms of its mental and linguistic assistance, to be effectively utilized in educational settings to enhance L2 communication among students and with teachers.

Nevertheless, while having numerous benefits for language learners as well as educators, there were some ethical, legal, and societal concerns with the integration of AI into language

instruction. Some challenges appeared to mainly revolve around the long-term effects, such as their creativity, problem-solving, and critical thinking skills, and privacy (Dai & Liu, 2024), adding to the overall fear of being overly dependent on AI tools (Duong & Nguyen, 2024). Concerns pertaining to language teaching were also raised, including cost-effectiveness, technical issues, and cultural adaptability (Li & Zhao, 2025). Additionally, despite the potential of AI-powered technologies, they lacked certain emotional reactions similar to those of humans (Li & Zhao, 2025), and they still required human monitoring and assessment to mitigate potential biases or errors (Alkhateeb et al., 2025).

Impact of technology on students' willingness to communicate in the classroom

Technology can be used as a mediated tool to assist learners in a virtual classroom, allowing them to upload videos, prepare for oral tasks, and reflect after the lesson (Chaisiri, 2023). Its use to support students' language skills, such as using a learning app to improve speaking skills, also appeared to yield positive results, including enhanced fluency (Tran, 2024). Moreover, technology-assisted speech-to-text tools could be employed to transcribe learners' speech and allow students to identify their own mistakes (Jiang et al., 2023), which might have given them more confidence and thus enhanced their WTC. It was observed that most of the benefits from using technology stemmed from its convenience and utility. Thus, it could be expected that artificial intelligence chatbots would further enhance learners' experience.

Studies examining the relationship between learners' L2 WTC and the application of AI have been consistent with past research and have reinforced the usefulness of chatbots. Fathi et al. (2024) demonstrated increases in learners' speaking skills and WTC, and cited the chatbot as useful for providing feedback on pronunciation and grammar and for offering more practice opportunities. These psychological and linguistic benefits were again observed in the study by Kim and Su (2024), which explored AI chatbots' impact on learners' L2 WTC in Korean. Their study, in a similar vein to previous research, highlighted reductions in anxiety and improvements in students' WTC in a foreign language. Zhang et al. (2024) studied the impact of an AI chatbot on the WTC in English of Chinese EFL learners. Notably, it was mentioned that the participants were rather reserved and often experienced anxiety in speaking classes. The study's findings were not only supported by others (Fathi et al., 2024; Kim & Su, 2024) but also underscored vital characteristics that distinguished AI from other technological tools, such as their capacity to provide constructive and contextualized feedback, creating an authentic feeling of interacting with an actual individual.

Overall, the impact of AI on learners' L2 WTC was often significant, primarily due to AI's capacity for real-time feedback, which engaged learners, and the low-pressure environment it provided, which encouraged students to utilize the chatbot for learning assistance. Additionally, the capacity to utilize AI may significantly impact their WTC in the second language with the AI's assistance (Zhang et al., 2025), as it could influence their anxiety and self-efficacy in utilizing the AI, both of which may affect their interaction with the chatbot, and subsequently, their L2 WTC.

Although the majority of research on the application of AI to enhance learners' L2 WTC has yielded favourable outcomes, the integration of AI predominantly occurred throughout the process of intervention, including spoken interactions with AI and practice with chatbots beyond the classroom, rather than concentrating on a particular phase of speaking tasks which could produce more specific insights into how AI affects learners' willingness to speak. Previous research has indicated that learners' WTC in a second language could be directly or indirectly influenced by several factors pertaining to the learning environment as well as

individuals' differences (Ebn-Abbasi & Nushi, 2022; MacIntyre et al., 1998; Solhi, 2024; Tavakoli & Davoudi, 2017); therefore, a more focused analysis of AI utilization during a specific learning phase may yield more valuable insights. Furthermore, self-confidence and its constituents were consistently shown to have a direct and significant influence on the WTC in a second language of learners (Peng & Woodrow, 2010; Riasati, 2018; Solhi, 2024; Yashima, 2002), suggesting that with adequate preparation, students might overcome such negative emotions and become more willing to communicate, particularly speaking in the context of this study. Nevertheless, there is a scarcity of empirical studies investigating the impact of utilizing text-based AI during the planning phase of speaking tasks on these variables and its potential to improve learners' L2 WTC in the classroom, especially among Vietnamese EFL learners.

Therefore, this study seeks to address the gap by examining the extent to which preparation with ChatGPT, a widely recognized AI chatbot in Vietnam, improves learners' WTC, specifically in spoken English. In the present study, ChatGPT-assisted preparation is operationalized as students' use of ChatGPT for mental and linguistic support during the planning phase of their speaking tasks, such as generating key points, providing content feedback, outlining structures, and seeking sample phrases or vocabulary, before their oral performance. Moreover, the study aims to investigate the influence of self-confidence on learners' L2 WTC and to determine the beneficial impacts of ChatGPT on learners' speech, as well as the challenges students faced while using ChatGPT for speaking preparation.

Methodology

Participants and study settings

The study followed a mixed-methods design, using a pre- and post-intervention design to collect quantitative and qualitative data. A total of 42 Vietnamese English-major graduates participated in the study, all of whom were sampled conveniently due to time and availability constraints. The participants were well informed about the purpose of the study and were aware that their participation was voluntary, with no repercussions. Permission for conducting research on the population was granted by the head teacher in charge of the students' class. Lastly, 42 students gave their consents and agreed to take part in the study. Additionally, although no personal information, such as name or gender, was collected, more females than males participated in the study.

