AsiaCALL
Online Journal

Indexed in

Google Scholar
SSRN
Crossref
DOI
LOCKSS
CLOCKSS
PKP PN
Library of Congress, U.S. ISSN Center
EuroPub
CiteFactor
J-Gate
Mendeley

Publication frequency

The ACOJ will publish 2 issues per year, one in June, and the other in December. The ACOJ will publish manuscripts as soon as they are accepted.

Principal Contact

Professor Dr. Andrew Lian
Suranaree University of Technology, Thailand
Email: editor@asiacall.info

Associate Professor Dr. Pham Vu Phi Ho
Faculty of Foreign Languages, Van Lang University, Vietnam
Email: acoj.editor@gmail.com

AsiaCALL Online Journal

Reviewers:

Ngo Nguyen Thien Duyen, Ho Chi Minh City University of Economics and Finance, Vietnam

Hoang Viet Hien, Ho Chi Minh City University of Economics and Finance, Vietnam

Le Thi Ngoc Diep, Faculty of Foreign Languages, Van Lang University, Ho Chi Minh city, Vietnam

Pham Van Thoa, Dong Nai University, Vietnam

Nguyen Hong Nhung, Faculty of Foreign Languages, Van Lang University, Ho Chi Minh city, Vietnam

Chieu Nguyen, University of Social Sciences and Humanities, Vietnam

Nguyen Thanh Huyen, HCMC University of Industry and Trade, Vietnam

Le Quang Thao, Faculty of Foreign Languages, Van Lang University, Ho Chi Minh city, Vietnam

Tran Thi Mai, Faculty of Foreign Languages, Van Lang University, Ho Chi Minh city, Vietnam

Phan Thi Kim Thao, Van Hien University, Ho Chi Minh City, Vietnam

Pham Huong Ngoc Uyen, Ho Chi Minh City University of Economics and Finance, Vietnam

Table of Content

Developing Intonation Through Gestures in Early English Language Teaching

Nguyen Ngoc Thuy Ngan[1], Luu Thi Mai Vy[1*]

[1] Ho Chi Minh City University of Economics and Finance, Vietnam

[*] Corresponding author's email: *vyltm@uef.edu.vn*

[*] https://orcid.org/0000-0003-0231-3863

https://doi.org/10.54855/acoj.241521

Abstract

Existing research has proved the strong link between gestures and speech both in the first language (L1) and the second language (L2) acquisition. Despite the significant benefits of incorporating gestures into language instruction, there remains a gap in research concerning their impact on very young learners, especially in non-Western settings like Vietnam. The current study investigates the effects of using gestures to teach English intonation to very young learners. The study adopted a quasi-experimental design, and it recruited 49 participants aged 4 to 6 years at a language center. The two intact classes were randomly assigned as the control and experimental groups. The learners in the experimental group were taught intonation patterns of some English sentence types, such as YES/NO questions, WH questions, and statements through gestures, while traditional instructions without any gestures were applied in the control group. Two primary tools were utilized for data collection: intonation tests and observations. The findings demonstrated that learners who received gesture-based teaching significantly showed improvements in their intonation. Additionally, these learners showed more engagement and active participation in class. These results highlight the benefits of using gestures in teaching English intonation, especially in early English language teaching in Vietnam.

Keywords: English intonation, gestures, very young learners, Vietnamese, early English acquisition

Introduction

According to Zulfugarova (2018), intonation refers to the modulation of voice pitch across phrases and sentences. Intonation plays a crucial role in verbal communication because it conveys emotions, structures speech, and shapes the interpretations of others' intentions. Besides, intonation can help distinguish between statements and questions, which makes language learners produce more fluent and clear speech (Wichmann, 2000). Meanwhile, in early language acquisition, the surrounding environment and educational methods are critical in mastering the language. According to Vygotsky's (1978) sociocultural theory, children develop language abilities through both formal teaching and casual interactions. This development occurs both physically and mentally. Moreover, the use of gestures in early childhood language

acquisition has been proven to reflect natural communicative behaviors and cognitive development stages (Church et al., 2004).

In educational settings, gestures can help L2 learners enhance learning outcomes by providing non-verbal cues that reinforce verbal instruction (McNeill, 1992). In this way, it facilitates understanding and retention. In addition, gestures can help organize thought and link abstract concepts with physical actions, leading to language improvements (Goldin-Meadow, 2011). Recent research in L2 intonation teaching has demonstrated that learners' intonation could be improved by the use of technological tools in pedagogical instructions, namely the computer software Praat for phonetic analysis (Le & Brook, 2011), Google Text-to-Speech for shadowing techniques (Le et al., 2022) and Chatbot AI (Hoang et al., 2023). Several scholars (e.g., Baker, 2014; Iizuka et al., 2020; Thompson & Renandya, 2020) also agreed that gestures in pronunciation training across segmental and suprasegmental levels were significant. In particular, Tellier (2008) and Macedonia (2014) suggested that gestures can help remember the language longer. Given the significance of integrating gestures in L2 instruction teaching intonation, there is a noticeable gap in applying these techniques to young learners, especially in non-Western contexts like Vietnam.