Questionnaire

The questionnaire employed in the present study was designed and adapted from previously used instruments (Bensalem, 2022; Chaisiri, 2023). There were 20 items in the pre-intervention survey and 20 items, including 3 open-ended questions, in the post-survey. Both surveys have two sections, communicative behaviours and self-confidence, with the post-survey having a third section consisting of three open-ended questions. The first half of the survey targeted at students' L2 WTC, containing 10 items about their communicative behaviours in the classroom (MacIntyre et al., 1998). The second-half, on the other hand, explored students' self-confidence, including their communication anxiety and self-perceived competence, which were consistently recognized as having a significant and direct effect on learners' WTC (Peng & Woodrow, 2010; Riasati, 2018; Yashima, 2002). Thus, exploring how this variable influences learners' L2 WTC would provide valuable insights into the dynamic relations among WTC and its variables (MacIntyre et al., 1998). To enhance the instrument's reliability, Cronbach's alpha was calculated for the pre-survey (Section 1: $\alpha = .88$, Section 2: $\alpha = .74$) and post-survey (Section 1: $\alpha = .93$, Section 2: $\alpha = .81$), indicating high reliability. Additional open-ended questions,

including students' uses of AI, beneficial impacts it has on students' speech, and whether there were any difficulties with using the AI for speaking preparation, were included in the post-questionnaire in order to explore students' experience with the chatbot and to understand the strengths and limitations of the tool to make viable recommendations for practical and pedagogical applications.

Questionnaire items were adapted and rephrased as needed to improve clarity and alignment with the current study's goal. For instance, an item relating to volunteering an answer in English (Bensalem, 2022; Chaisiri, 2023), which was already quite suitable for the study's context, was only slightly changed into "I am willing to answer questions in English" to make it clear to the students about the intention to perform the communicative action. Similarly, for the same item in the post-intervention questionnaire, the statement would be "With ChatGPT support, I am willing to answer questions in English" to reflect the chatbot's use during the planning phase. There were also items that underwent more modifications, such as one that referred to helping others to answer a question (Bensalem, 2022; Chaisiri, 2023) was specified as "I am willing to help others understand a complex topic in English" to improve relevancy with the current study's speaking tasks, and likewise, the phrase would be "With ChatGPT support, I am willing to help others understand a complex topic in English" in the post-intervention questionnaire to demonstrate the use of AI to aid in giving explanations to peers. In a similar manner, the statement regarding students' self-belief that they knew the words required for communication in English (Bensalem, 2022; Chaisiri, 2023) was rephrased in the post-survey as "With ChatGPT support, I know the words and ideas that are required for the completion of each task" to correspond to the use of AI to assist with speaking assignments. Moreover, some items were added to the questionnaire, such as statements about willingness to give a presentation, engage in a group discussion, and role-play a scenario. However, items that were not suitable for the study's context were excluded, such as the statements about giving a speech with notes (Bensalem, 2022) or guessing the meaning of words (Chaisiri, 2023).

Data collection and analysis

Prior to collecting the data, the researcher obtained permission from the teacher responsible for the students' class, and subsequently arrived at the classroom once it was granted. The students were informed about the objectives of the study, the potential risks (none), and the AI tool to be utilized throughout the intervention: specifically, ChatGPT v4o-mini, the free version available at that time. Participants were given time to decide whether to participate, which was voluntary and without repercussions. At the end, 42 students provided their consent and agreed to participate in the study.

In the initial phase of the procedure, participants were instructed to complete a questionnaire via Google Forms, examining their WTC in English in various classroom scenarios and their self-confidence when speaking English in class. In this study, each student was instructed to create a nickname to ensure accurate identification and paired-sample comparisons of their responses on the pre- and post-questionnaires. In the next step, students were required to form groups of 4 to 5 members to conduct three speaking tasks simulating classroom activities: pair and group discussions on two topics, a small group presentation on one of the issues relevant to the contents previously learned in the course, and a pair role-play of situations similar to common topics discussed in class such as workplace situations or daily life events. For each task, students were instructed to use ChatGPT in their preparation for the speaking activity, which often lasted approximately 15-20 minutes. In the context of this study, ChatGPT-assisted preparation was defined as students' use of ChatGPT during the planning phase of their speaking tasks, including searching for vocabulary, seeking feedback on content, generating ideas, and

organizing presentations, prior to carrying out their speaking assignment. After completing the speaking tasks, participants were administered a post-intervention questionnaire via Google Forms, which included the term 'ChatGPT assistance' in each item to reflect its use in previous stages. Additionally, three open-ended questions were included, asking about their use of ChatGPT, improvements in their speech, and any challenges encountered.

Regarding the quantitative data, the researcher employed Jamovi to analyse descriptive statistics collected through the questionnaires, including means and standard deviations. The students' responses to the pre- and post-questionnaires were analysed using a paired-samples t-test to determine whether there was a significant difference in overall L2 WTC and self-confidence after the use of ChatGPT as a preparation tool. Moreover, correlational analyses were conducted to determine whether the self-confidence variable correlated significantly with learners' WTC in English. Regarding qualitative data, the researcher conducted a thematic analysis of students' open-ended responses, translated them into English when written in Vietnamese, and then categorized them into relevant themes for further examination.

Results

The influence of ChatGPT-assisted preparation on students' willingness to communicate

To obtain specific insight into how students responded to the items before and after the use of ChatGPT as a speaking preparation tool, descriptive statistics for each questionnaire item were analysed as follows (Table 1).

Table 1

Item-level descriptive statistics of students' WTC pre-test and post-test mean scores and standard deviation

Item	Pre-WTC		Post-WTC	
	M	*SD*	*M*	*SD*
Q1	3.39	1.25	4.00	.89
Q2	3.50	1.02	4.05	.83
Q3	3.29	1.22	3.70	.90
Q4	3.46	.97	4.15	.76
Q5	2.81	1.00	3.84	.94
Q6	3.60	1.20	4.08	.93
Q7	3.34	1.06	3.89	1.11
Q8	3.48	1.28	4.00	.86
Q9	3.50	1.18	3.91	.88
Q10	3.39	1.23	4.00	1.13

Based on the analysis presented in Table 1, it can be seen that students' WTC generally shifted towards the positive side across most items. Most notably, item number 5 *"I'm willing to talk about complex topics in English"* experienced the highest increase by 1.03 points, from pre-test *(M=2.81, SD = 1.00)* to post-test *(M = 3.84, SD = .94)*. This was followed by item 4 "I am willing to express my own opinions on a topic in English", which rose by .69 points in post-test *(M = 4.15, SD = .76)* compared to that of pre-test *(M = 3.46, SD = .97)*. In a similar manner, item 1 *"I am willing to volunteer to answer questions in English" (M = 4.00, SD = .89)* and item 10 *"I am willing to do a role-play in English" (M = 4.00, SD = 1.13)* improved by .61 points after the intervention. Among the remaining items, item 3 "I am willing to ask questions

in English in class" and 9 "I am willing to participate in group discussions about a topic in English" experienced the smallest change compared to other statements, at .41 points, with post-test scores at *(M = 3.70, SD = .90) and (M = 3.91, SD = .88)*. Additionally, observations from standard deviation scores showed that students' opinions of their WTC in the post-intervention were more focused, as most items experienced a reduction in variety, revealing an increase in the uniformity of extents of improvements.

Table 2

Paired-sample t-test for students' WTC pre-test and post-test scores

WTC	Mean	SD	95% Confidence Interval					
			Lower	*Upper*	*t-statistic*	*df*	*p-value*	*Cohen's d*
Pre-test	3.37	.78	-1.06	-.373	-4.21	41	<.001	-.65
Post-test	4.09	1.09						

As students were instructed to assign themselves the same nickname for both pre- and post-test surveys, their answers were matched and then averaged to obtain the mean and standard deviation. A paired-sample t-test was conducted to ascertain whether the increase in students' L2 WTC was significant (Table 2). The results from the pre-test *(M = 3.37, SD = .78)* and post-test *(M = 4.09, SD = 1.09)* indicated that the employment of ChatGPT as the speaking preparation tool led to an enhancement in the WTC in English of students in the classroom, $t(41) = -4.21, p < .001$.

At the item-level statistics, an overview of students' responses to each item in the self-confidence (SC) section before and after the use of ChatGPT was displayed in Table 3

Table 3

Item-level descriptive statistics of students' self-confidence pre-test and post-test mean scores and standard deviation

Item	Pre-SC		Post-SC	
	M	*SD*	*M*	*SD*
Q1	2.74	1.04	3.03	.87
Q2	2.98	1.08	3.12	.89
Q3	3.62	.94	3.81	.68
Q4	3.29	.97	3.24	.94
Q5	2.74	1.15	3.31	.93
Q6	2.41	.89	3.50	.92
Q7	3.05	.67	4.08	.72
Q8	3.29	.84	3.91	.76
Q9	3.77	.80	3.89	.81
Q10	4.10	.73	3.81	.95

Illustrations of each item's means and standard deviations in Table 3 showed that Item 6 "I have no difficulty expressing my ideas in English" had the highest increase in means scores compared to the rest *(Pre-SC M = 2.41, SD =.89; Post-SC M = 3.50, SD =.92)*. Similarly, item 7 "I know the words and ideas that are required for the completion of each task" leaned more towards the positive end *(Pre-SC M = 3.05, SD =.67; Post-SC M = 4.08, SD =.72)*. On the contrary, items 4 "I am not worried about misunderstanding what my classmates say in English" *(Pre-SC M = 3.29, SD =.97; Post-SC M = 3.2, SD =.94)* and 10 "I think participation in class activities with ChatGPT support helps me develop my fluency (i.e., with little hesitation and

pauses)" *(Pre-SC M = 4.10, SD =.73; Post-SC M = 3.81, SD =.95)* experienced a decrease. Although they did not increase as much, item 8 "I am able to say what I want to say in English" *(Pre-SC M = 3.29, SD =.84; Post-SC M = 3.91, SD = .76)* and item 5 "I am not nervous when I speak English to the teacher" *(Pre-SC M = 2.74, SD = 1.15; Post-SC M = 3.31, SD =.93)* both climbed by .62 and .57 respectively. The remaining items, however, observed rather modest increase.

Table 4

Paired-sample t-test for students' SC pre-test and post-test scores

SC	Mean	SD	95% Confidence Interval					
			Lower	*Upper*	*t-statistic*	*df*	*p-value*	*Cohen's d*
Pre-test	3.20	.50	-.566	-.177	-3.85	41	<.001	-.60
Post-test	3.57	.51						

Paired-sample t-test of students' SC, including their communication anxiety and self-perceived competence, in the pre-test (M = 3.20, SD =.50) and post-test (M = 3.57, SD=.51) was computed (Table 4). The result indicated that there was a significant improvement in students' SC prior to the utilization of the ChatGPT as the preparation tool for their speaking tasks.

However, although there was a positive relation *(r = .289)* between students' post-WTC and their post-SC, the correlation between students' SC and their WTC in the post-test was not significant *(p >.005)* (Table 5).

Table 5

Correlation between students' post-intervention SC and WTC

Correlation	
Pearson's r	*.289*
Df	*40*
p-value	*.063*
95% CI Upper	*.545*
95% CI Lower	*-.016*
N	*42*

Impact of ChatGPT-assisted speaking preparation on students' speech

To obtain findings on how students used ChatGPT, a thematic analysis was conducted of students' open-ended responses. Specifically, students' answers were analysed for recurring themes related to their uses of the AI, while responses that did not show the use of ChatGPT was not counted. For instance, a response that stated *"By typing a command of what I needed"* was not included as it could not demonstrate how ChatGPT was employed to support the student's speaking preparation. Similarly, vague or incomplete answers were not counted as well, such as *"I uses the command to ask for its instructions"* and *"I used chatgpt to give me main ideas for tasks first, then I use it to"*. Additionally, students whose responses were in Vietnamese were translated to English prior to analysis, and if students mention different variations of the same category, they would still be counted as one. For example, a response such as *"To find more ideas, vocabulary and check my grammar"* would contribute one instance to idea development and one to language support.