In this research, the target learners were aged 4 to 6 years for two reasons. First, this is a critical stage of linguistic development where intonation patterns and rhythmic speech are becoming internalized. Second, as Goldin-Meadow (2009) argued, gesture-based learning could be particularly effective for this age group as gestures are naturally integrated into their communicative methods. The main goal of this study is to compare the effectiveness of a gesture-based approach with traditional teaching methods in developing English intonation. The results of this study hopefully can offer structured insights into the practical implications of such pedagogical strategies. The gestural approach reflects the natural integration of gesture and speech in communication and taps into the intrinsic learning styles of very young learners. Subsequently, the study addresses the two following questions:

1. To what extent do the learners who received gestural instructions improve their English intonation?

2. What are these learners' reactions to this gestured-based intonational teaching approach?

Literature review

Theoretical Foundations of Early English Acquisition

The benefits of early language exposure are underlined by Garton and Copland (2019), who stated that teaching English to very young learners, particularly those aged 4 to 6 is crucial. They explained that early exposure enhances listening skills and pronunciation, thus leveraging the developing brain's receptivity to new sounds. Despite the fact that there might be slower progress in grammar, the overall benefits of improved pronunciation and listening comprehension over time cannot be overlooked for long-term development. What is more, early language learning is critical for achieving proficiency even as children continue to develop their first language (Serrano, 2018). The learning process often involves oral exposure to new

languages through interactions that include both facial expressions and gestures. These factors set the foundation for full verbal communication in L2 acquisitions. As Halliwell (1992) and Cameron (2001) outlined, the teaching principles for very young learners should promote a learning-centered approach. This approach is backed by the social learning and cognitive development theories of Vygotsky (1978) and Piaget (1952). According to these theories, learning occurs through social interactions and is strengthened by scaffolding and structured activities. Such activities help children focus on crucial elements of L2 learning, like intonation.

Teachers should prioritize comprehension and communication when teaching English intonation to these young learners (Cameron, 2001). Gestures are recommended for tasks that require both verbal and nonverbal cues. This makes the activities more engaging, and learners can master the spoken language in a meaningful and interactive manner. To conclude, the integration of gestures in teaching can make learning more effective and align with learners' natural learning behaviors, resulting in deeper understanding and retention of language skills.

Intonation in English Language Proficiency

In linguistics, intonation is fundamentally described as the melody of speech or sentence, often involving pitch and modulation variations. These variations extend simple sounds. In Allen's (1971) definition, intonation includes additional aspects such as rhythm, melody, pitch variations, stress, volume, and pause durations. Allen (1971) added that these components are closely linked to the broader concept of prosody or suprasegmentals. Moreover, intonation is considered part of a comprehensive gestural framework, which is essential for effective communication by Bolinger (1985). He identified two elements in defining intonation: body language and facial expressions. Meanwhile, according to Zulfugarova's definition (2018), intonation refers to the melody of speech, sentence stress, and rhythmic patterns. Therefore, intonational patterns can signal different sentence types and functions, such as declarative sentences, commands, and questions, all of which have distinct communicative roles.

Chun (2002) stated that intonation serves multifaceted functions in spoken language, including grammatical, attitudinal, discourse, and sociolinguistic aspects. Regarding grammatical aspects, intonation helps structure speech and guides the listener to interpret the speaker's intent. For instance, rising intonation typically signals a question or prompts a response, whereas signaling a conclusion or command should use falling intonation. For attitudinal aspects, intonation conveys emotional cues, such as sarcasm or anger. Speakers can express their attitudes and emotions using intonation to make the interaction more effective. At the discourse level, intonation can be used to organize speech. The act of emphasizing or deemphasizing certain elements using intonation aims to maintain focus and coherence. It also facilitates transitions in topics or the introduction of new information, which helps listeners navigate the flow of conversation. In terms of sociolinguistic areas, intonation functions as a marker of identity. Chun (2002) explained that intonation patterns can distinguish speakers by regional, social, or professional attributes and influence how messages are interpreted as well as how speakers are positioned within social contexts. In sum, given the interplay of intonation across different layers of language, it is pivotal to pay more attention to intonation in obtaining more effective communication in early L2 development.

Gestures in English Learning

Language and gestures are fundamentally interconnected (McCafferty, 2004). In L2 learning, this interconnection can help enhance comprehension and expression because it enables L2 learners to minimize obstacles in the development of vocabulary, grammar, and discourse (Gullberg, 2006, 2009). The relationship between gestures and language is demonstrated in the learning process as both input and output. For the former, gestures can capture attention and enhance semantic understanding thanks to the multisensory engagement. Conversely, for the latter, gestures help structure the prosodic elements of speech, such as rhythm and stress patterns (McCafferty, 2006). What is more, due to the distinct differences between Vietnamese and English in phonological structures, the role of intonation is more apparent in achieving English proficiency for Vietnamese learners. To illustrate, Vietnamese is characterized as tonal and syllabic-timed, and it maintains consistent timing across syllables. In contrast, English is stress-timed, which means that it has variable intonation that affects stress perception and production within its language (Wennerstrom, 2001).

McNeill (2000) proposed the common classifications of gestures, pointing out four types of forms: deictic, iconic, metaphoric, and beat gestures. Each type has specific communicative functions. Deictic gestures, for instance, indicate objects or concepts. Iconic gestures visually represent the objects they describe. Metaphoric gestures convey abstract ideas, while beat gestures synchronize with speech rhythms to emphasize particular points or words (McNeill, 2000). These gestures help learners bridge linguistic gaps and facilitate a deep understanding during interactions.