Table 6

Uses of ChatGPT for speaking preparation

Theme	Example	Frequency
Idea development	*"I ask ChatGPT for the idea and then make a speech from that" (S30)*	31
Language support	*"I use it for brainstorm ideas and find suitable vocab "(S42)*	12
Practice and revision	*"I used ChatGPT to practice speaking topics…" (S15)*	9
Task analysis	"*… analyze the specific task I need to achieve" (S9)*	6
Organization	*"I used ChatGPT to help me arrange the idea and general outline for the tasks" (S31)*	6

In the following sections, students were coded as 'S' for convenience and ease of analysis. For instance, S1 indicated that the student was participant no. 1. As illustrated in Table 6, there were five main uses of ChatGPT for speaking preparation in the current study: idea generation, organization, task analysis, language support, practice, and revision. Idea development includes using ChatGPT to generate more ideas and create sample answers, while language support includes using ChatGPT to support vocabulary, grammar, and any linguistic issues. The category of 'practice and revision' refers to students doing practice with ChatGPT and adapting AI's suggestions for personal use. Task analysis is linked to the use of ChatGPT to gather more information about the task, thereby achieving a clearer understanding of its goals and purposes. Lastly, the 'organization' category includes responses related to linking and sequencing ideas. Among these groups, idea development was the most dominant, with 31 instances, followed by language support and practice and revision, each mentioned by students 12 and 9 times, respectively. Task analysis and organization, however, were observed in only about 6 cases each.

Table 7

Beneficial impacts on students' speech from preparing with ChatGPT

Theme	Example	Frequency
Ideas development	*"My vocabulary and idea development see some improvement" (S28)*	23
Language enhancement	*"more advanced vocabs and impressive ideas" (S27)*	22
Coherence and organization	*"The aspect of vocabulary and flow between one idea to another" (S29)*	14
Fluency and confidence	"*My fluency and lexical resource improve very much…" (S38)*	10

Table 7 showed the improvements in students' speech after they have employed ChatGPT to assist with the preparation for their speaking tasks. It could be observed that most of the respondents reported more than one aspect improved after the use of ChatGPT. Ideas development, which includes the expansion of ideas and addressing the task fully, was the most prominent category *("My vocabulary and idea development see some improvement", S28; "Vocabulary, the ideas are clearer with better supports and maybe even more new aspects", S2)*. However, it was marginally followed by language enhancement, which pertains to vocabulary and grammar improvement in general *("more advanced vocab and impressive*

ideas", S27). The category of "coherence and organization", which involves linking, logical, and structured ideas, was reported in 14 instances *(The aspect of vocabulary and flow between one idea to another, S29)*, while the figure was 10 for 'fluency and confidence' *(My fluency and lexical resource improve very much…, S38)*.

Challenges faced by students when using ChatGPT for speaking preparation

Table 8

Challenges encountered by students when using ChatGPT for speaking preparation

Theme	Example	Frequency
AI-generated content	*"Because the information that ChatGPT provides me sometime not true" (S40)*	19
Student-related challenges	*"I can't remember ideas…" (S17)*	11
Technical issues	*"Sometimes the chat doesn't understand what we want to do…" (S38)*	5
Language issues	*"some answers may be using complex words…" (S20)*	5

Regarding the challenges that students experienced during the intervention process (Table 8), the majority of them had issues with content generated by AI (*"Because the information that ChatGPT provides me sometime not true", S40; "Vocabularies are not nature, common and sometimes examples are not pretty practical", S35) "Some ideas that ChatGPT provides me quite some general, with lack of explanations", S19)*, which was followed by student-related challenges and technical issues *("Sometimes my questions are not clear enough", S13; "I can't remember ideas…", S17; "Since they are not my own developed ideas, I may forget them when I speak…", S18; "… you will still have to actually speak, and that's where the issue lies, if you aren't already confident in speaking, you are more likely to forget and stutter even with ChatGPT's assistance…", S29;"Sometimes the chat doesn't understand what we want to do...", S38),* and then language issues (*"some answers may be using complex words…", S20).* However, responses that stated simple answers like 'Yes' and without adequate explanations were not included. Similarly, students responding with "No" was not counted as they did not experience any difficulties.

Discussion

Impacts of ChatGPT-assisted preparation of speaking tasks on students' WTC

With regard to the item-level improvements in students' willingness to communicate (WTC) and self-confidence (SC), it was consistently observed that students expressed increased readiness to communicate and greater confidence in various situations, aligning with the main findings of the construct-level analysis that indicated significant changes in students' overall WTC and SC following the intervention period. In general, communicative situations related to students' performance in speaking tasks showed the greatest increase, whereas situations involving interactions with peers, such as asking questions and discussions, showed less improvement. These findings support the notion that AI-powered technologies can be used to enhance learners' WTC in the classroom context (Chaisiri, 2023); however, improvements in student communication appear modest, suggesting possible technological constraints on promoting this interactive aspect (Jiang et al., 2023). The changes in students' SC had fewer items with moderate-to-large increase compared to those of WTC, and most items that

demonstrated large improvement were related to learners' self-perceived competence. Without a doubt, AI-powered tools are effective instruments for language learning, capable of enhancing learners' vocabulary, fluency, and precision (Fathi et al., 2024). The students in the present study likely experienced comparable advantages and acknowledged these enhancements in their linguistic ability. Nevertheless, although remaining in the positive range, indicating a beneficial effect of AI on learners' fluency, students' positive perceptions of this element appear to be declining following the intervention. A plausible explanation is that the time limits were insufficient for students to familiarize themselves with the AI-generated content, thereby diminishing their perceived fluency enhancement. Another minor reduction in post-test responses was observed when students were asked about potential misunderstandings by peers, suggesting that miscommunication may still arise in interactive classroom contexts despite extensive AI-assisted preparation.

In a similar manner, the overall enhancement of learners' WTC in English, before and after employing ChatGPT as a speaking preparation tool, revealed that students' WTC, particularly in spoken English, significantly improved following the use of ChatGPT, making it congruent with previous research findings (Fathi et al., 2024; Zhang et al., 2024). This improvement in learners' WTC in English is also in line with MacIntyre et al.'s (1998) heuristic model of WTC, which illustrates that the intention to engage in communication is influenced by various environmental, societal, and individual factors. In the educational context, ChatGPT might have sparkled interests, motives, and confidence that enhanced overall learning experience (Dai & Liu, 2024), which potentially promotes students' willingness to participate in communicative situations. With internet connectivity, ChatGPT can effortlessly retrieve a vast amount of information and provide answers within seconds, addressing any inquiries students may possess. Compared to traditional information searching methods, employing a chatbot might be more efficient than manually navigating through search results from average search engines, thus reducing time lost to preparation while simultaneously gathering relevant information. Nevertheless, it should be acknowledged that since the study's findings have indicated that there might be issues with content generated by AI, the relevancy and usefulness of information provided by AI may not always be appropriate for the users, which may affect their WTC.