The role of nonverbal communication, specifically gestures, in reinforcing verbal messages and enhancing cognitive processes has been documented in prior related literature (Bolinger, 1983; Goldin-Meadow, 2009). Studies by Kendon (2004) and McNeill (2005) highlight the inseparable relationship between speech and gestures. These researchers emphasized the significant contribution of gestures in enhancing expression and thought during communication. Moreover, Gentilucci and Dalla Volta (2008) advocated that gestures and spoken language share a common motor control system. Therefore, it plays a part in communication, especially in L2 learning. Gestures can help young L2 learners acquire language more effectively (Goldin-Meadow, 2009). This benefit is confirmed by McCafferty (2006), who elucidated that using gestures synchronously with speech in education settings is an effective way to master language features. Specifically, this approach can make students grasp abstract language concepts, thus enriching their learning experience. Despite its integral part in communication, how gestures complement L2 speech in EFL contexts is still underexplored.

Research on Gestures and Intonation in English

A review of related literature on teaching English intonation among EFL learners has shown a recent integration of technology to enhance pronunciation or intonation. Specifically, Le and Brook (2011) utilized the computer software Praat for phonetic analysis in their study. Six participants used the software to analyze their phonetic stress patterns. The input focused on yes/no and WH questions. The findings uncovered that thanks to the immediate visual feedback provided by digital tools, learners could identify their errors and enhance their pronunciation.

In a similar vein, in Le et al.'s study (2022), the benefits of the shadowing method with the assistance of Google Text-to-Speech in improving students' intonation were also observed. Seven participants used this technique for pronunciation practice. After the practice, they could reduce their flat tone and achieve more comprehensible English intonations. Moreover, the findings of the study by Nguyen et al. (2023) also revealed learners' positive attitudes towards the use of podcasts in teaching intonation. Ngo (2017) also conducted an experimental study to manipulate intonational instructions, concentrating on teaching tonicity and tone. His findings suggested that the learners' pronunciation could be improved by affecting their intonation perception and production.

The crucial role of gestures in teaching pronunciation also received recognition from recent research, ranging from individual sounds to the melody of speech. For instance, Baker (2014) uncovered that gestures are important for developing linguistic items at the word level. These results were reported by five experienced teachers with master's degrees in English teaching. Similarly, this argument is supported by Iizuka et al. (2020), arguing that the use of kinetic activities, such as handclapping, in pronunciation instruction can boost phonological skills and memory. In their study, Japanese EFL students who practiced pronunciation with handclapping outperformed those who did not in developing L2 segmental features. This effect goes beyond segmental levels. Thompson and Renandya (2020) postulated that gestures can also be used in corrective feedback in pronunciation instruction at suprasegmental levels.

Regarding very young learners, a study by Tellier (2008) attempted to examine the effect of gestures on L2 memorization. The study recruited 20 French EFL children with an average age of 5.5. The groups of participants who received vocabulary instructions with gestures, including mimicking the gestures while repeating the words, demonstrated an increase in memorizing English vocabulary. The results stressed the important role of gestures as visual and motor modalities in L2 vocabulary learning. This view is advocated by another research study conducted by Macedonia (2014), which found that gestures can improve vocabulary learning. In other words, L2 learners can boost their ability to remember and recall words by using gestures during learning.

In teaching intonation, Smotrova (2017) and Girsang et al. (2021) investigated how gestures are integrated into L2 teaching and learning. Smotrova (2017) discovered that teachers could use instructional gestures to help learners identify and generate syllables, determine word stress placement, and master rhythmic patterns in producing L2 speech. Besides, Smotrova (2017) underlined that gestures performed by learners can help them gain control over some pronunciation features. In the same manner, in a qualitative study conducted by Girsang et al. (2021), students were found to use similar paralinguistic features in their unique manner. It was revealed that their pitch levels varied, with some speaking at low pitches and others at high pitches.

Altogether, the abovementioned studies highlight the critical role of gestures in English communication and their multifaceted benefits across domains of language acquisition. Gestures can be used as a powerful instructional pedagogical tool in teaching aspects of language such as pronunciation and intonation. Specifically, gestures can act as a bridge to convey prosodic features more effectively and support learners in internalizing the rhythm and

melody of English speech.

Despite the proven benefits of incorporating gestures into language instruction, there remains a gap in research concerning their impact on very young learners, especially in non-Western settings like Vietnam. Existing studies have mainly focused on older learners or have been conducted in Western educational contexts. Cultural differences and educational practices may influence how gestures are perceived and utilized in these settings. Hence, there is a need for more investigations to warrant localized research. A tonal language, Vietnamese presents distinct challenges and opportunities for English intonation acquisition. Therefore, this study aims to address this gap by investigating the effectiveness of a gesture-based approach in teaching intonation to very young Vietnamese English learners. This topic has not been widely studied before.

Methods

Participants

There were 49 participants in this study. They were between 4 and 6 years old and enrolled in a Vietnamese language center. The two intact classes were randomly assigned to either the experimental group (24 participants) or the control group (25 participants). These learners were chosen as the result of convenient sampling. These learners were young, so the researchers asked for informed consent informally from their parents or guardians. They were fully briefed on the study's purpose, procedures, and their right to withdraw participation at any time. The researcher also guaranteed that there was no harm, only benefits for the learners. During the intervention, the experimental group received English intonation instruction through a gesture-based method, while the control group followed a traditional instruction method without gestures.