Furthermore, owing to its extensively trained database, AI chatbot without a doubt surpasses traditional methods of information searching when students make more complicated and demanding requests. As a result, students are able to obtain personalized ideas, vocabulary, and structures, allowing them to form a well-prepared speech, potentially enhancing their motivation, confidence, and then their readiness to engage in communication later in the production phase. However, as found in the study, the ideas generated by AI could be overcomplicated and repetitive, limiting its personalization aspect to certain degrees. Additionally, while previous studies examined the effect of AI on students' WTC after several sessions (Fathi et al., 2024; Kim & Su, 2024; Zhang et al., 2024), the current study's findings indicated that its beneficial influence on students' intentions to communicate may have emerged almost immediately upon their access to the AI chatbot. This supports the idea that AI serves as a complimentary instrument for language learning in the classroom, capable of addressing existing elements affecting L2 WTC, such as anxiety and motivation (MacIntyre et al., 1998; Riasati, 2018; Solhi, 2024), which may influence students' readiness to engage in second language communication.

Additionally, whilst the findings indicated a significant improvement in students' overall SC through the utilization of AI, including their anxiety and self-perceived competence, similar to past studies (Li & Zhao, 2025; Kim & Su, 2024), there was no significant correlation between

this variable post-test and students' post-WTC, which was interestingly in contrast with studies that typically identified such a connection (Elahi Shirvan et al., 2019; Peng & Woodrow, 2010; Riasati, 2018; Yashima, 2002). As previously observed and explored, the convenience and utility of AI might hold a pivotal role in fostering learners' positive emotions and reducing negative ones (Dai & Liu, 2024; Li & Zhao, 2025; Jeon & Lee, 2024), which in turn facilitate students' WTC (Peng & Woodrow, 2010; Kim & Su, 2024; Yashima, 2002). However, this appears not to be the case in the current study, which focused on the use of AI chatbots during the preparation phase within a short-term intervention period. The finding was in line with MacIntyre et al.'s (1998) heuristic WTC model, which outlined complex interrelationships between situational and stable elements that constitute the intention to engage in communication, suggesting a possible indirect relationship in the present study. The findings also imply that additional factors, such as motivation (Fallah, 2014; Solhi, 2024), enjoyment, and classroom learning environment (Ebn-Abbasi & Nushi, 2022; Khajavy et al., 2018), may have had a more prominent role in directly influencing the WTC in English during the study. Moreover, as observed, the effectiveness of AI use for learning may vary across proficiency levels (Li & Zhao, 2025), and learners' proficiency levels may have impacted this instance (Rostami et al., 2016; Sato, 2023; Welesilassie & Nikolov, 2024). Students may use ChatGPT to generate ideas and vocabulary; however, although these aids might bolster students' SC, they may not have an immediate or long-term impact on their actual skill level, which subsequently influences their willingness to speak in the second language. In other words, learners' SC was enhanced following the AI-assisted speaking preparation process, but this effect may have been situational and thus had an insignificant impact on their WTC during the speaking tasks when conditions differed. Furthermore, this notion seems to align with MacIntyre et al.'s (1998) concept of WTC, as it was demonstrated that actual communicative competence encompasses more than simply lexical knowledge, with various equally important elements such as an understanding of morphological rules, phonological systems, and the capacity to convey a message appropriately within specific cultural and societal contexts. Overall, given the challenges participants faced whilst employing the AI, it should be noted that the gains in learners' WTC may vary between learners. For instance, while some individuals found AI-generated content relevant to their needs, others could hardly make use of the provided information. It seems that a balanced use of AI, with teachers' interventions and guidance, might be the most sensible approach to address the inevitable growth of AI use among students and educators (Duong & Nguyen, 2024). Thus, these findings imply that the use of ChatGPT, particularly in the preparation stage, might be more effectively employed as a supplementary tool to leverage its supportive mechanisms in tandem with other approaches aimed at cultivating students' lasting SC and speaking skills.

Beneficial impacts on students' speech after preparation with ChatGPT

The results revealed that most participants used the chatbot to develop ideas for their responses and to improve their English, resulting in a perceived improvement in their speaking ideas and language use. The findings seemed to corroborate other studies (Darmawansah et al., 2025; Tai & Chen, 2024; Zou et al., 2023), emphasizing the potential application of AI to improve learners' speaking skills, specifically in terms of language complexity and the quality of ideas. These findings appeared to align with MacIntyre et al.'s (1998) heuristic model of WTC, as the use of ChatGPT to develop ideas and enhance linguistic proficiency might have facilitated a significant increase in participants' SC. Nonetheless, the findings of the current study suggest that students may have mostly focused on self-perceived competence, as evidenced by the majority of instances being related to idea development and the enhancement of linguistic proficiency. This inclination demonstrates students' desire to appear competent in class, as

individuals who articulate their speech with refined, sophisticated language are regarded as proficient English speakers. This behaviour might have appeared as a reaction to various underlying sources of anxiety in speaking, including low-level English proficiency, peer evaluations, cultural norms, or even teacher influences (Goñi Osacar & Lafuente-Millán, 2022; Islam & Stapa, 2021; Savaşçı, 2014).

Alternative applications of ChatGPT, while less common than the aforementioned categories, indicate a more interactive and deliberate utilization of the AI chatbot. These include practicing, revising, analysing tasks, and organizing responses, reflecting a certain degree of autonomy (Dai & Liu, 2024), although not as remarkable as other benefits, and involving self-regulatory actions expressed by the participants. This suggests that students regarded the AI chatbot as a capable and learner-friendly resource that enabled them to evaluate and reflect on their inputs in a learner-friendly and low-pressure environment, free from interventions or judgments from peers or teachers (Fathi et al., 2024; Kim & Su, 2024; Zhang et al., 2024). In a broader sense, ChatGPT may have served as a scaffolding tool (Vygotsky, 1978), offering students continuous support through feedback and linguistic resources, thereby facilitating the practice and revision of their responses and gradually boosting their speaking performance beyond their current capabilities.

However, although accounts of idea development and language enhancement were noted in more than half of the instances described by students, the improvements in coherence, organization, fluency, and confidence were not as remarkable. This may be attributed to the fact that ChatGPT was used solely during the planning phase of their speaking tasks, suggesting that, in the production stage, the students might have had to rely on their language proficiency to process the linguistic resources and concepts they had previously prepared. Additionally, despite thorough preparation, a lack of the ability to sequence, select, and arrange words and structures into coherent spoken texts could influence students' speech rate and coherence. Furthermore, the time constraints and limitations of the text-based chatbot hindered students' opportunities for practice and their familiarity with the concepts and linguistic elements presented by the AI, potentially diminishing their fluency and confidence. Thus, these aspects were not commonly perceived as improvements, as their effects were not as apparent compared to the other categories.

Challenges faced by students when using ChatGPT for speaking preparation

The study's findings revealed that the majority of challenges faced by students preparing for speaking tasks with ChatGPT assistance were related to AI-generated content, such as repetitive, mechanical ideas and inaccuracies, as well as student-related issues, such as unclear prompts, which led the AI to misunderstand them. These challenges align with previous research highlighting similar concerns about the accuracy and relevance of AI-generated content (Alkhateeb et al., 2025). These issues are partially expected, as most AI uses in the current study focused on acquiring ideas and enhancing vocabulary and grammatical structures. Consequently, the findings underscore the need for conscious use of AI-powered tools, emphasizing the value of proactively evaluating the accuracy of AI-generated resources.

Moreover, although AI-driven tools have been integrated into language courses worldwide, their adoption in Vietnam has only started to gain traction. Students lacking knowledge in employing AI tools may encounter difficulties while interacting with the chatbot, such as making ineffective prompts, possibly undermining their perceived self-efficacy in utilizing the AI tool effectively to improve their language learning experience (Zhang et al., 2025). Hence, these limitations suggest that students' willingness to engage in classroom communication may

be hindered when they lack confidence in the speaking ideas generated by AI or in their perceived self-competence when utilizing the content and language supplied by the chatbot (MacIntyre et al., 1998).

Furthermore, some students expressed concerns that their readiness to communicate in English would diminish, regardless of their preparation, if they were unable to recall ideas or lacked confidence during the actual speech. The impact of these unpleasant feelings could dilute their motivation and confidence, subsequently affecting their readiness to engage in English communication (MacIntyre et al., 1998). Thus, it seems to imply that students' linguistic proficiency should be developed to a certain extent, as proficiency may have an impact on their WTC (Rostami et al., 2016; Sato, 2023), prior to incorporating AI-powered chatbots into their learning process, to effectively leverage the chatbot to foster the development of learners' WTC. Notably, a small proportion of participants regarded the advanced vocabulary supplied by AI as an obstacle, potentially stemming from their insufficient linguistic competence, resulting in students' difficulties in understanding and utilizing the lexicon offered by ChatGPT in their speech. Hence, it advocates for the necessity of guidance and support by teachers in an AI-assisted language classroom, who may intervene and aid students in decision-making to fully leverage the capabilities of AI (Alkhateeb et al., 2025). In general, these findings again underscore the feasibility of using AI as a supplementary tool for language learning, particularly for speaking skills.

Conclusion

Main findings

The study aimed to explore the extent to which ChatGPT, as a preparation tool, could enhance students' WTC, specifically speaking, in a classroom context. The results indicated that using ChatGPT as a speaking preparation tool significantly improved students' WTC in English and their SC. However, there was no significant correlation between participants' WTC and their SC post-intervention, suggesting the influence of other underlying factors, such as motivation or classroom environment. In particular, the tendency to engage in communicative behaviours related to task completion showed the greatest increase, whereas interactional activities, such as group discussions, showed less marked improvement. Further thematic analysis of qualitative data indicated that most students used ChatGPT for brainstorming and language assistance, both of which were effectively enhanced by the AI, leading to a perceived improvement in the quality of students' ideas and language. The participants also expressed concerns about AI-generated content, including its accuracy and relevance, as well as student-related issues when using the Chatbot for their speaking task preparation.

Implications

The study's findings yielded several theoretical and practical implications. Firstly, in the context of AI-assisted language learning, motivation and other factors may have a more direct impact on students' readiness to engage in English communication than SC, as the study found no significant correlation between learners' SC and their WTC post-intervention. Secondly, the planning phase may be crucial for developing learners' speaking skills. The study demonstrated that preparation, especially with the assistance of AI-powered tools, increased students' WTC in English and their SC, thus encouraging students to engage more in oral tasks and facilitating the gradual improvement of their speaking skills.

From a practical perspective, text-based AI chatbots should be used as supplementary resources to enhance speaking skills, alongside conventional classroom drills, allowing students to practice and familiarize themselves with the AI-generated content, thereby supporting fluency and confidence. Furthermore, it is essential to educate students on the advantages and limitations of AI. Results have identified certain shortcomings with using the chatbot, including issues with making prompts, leading to misunderstandings. With prior instructions and teachers' guidance, these challenges might be mitigated, enabling students to fully leverage AI's potential to assist them with language learning, or speaking in the present study. Additionally, it might be essential to develop students' communicative competence before introducing them to AI, as while the chatbot could provide ideas and language suggestions, students still have to deliver the actual speech. Certain communicative skills, such as connecting ideas into coherent messages, managing discourse interactions, and understanding varied real-world cultural and societal contexts, might currently be beyond the capabilities of AI technologies.