Design of the Study

This study adopted a quasi-experimental design to investigate the effectiveness of gesture-based teaching methods in developing English intonation among very young learners in the Vietnamese context. The experimental group and control group received differing approaches, and the main difference between the two intonational instructions between the two groups are described as follows:

In the experimental group, the teaching sessions employed specific gestures aimed at emphasizing the intonational patterns of English, such as the distinct rising and falling pitches associated with questions and statements. Specifically, learners imitated the teachers' gestures while producing the patterns, or they could generate spontaneous body movements. These gestures were incorporated into dynamic and engaging tasks like game-based activities. In this way, these children could recognize and reproduce intonational patterns and, at the same time, stay actively engaged and interested in the learning process.

Conversely, the control group adhered to a more traditional model of intonation instruction that focused solely on verbal cues without the support of accompanying gestures. The content delivered to this group mirrored that of the experimental group in terms of topics and themes

but was demonstrated through conventional teaching methods. Common techniques include listening to the teacher and repeating things. Regardless of the use of games, these activities mainly relied on auditory reception and verbal repetition.

Data collection

Two primary methods were used to collect data: the intonation test and observation. Based on the WIDA Speaking Test format designed by the World-Class Instructional Design and Assessment (WIDA) Consortium, the researchers created an intonation test for these young learners (for more details, please visit https://wida.wisc.edu/). The test was customized to serve the purposes of the current study. The test had two tasks: describing pictures and responding to everyday prompts about topics such as family and hobbies. The evaluation was conducted based on the WIDA rubrics with some additional aspects. There were five rubrics: linguistic complexity, language control, stress patterns, rhythm, and fluency. The assessment was carried out by an English native speaker who was informed of the criteria for marking without knowing which group was the experimental or control group.

The second instrument was observation. During the 16-session observation phase, learner interactions and learning processes were meticulously recorded using a structured observation sheet. The purpose of this tool is to capture classroom dynamics, learner participation, and the effectiveness of a gestural teaching approach in learning intonation and non-verbal cues. This detailed information could provide evidence for further analysis of the impact of the gestural method on students' intonation mastery and overall learning experience. In this way, it could offer valuable insights for understanding this gestural approach in early language acquisition.

Data analysis

For the quantitative data, T-tests were run using SPSS 23. The purpose was to analyze pre-test and post-test scores. This analysis could detect significant differences in intonation between control and experimental groups. In other words, these significant differences could indicate the effectiveness of the gesture-based approach in teaching intonation among these very young learners. Content analysis was utilized to analyze the qualitative data. The researchers carefully read the information recorded in the observation sheet many times for analysis. The main themes were identified based on the key topics in the observation sheet. This could offer insights into learners' reactions to the gesture-based teaching approach.

Several rigorous measures were taken into consideration to ensure the reliability and validity of the study. First, the lesson plans for the two groups were validated by an experienced English teacher. This expert made sure the plans matched learning objectives and were uniform in content. Instruction time was identical in the two groups. The only different variable was the use of gestures. Second, the intonation tests were customized and adapted from standardized WIDA assessments. This ensured the validity of the tests. Finally, qualitative data from observations was gathered using a triangulation method. In this way, qualitative data complemented the quantitative data by providing deeper insights into student engagement in addition to the effectiveness of the gesture-based approach.

Ethical Considerations

Ethical considerations were carefully addressed to uphold the integrity of the research. Parents or guardians were fully briefed on the study's purpose, procedures, and their right to withdraw participation at any time. After that, informed consent was obtained. The physical and psychological well-being of the young participants were also guaranteed. The study also ensured confidentiality through secure data management practices and maintained transparency regarding the research's nature, potential risks, and benefits.

Results/Findings

In response to the first research question regarding whether very young EFL learners enhance their intonation through gesture-based instruction, the findings indicate that these learners do indeed show improvement. Initially, both groups demonstrated comparable intonation abilities, as indicated by the pre-test scores with a t-value of 0.619 and a p-value of .539, showing no significant differences at the study's onset.

Table 1

Within-group Mean Difference between pre-test and post-test for the two groups

Scores				T-test		
	Mean	*SD*	*Mean Difference*	*df*	*t*	*Sig. (2-tailed)*
Pretest-CG	7.15	1.65	0.00417	23	.042	.967
Posttest-CG	7.75	1.39				
Pretest-EG	8.04	1.85	0.51200	24	6.04	.000*
Posttest-EG	8.58	1.54				

*p< .05 level

Post-intervention, significant improvements were observed in the EG's intonation. The paired T-test results showed that the EG's post-test scores (Mean=8.58, Standard Deviation=1.54) were significantly higher than their pre-test scores (Mean=8.04, Standard Deviation=1.85), with a t-value of 6.04 and a p-value of .000. The CG also saw improvements, though less pronounced. Further analysis using independent sample T-tests revealed that the EG significantly outperformed the CG in post-test intonation performance, with a t-value of 2.087 and a p-value of .042. This indicates the effectiveness of gesture-based teaching in enhancing intonation skills among very young EFL learners.

Table 2

Between-group Mean Difference for the pre-test and post-test

					95% Confidence Interval	
	SE Difference	*df*	*t*	*Sig. (2-tailed)*	*Lower*	*Upper*
Pre-test	.311	47	0.619	.539	-.701	1.324
Posttest	.865	47	2.087	.042*	.031	1.699

*p< .05 level

In response to the second research question regarding learners' reactions during learning

intonation with a gesture-based approach, analysis of qualitative data revealed that the class showed active engagement and participation. Initially, students seemed to show unfamiliarity with coordinating gestures and speech. The teachers had to remind them consistently and repeatedly in a gentle and playful manner. Gradually, the learners became curious and excited about demonstrating their own body movements in a fun way. They were shifting from reserved behaviors to more participation. Later on, they became disciplined and willing to synchronize gestures with speech. From their facial expressions and active participation via hand raising and laughter, the atmosphere in the classroom was livelier. Their positive reactions and engagements during the intervention indicate the effective implementation of this gesture-based approach.

Despite the benefits, there were some challenges to implementing this gestural approach. Initially, some of the learners were distracted and showed a lack of cooperation. Some of them made noise during class because they were uncontrollably active. In contrast, some were overly reserved. These obstacles were unavoidable because, at this point, these learners tended to love playing games and having fun. Under this circumstance, the teacher had to exhibit considerable patience and adaptability to manage the classroom. Sometimes, teachers had to use rewards to motivate learners' participation. The overall findings of this study suggest that gesture-based instruction could improve the learner's engagement in learning and their ability to perform English intonations effectively, regardless of some initial challenges. This suggests that incorporating gestures into intonation instruction can be an effective strategy for enhancing English skills among Vietnamese very young learners.

Discussion

This study sought to explore the effectiveness of integrating gestures into intonation teaching for very young learners in Vietnam. The experimental group was taught intonation with gesture-based methods, while the control group was taught intonation with traditional methods. The results indicate that pupils in the experimental group displayed notable improvements in intonation accuracy when compared to their counterparts in the control group. Despite equal amounts of time on tasks, the intonation scores of the experimental group showed better improvements.

This result was consistent with those of previous research, which also observed the benefits of gestures in teaching English pronunciation (e.g., Tellier, 2008; Iizuka et al., 2020). These studies showed that gestures could enhance learning. In other words, providing visual and kinetic reinforcement can help learners master intonation. Those learners who are young with limited memory spans can better retain and recall language patterns, particularly intonational patterns, thanks to the use of gestures. Moreover, what was discovered in the current study was in line with the findings of Smotrova (2017) and Girsang et al. (2021). These researchers suggested that using gestures with speech could promote more fluent speech and remove the monotonous tone, resulting in more native and natural output.

Furthermore, qualitative data in the study also indicated that the gesture-based approach could enrich the classroom atmosphere. Integrating gestures in producing intonational patterns could

be embedded in games, making intonation lessons lively and interactive. The activities could create a game-like and engaging learning environment for these young learners. Besides, this approach fostered active participation and enthusiasm among learners keen to mimic and creatively adapt gestures. As a result, they could master intonation or language fluency more effectively. The dynamic interaction within the classroom deepened the bond between learners and teachers and among the pupils themselves via fun physical and verbal activities. This collaborative and supportive educational environment featuring an enjoyable atmosphere is critical in helping young learners master the L2 language. Taken together, using gestures to teach intonation to very young learners was found to be beneficial for learners mastering intonation patterns and experiencing a pleasant learning atmosphere. This lays the foundation for achieving fluency of speech and strengthening memorability of speech in English.

Conclusions

In conclusion, this paper reported the results of an investigation into the effects of gesture-based instruction on the intonation of 49 very young Vietnamese EFL learners aged 4 to 6. The study was conducted at a language center in Ho Chi Minh City. The findings demonstrated that learners who received gesture-integrated teaching significantly improved in intonation accuracy compared to those taught with traditional methods. The results also showed that this method enhanced the learners' intonation and increased their enthusiasm for English classes. The use of gestures was found to facilitate language acquisition effectively by capturing the students' attention and enhancing their focus. This reflects the natural language acquisition processes observed in young learners.

The study has the significant pedagogic benefits of integrating gestures in teaching intonation to very young EFL learners. Given the benefits of gestures in teaching intonation, teachers should implement this approach via various activities, particularly game-based tasks, to maximize its benefits. The implementation of gestures in teaching intonation can help capture attention from learners and also help learners enhance memory retention and linguistic understanding. At the same time, learners' interest in language is also stimulated thanks to this engaging learning environment. For learners, the gesture-based method proves particularly engaging and effective, catering to their limited attention spans and preference for interactive learning. It utilizes auditory and visual stimuli to maintain focus and deepen cognitive processing, making the learning experience impactful and memorable. Suffice it to say that this multimodal approach not only aids retention but also makes the learning process enjoyable, encouraging active participation and physical involvement, which are critical for young learners. For researchers, these findings open new avenues for exploring the efficacy of gesture-based language teaching further. There is potential for studies that examine different types of gestures and their specific impacts on various aspects of language learning, such as pronunciation, rhythm, and fluency.

However, the study acknowledged several limitations. First, the demographic information of the participants, who were very young Vietnamese learners, may restrict the generalizability of the findings to other settings. Second, the duration of the study, which was two months with 16

sessions, was relatively short, which raises questions about the long-term effect of gesture-based teaching methods. Finally, the primary use of observation for data collection may have missed other aspects of classroom interactions that video recordings could capture.