Limitations and suggestions for future research

This study is not without limitations. Firstly, due to the scale and limited access to participants, the sample was rather modest, limiting the generalizability of the findings to broader contexts. Secondly, as the study was conducted towards the end of the semester, the students' schedules were quite hectic, limiting the intervention to one session, which may have created stress and pressure among the participants. Nonetheless, this limitation was partially addressed, as the researcher designed the speaking tasks to simulate diverse and familiar classroom speaking activities, thereby enabling students to employ AI in different contexts. Moreover, despite mostly favourable results, there may be biases in students' self-reported data, as they may be influenced by their classmates and other psychological factors.

Future research could aim for a more diverse population, with varied proficiency levels and academic majors, to examine whether there would be differences in the improvement of WTC. Secondly, researchers could extend the implementation period to give participants more time to familiarize themselves with the technology and engage in additional speaking activities, thereby increasing their opportunities to use the AI chatbot. Lastly, formal speaking assessments may be conducted to examine learners' speaking performance, particularly their WTC in English, to obtain thorough information on the extent to which students' speech could benefit from AI tools.

References

Alam, M. R., Ansarey, D., Abdul Halim, H., Rana, M. M., Milon, M. R. K., & Mitu, R. K. (2022). Exploring Bangladeshi university students' willingness to communicate (WTC) in English classes through a qualitative study. *Asian-Pacific Journal of Second and Foreign Language Education, 7*, Article 2. https://doi.org/10.1186/s40862-022-00129-6

Alkhateeb, A., Hezam, A. M. M., & Almuraikhi, A. A. (2025). Assessing the use of AI tools for EFL exam preparation at Saudi universities: Efficiency, benefits, and challenges. *Cogent Education, 12*(1), Article 2507553. https://doi.org/10.1080/2331186X.2025.2507553

Bensalem, E. (2022). The impact of enjoyment and anxiety on English-language learners' willingness to communicate. *Vivat Academia. Journal of Communication*, *155*, 91–111. https://doi.org/10.15178/va.2022.155.e1310

Chaisiri, P. (2023). Promoting Thai EFL Learners' Willingness to Communicate in the Virtual Classroom Through Technology-Mediated Oral Tasks. *LEARN Journal: Language*

Education and Acquisition Research Network, *16*(1), 97–120. retrieved from https://so04.tci-thaijo.org/index.php/LEARN/article/view/263435

Dai, K., & Liu, Q. (2024). Leveraging artificial intelligence (AI) in English as a foreign language (EFL) classes: Challenges and opportunities in the spotlight. *Computers in Human Behavior, 159*, Article 108354. https://doi.org/10.1016/j.chb.2024.108354

Darasawang, P., & Reinders, H. (2021). *Willingness to communicate and second language proficiency: A correlational study. Education Sciences, 11*(9), Article 517. https://doi.org/10.3390/educsci11090517

Darmawansah, D., Rachman, D., Febiyani, F., & Hwang, G.-J. (2025). ChatGPT-supported collaborative argumentation: Integrating collaboration script and argument mapping to enhance EFL students' argumentation skills. *Education and Information Technologies, 30*, 3803–3827. https://doi.org/10.1007/s10639-024-12986-4

Duong, T. T. U., & Nguyen, M. H. (2024). Students' Perspective on Applying AI in English Learning and Teaching – A Study at UEH. *ICTE Conference Proceedings*, *5*, 91–102. https://doi.org/10.54855/ictep.2458

Ebn-Abbasi, F., & Nushi, M. (2022). EFL learners' grit, classroom enjoyment and their willingness to communicate: Iranian public school versus private English language institute learners. *Asian-Pacific Journal of Second and Foreign Language Education*, *7*, Article 24. https://doi.org/10.1186/s40862-022-00150-9

Elahi Shirvan, M., Khajavy, G. H., MacIntyre, P. D., & Taherian, T. (2019). A meta-analysis of L2 willingness to communicate and its three high-evidence correlates. *Journal of Psycholinguistic Research, 48*(6), 1241–1267. https://doi.org/10.1007/s10936-019-09656-9

Fallah, N. (2014). Willingness to communicate in English, communication self-confidence, motivation, shyness and teacher immediacy among Iranian English-major undergraduates: A structural equation modeling approach. *Learning and Individual Differences, 30*, 140–147. https://doi.org/10.1016/j.lindif.2013.12.006

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

Gayed, J. M. (2025). Educators' perspective on artificial intelligence: Equity, preparedness, and development. *Cogent Education, 12*(1), Article 2447169. https://doi.org/10.1080/2331186X.2024.2447169

Goñi Osacar, E., & Lafuente-Millán, E. (2022). Sources of Foreign Language Anxiety in the student-teachers' English classrooms: a case study in a Spanish university. *Revista Electrónica De Lingüística Aplicada*, *20*(1), 155–176. Retrieved from https://matrix.aesla.org.es/RAEL/article/view/473

Hu, L., & Wang, Y. (2023). The predicting role of EFL teachers' immediacy behaviors in students' willingness to communicate and academic engagement. *BMC Psychology, 11*, Article 318. https://doi.org/10.1186/s40359-023-01378-x

Islam, S. M., & Stapa, M. B. (2021). Students' low proficiency in spoken English in private universities in Bangladesh: Reasons and remedies. *Language Testing in Asia, 11*(1), Article 22. https://doi.org/10.1186/s40468-021-00139-0

Jeon, J., & Lee, S. (2024). The impact of a chatbot-assisted flipped approach on EFL learner interaction. *Educational Technology & Society, 27*(4), 218–234. https://doi.org/10.30191/ETS.202410_27(4).RP12

Jiang, M. Y. C., Jong, M. S. Y., Lau, W. W. F., Chai, C. S., & Wu, N. (2023). Effects of automatic speech recognition technology on EFL learners' willingness to communicate and interactional features. *Educational Technology & Society*, *26*(3), 37-52. https://doi.org/10.30191/ETS.202307_26(3).0004

Khajavy, G. H., MacIntyre, P. D., & Barabadi, E. (2018). Role of the emotions and classroom environment in willingness to communicate: Applying doubly latent multilevel analysis in second language acquisition research. *Studies in Second Language Acquisition, 40*(3), 605–624. https://doi.org/10.1017/S0272263117000304