There are some recommendations. Future studies should involve learners from different age groups, proficiency levels, and cultural backgrounds to enhance the generalizability of the findings. Moreover, the duration of intervention can be extended to obtain more comprehensive data on how the sustained use of gestures influences language acquisition over time. Lastly, future work should combine video analysis with other qualitative methods, such as interviews and learner diaries, to get deeper insights into learners' perceptions and experiences of gesture-based teaching. This could provide a more robust understanding of how gesture-based teaching can be effectively implemented to support L2 development.

References

Allen, V. (1971). Teaching intonation, from theory to practice. *TESOL Quarterly, 5(1)*, 73–81. https://doi.org/10.2307/3586113

Baker, A. (2014). Exploring Teachers' Knowledge of Second Language Pronunciation Techniques: Teacher Cognitions, Observed Classroom Practices, and Student Perceptions. *TESOL Quarterly*, *48*(1), 136–163. https://doi.org/10.1002/tesq.99

Bolinger, D. (1983). Intonation and gesture. *American Speech, 58*(2), 156-174. https://doi.org/10.2307/455326

Cameron, L. (2001). *Teaching Languages to Young Learners*. Cambridge University Press.

Church, R. B., Ayman-Nolley, S., & Mahootian, S. (2004). The role of gestures in bilingual education: Does gesture enhance learning? *International Journal of Bilingual Education and Bilingualism, 7*(4), 303-319. https://doi.org/10.1080/13670050408667815

Chun, D. (2002). *Discourse intonation in L2: From theory and research to practice*. John Benjamins Publishing Company.

Garton, S., & Copland, F. (2019). *The Routledge handbook of teaching English to young learners*. Routledge. https://doi.org/10.4324/9781315623672-7

Gentilucci, M., & Volta, R. D. (2008). Spoken language and arm gestures are controlled by the same motor control system. *Quarterly journal of experimental psychology, 61*(6), 944-957. https://doi.org/10.1080/17470210701625683

Girsang, M. I., Sumbayak, D. M., & Muhammad Yusuf. (2021). Paralinguistic Features in Students' Speaking Performance. *LingPoet: Journal of Linguistics and Literary Research*, *2*(2), 1–16. https://doi.org/10.32734/lingpoet.v2i2.4452

Goldin-Meadow, S. (2009). How gestures promote learning throughout childhood. *Child development perspectives*, *3*(2), 106-111. https://doi.org/10.1111/j.1750-8606.2009.00088.x

Goldin-Meadow, S. (2011). Learning through gestures. *Wiley Interdisciplinary Reviews:*

Cognitive Science, *2*(6), 595-607. https://doi.org/10.1002/wcs.132

Gullberg, M. (2008). Gestures and second language acquisition. In P. Robinson & N. C. Ellis (Eds.), *Handbook of cognitive linguistics and second language acquisition* (pp. 276–305). Routledge.

Gullberg, M. (2009). Gestures and the development of semantic representations in first and second language acquisition. *Acquisition et Interaction En Langue Étrangère*, *1*, 117–139. https://doi.org/10.4000/aile.4514

Gullberg, M. (2006). Some reasons for studying gestures and second language acquisition. IRAL - International Review of Applied Linguistics in Language Teaching, 44(2), 103-124. https://doi.org/10.1515/IRAL.2006.004

Halliwell, S. (1992). *Teaching English in the Primary Classroom*. Longman.

Hoang, N. T.,Duong, N. H., & Le, D. H. (2023). Exploring Chatbot AI in improving vocational students' English pronunciation. *AsiaCALL Online Journal, 14*(2), 140–155. https://doi.org/10.54855/acoj.231429

Iizuka, T., Nakatsukasa, K., & Braver, A. (2020). The Efficacy of Gesture on Second Language Pronunciation: An Exploratory Study of Handclapping as a Classroom Instructional Tool. *Language Learning*, *70*(4), 1054–1090. https://doi.org/10.1111/lang.12415

Kendon, A. (2004). *Gesture : Visible Action as Utterance*. Cambridge University Press.

Le, P. N., Vu, H. M. L., & Tran, M. N. (2022). Improving EFL Students' Intonation In-Text Using Shadowing Technique with the Implementation of Google Text-to-Speech. *AsiaCALL Online Journal*, *13*(1), 93–121. https://asiacall.info/acoj/index.php/journal/article/view/102

Le, T. H., & Brook, J. (2011). Using Praat to Teach Intonation to ESL Students. *Hawaii Pacific University TESOL Working Paper Series*, *9*(1), 2–15. https://www.hpu.edu/research-publications/tesol-working-papers/2011/9_1-2_Le%20Brook.pdf

Macedonia, M. (2014). Bringing back the body into the mind: Gestures enhance word learning in foreign language. *Frontiers in Psychology*, *5*(12), 1–6. https://doi.org/10.3389/fpsyg.2014.01467

Mccafferty, S. G. (2006). *Gesture and the materialization of second language prosody*. *44*, 197–209. https://doi.org/10.1515/IRAL.2006.008

McCafferty, S. G. (2004). Space for cognition: Gesture and second language learning. *International Journal of Applied Linguistics*, *14*(1), 148–165. https://doi.org/10.1111/j.1473-4192.2004.0057m.x

Mcneill, D. (2005). *Gesture and Thought*. University of Chicago Press.

McNeill, D. (2000). *language and gestures*. Cambridge University Press.

McNeill, D. (1992). *Hand and mind: What gestures reveal about thought*. University of

Chicago Press.

Ngo, P. A. (2017). Teaching English Intonation To Vietnamese Students of English: Tonicity and Tone. *VNU Journal of Foreign Studies*, *33*(6). https://doi.org/10.25073/2525-2445/vnufs.4205

Nguyen, H. L., Nguyen, T. L., & Le, D. H. (2023). Non-English-majored Freshmen's Investigating Perspectives and Attitudes towards English Intonation through Podcast Integration in a Vietnamese University. *AsiaCALL Online Journal, 14*(2), 168–184. https://doi.org/10.54855/acoj.2314211

Piaget, J. (1952). *The origins of intelligence in children*. International Universities Press.

Serrano, L. B. (2018). *The role of pronunciation in Very Young Learners ' classes. Teachers ' beliefs and concerns* (Final Degree Project). Universitat de Vic-Universitat Central de Catalunya.

Smotrova, T. (2017). Making Pronunciation Visible: Gesture In Teaching Pronunciation. *TESOL Quarterly*, *51*(1), 59–89. https://doi.org/10.1002/tesq.276

Tellier, M. (2008). The effect of gestures on second language memorisation by young children. Gesture, 8(2), 219-235. https://doi.org/10.1075/gest.8.2.06tel

Thompson, A. A., & Renandya, W. A. (2020). Use of gesture for correcting pronunciation errors. *Teflin Journal*, *31*(2), 342–359. https://doi.org/10.15639/teflinjournal.v31i2/342-359

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

Wennerstrom, A. (2001). *The music of everyday speech: Prosody and discourse analysis*. Oxford University Press.

Wichmann, A. (2000). *intonation in text and discourse: Beginnings, middles and ends*. Longman.

Zulfugarova, R. (2018). *The Function of Intonation in the English Language. Web of Scholar, 6*(24). https://journals.indexcopernicus.com/api/file/viewByFileId/300380.pdf

Biodata

Nguyen Ngoc Thuy Ngan is a graduate student at Ho Chi Minh City University of Economics and Finance, Vietnam. Email: ngannguyen03031@gmail.com

Luu Thi Mai Vy is a lecturer at Ho Chi Minh City University of Economics and Finance, Vietnam. Her research interests include L2 listening development, pronunciation, theories in language and teaching. Email: vyltm@uef.edu.vn.

The Attitudes of Ethnic Minority Students towards Project Based Learning in MOET'S 2018 General Education English Curriculum

Nguyen Thi Hoai Huong[1*]

[1] Lam Dong Ethnic Minority Boarding High School, Da Lat City, Vietnam
[*]Corresponding author's email: nguyenthihoaihuong3384@gmail.com
* https://orcid.org/0000-0002-8481-6634
https://doi.org/10.54855/acoj.241522

Abstract

This study aimed to examine the attitudes of ethnic minority students towards project-based learning (PBL) and discover the obstacles they encountered while dealing with this method. The participants in this study were 235 ethnic minority students in grade 10 of two boarding schools in Lam Dong province. The author employed a questionnaire and a semi-structured interview to collect data in this study. Then, quantitative data was processed using SPSS software, while qualitative data was recorded for content analysis. Research results indicated that most ethnic minority students in grade 10 at two boarding schools expressed a positive attitude towards PBL. At the same time, the students also stated several obstacles they encountered while dealing with this method, such as project time constraints, uncooperativeness among group members, digital skills shortage, and limited budget. The author hoped that the early findings of this research would be beneficial to the development of the quality of English learning through this study in two boarding schools in particular and in other high schools in Vietnam in general.

Keywords: *project-based learning, ethnic minority students, boarding school, English 10*

Introduction

With the demands and advancements of the 21st century, students nowadays need to be prepared with basic knowledge and necessary abilities. A novel teaching strategy known as project-based learning (PBL) has been shown to support students' complete knowledge and skill development. According to Thomas (2000), PBL is a method that improves learners' communication capacity and helps them accumulate their life skills. This is an advanced learning method implemented by many major STEM educational institutions because of the great benefits that this method brings back. Researchers and educators have also confirmed those benefits in their studies. Hutchinson (1991) believes that students who study with the PBL method will be trained in 4 Cs skills (communication, criticism, cooperation, creativity) and a self-disciplined learning attitude. Some other researchers (Demir, 2020; Krajcik et al., 1999; Pham, 2014; Tran &Tran, 2019) also share the same opinion when considering PBL as one of the comprehensive learning methods that help learners not only gain basic knowledge and skills but also develop necessary skills in modern society.

A Swiss psychologist, Jean Piaget, once said: "Knowledge is the result of experience." Indeed, "learning with practice" is the fastest way to push us to get closer to human civilization. In fact,

every day, people face many problems in life, and solving those problems is the foundation of development. Therefore, to succeed in the future, we need to aim to accumulate knowledge based on solving practical problems. On that journey, project-based learning is considered to be the learning method of the 21st century.