Kim, A., & Su, Y. (2024). How implementing an AI chatbot impacts Korean as a foreign language learners' willingness to communicate in Korean. *System, 122*, Article 103256. https://doi.org/10.1016/j.system.2024.103256

Lee, J. S., & Hsieh, J. C. (2019). Affective variables and willingness to communicate of EFL learners in in-class, out-of-class, and digital contexts. *System, 82*, 63–73. https://doi.org/10.1016/j.system.2019.03.002

Li, D., & Zhao, Y. (2025). Artificial intelligence applications for oral communication skills in EFL contexts: A systematic review. *The Asia-Pacific Education Researcher*. https://doi.org/10.1007/s40299-025-01023-8

MacIntyre, P. D., Baker, S. C., Clément, R., & Donovan, L. A. (2002). Sex and age effects on willingness to communicate, anxiety, perceived competence, and L2 motivation among junior high school French immersion students. *Language Learning, 52*(3), 537–564. https://doi.org/10.1111/1467-9922.00194

MacIntyre, P. D., Clément, R., Dörnyei, Z., & Noels, K. A. (1998). Conceptualizing willingness to communicate in a L2: A situational model of L2 confidence and affiliation. *The Modern Language Journal, 82*(4), 545–562. https://doi.org/10.1111/j.1540-4781.1998.tb05543.x

Peng, J.-E., & Woodrow, L. (2010). Willingness to communicate in English: A model in the Chinese EFL classroom context. *Language Learning, 60*(4), 834–876. https://doi.org/10.1111/j.1467-9922.2010.00576.x

Riasati, M. J. (2018). Willingness to speak English among foreign language learners: A causal model. *Cogent Education, 5*(1), Article 1455332. https://doi.org/10.1080/2331186X.2018.1455332

Rostami, G., Kashanian, V., & Gholami, H. (2016). The relationship between language proficiency and willingness to communicate in English in an Iranian EFL context. *Journal of Applied Linguistics and Language Research*, *3*(2), 166–176. http://jallr.com/index.php/JALLR/article/download/283/pdf283

Sato, R. (2023). Japanese EFL speakers' willingness to communicate in L2 conversations: The effects of code-switching and translanguaging. *TESL-EJ, 27*(3), 1-22.https://doi.org/10.55593/ej.27107a5

Savaşçı, M. (2014). Why are some students reluctant to use L2 in EFL speaking classes? An action research at tertiary level. *Procedia - Social and Behavioral Sciences*, *116*, 2682–2686. https://doi.org/10.1016/j.sbspro.2014.01.635

Solhi, M. (2024). The impact of EFL learners' negative emotional orientations on (un)willingness to communicate in in-person and online L2 learning contexts. *Journal of Psycholinguistic Research, 53*(2), Article 26. https://doi.org/10.1007/s10936-024-10071-y

Tai, T. Y., & Chen, H. H. J. (2024). Navigating elementary EFL speaking skills with generative AI chatbots: Exploring individual and paired interactions. *Computers & Education, 220*, Article 105112. https://doi.org/10.1016/j.compedu.2024.105112

Tavakoli, E., & Davoudi, M. (2017). Willingness to communicate orally: the case of Iranian EFL learners. *Journal of Psycholinguistic Research*, *46*(6), 1509–1527. https://doi.org/10.1007/s10936-017-9504-0

Tran, T. N. P. (2024). The Influence of the ChatterKid App on the English-speaking Skills of Tertiary Students. *ICTE Conference Proceedings*, *5*, 1–11. https://doi.org/10.54855/ictep.2451

Vo, T. Q. N., & Tran, K. M. A. (2025). The Effectiveness of Applying AI to Online Teaching English: From Students and Teachers' Perspectives. *ICTE Conference Proceedings*, *9*, 20–35. https://doi.org/10.54855/979-8-9870112-9-4_2

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds. and Trans.). Harvard University Press.

Welesilassie, M. W., & Nikolov, M. (2024). The relationship among EFL learners' motivational self-system, willingness to communicate, and self-assessed proficiency at an Ethiopian preparatory high school. *Heliyon*, *10*(2), Article e24171. https://doi.org/10.1016/j.heliyon.2024.e24171

Xu, J., & Liu, Q. (2025). Uncurtaining windows of motivation, enjoyment, critical thinking, and autonomy in AI-integrated education: Duolingo vs. ChatGPT. *Learning and Motivation, 102*, Article 102100. https://doi.org/10.1016/j.lmot.2025.102100

Yang, L., & Zhao, S. (2024). AI-induced emotions in L2 education: Exploring EFL students' perceived emotions and regulation strategies. *Computers in Human Behavior, 159*, Article 108337. https://doi.org/10.1016/j.chb.2024.108337

Yashima, T. (2002). Willingness to communicate in a second language: The Japanese EFL context. *Modern Language Journal, 86*(1), 54–66. https://doi.org/10.1111/1540-4781.00136

Zhang, C., Meng, Y., & Ma, X. (2024). Artificial intelligence in EFL speaking: Impact on enjoyment, anxiety, and willingness to communicate. *System, 121*(3), Article 103259. https://doi.org/10.1016/j.system.2024.103259

Zhang, Q., Nie, H., Fan, J., & Liu, H. (2025). Exploring the dynamics of artificial intelligence literacy on English as a foreign language learners' willingness to communicate: The critical mediating roles of artificial intelligence learning self-efficacy and classroom anxiety. *Behavioral Sciences*, *15*(4), Article 523. https://doi.org/10.3390/bs15040523

Zou, B., Du, Y., Wang, Z., Chen, J., & Zhang, W. (2023). An investigation into artificial intelligence speech evaluation programs with automatic feedback for developing EFL learners' speaking skills. *SAGE Open, 13*(3), Article 21582440231193818. https://doi.org/10.1177/21582440231193818

Biodata

Dao Le Trong Nhan is a lecturer at Saigon University in Vietnam, teaching courses in English skills, cross-cultural communication, and the cultures of English-speaking countries. He holds a Master's degree in Linguistics with TESOL from Benedictine University, USA. His research interests involve Language Skills Development, Second Language Acquisition, Learning Motivations, and Cultural Effects in Learning.