In some affluent nations, PBL has been extensively used to teach and learn foreign languages at all levels. Project-based learning has been implemented in Vietnam's colleges and institutions but is still relatively new in high schools. Recognizing the importance of PBL in improving the quality of English teaching and learning in Vietnam, the Ministry of Education and Training released the English 10 textbooks to replace the outdated ones at the start of the academic year 2022-2023. The new English 10 textbooks have a project at the end of each unit. With diverse and familiar themes, the projects aim to encourage students to improve their communication ability and foster their learning motivation.

Lam Dong province has two boarding schools for ethnic minority students: Lam Dong Ethnic Minority Boarding School and Southern inter-district Ethnic Minority Boarding School. The ethnic minority students at these two boarding schools are often passive and afraid of innovation in the learning process.

As noted in many studies conducted by Standford and Harvard University, attitude is one of the prerequisites for success in the language learning process. As a result, the author conducted this study to shed light on the attitudes of ethnic minority students in the 10th grade towards PBL and find out the difficulties they encountered when dealing with it.

To fulfill the purpose of the study, the survey was seeking to answer the following research questions:

1. To What were the attitudes of the 10th-grade ethnic minority students at Lam Dong Ethnic Minority Boarding School and Southern inter-district Ethnic Minority Boarding School toward the project-based learning approach in English 10?

2. What were the difficulties that the students encountered while doing the projects?

Literature review

Definition of "Project Learning" (PBL)

Researchers worldwide have introduced several concepts of Project-based Learning (PBL) in several different ways. PBL is the best teaching strategy, according to Bransford, Brown & Cocking (1999), since it encourages students to use and expand their prior knowledge in a new setting.

Thomas (2000) defines PBL, specifically arguing that it is a learning model in which learners work together in groups, solving a problem in the real world by utilizing various knowledge and abilities. According to Demir (2020), PBL is a teaching strategy that allows students to explore real-world issues while also coming up with their own solutions. According to Savery (2006), PBL is a constructivist teaching strategy in which teachers guide groups of students as they use what they have learned in the classroom to address problems that they encounter in the real world.

In summary, PBL is a learner-centered teaching model that activates collaboration and critical thinking skills through real-life problem-solving experiences. Group work is the basic form of this method.

PBL and traditional teaching methods

In the view of Hirsh et al. (2022), traditional teaching methods are defined as those that are well-known and have been in use for a long time. Teachers will directly teach and interpret knowledge to students while students will listen, take notes, and memorize it. This teaching style has been used for a long time and continues to be effective. However, there are some disadvantages to adopting the traditional teaching method, such as students absorbing knowledge passively, class time spent in boredom, and in favor of theoretical knowledge (Bruner, 1982). Students will have fewer opportunities to practice and actively explore, making it harder to remember and apply information for an extended period of time (Liu & Long, 2014).

PBL is a student-centered project-based learning. Accordingly, students will actively focus on finding out and solving real-life problems on their own to achieve results.

Figure 1.

Differences between traditional and PBL methods

The benefits of learners when using PBL

Promoting self-learning ability

According to Hoang (2009), Tran & Tran (2020), Nguyen (2011), and Pham, Nguyen & Phan (2023), over the course of project implementation, learners' self-study ability will be higher and higher because when participating in a project, learners have to spend time searching for information from different sources, then analyzing and synthesizing. Those that help learners not only deepen but also broaden their understanding of what they have learned in classes when applying them to real-life problems.

Developing 21st century skills

According to Thomas (2000), PBL helps to improve students' diligence, self-reliance, and learning attitude. In addition, Sri (2018), Zarif & Ahmed (2013), Pham (2014), and Tran & Tran (2020) also indicate that PBL helps learners build necessary 21st-century abilities such as cooperation, creativity, critical thinking, problem solving, decision-making, communication skills, and so on.

Improving target language usability

According to Maftoon, Birjandi, Ahmadi (2013), and Nguyen (2023), PBL allows learners to use the language for practical purposes. To be able to express their own opinions and convey messages in projects, learners must search for ways to enrich their vocabulary. Pham (2014) states that with a rich vocabulary, learners will eliminate fear when handling a problem in front of the class. Therefore, it is PBL that forces learners to accumulate their vocabulary, and since

then, their ability to use the target language is gradually improved.

Building self-assess

PBL allows learners to assess the learning of their group members or class members and their own learning progress. (Gubacs, 2004)

Improving academic achievement

According to Ergul and Kargin (2014), PBL helps students enhance their academic performance. Based on cooperative learning research, students who actively work in groups produce superior academic results than in typical classroom settings (Gillies & Ashman et al., 2000). This is due to the back-and-forth interaction among team members. Weaker team members often receive help and support from better team members. As a result, weak members will gradually improve.

Although PBL significantly benefits learners, it also results in many difficulties. In his research paper, Sumarni (2015) mentions four major challenges when using PBL, including: (1) Not enough time to implement the project, (2) Lack of experience in teamwork, (3) Lack of teacher support, (4) Lack of technology skills.

Particularly, the project implementation time is a significant challenge. PBL encourages learners to devote more time to completing a sequence of activities in a project activity when compared to other techniques (Grant, 2002). Furthermore, learners struggle with researching and acquiring material and preparing for presentations due to a lack of digital skills (Kurzel & Rath, 2007). Furthermore, learners with limited experience working in groups struggle to discuss and agree on a topic. And yet, the study of Kurzel & Rath (2007) also shows that one of the biggest difficulties that learners encounter when dealing with project implementation is the lack of support from the instructors.

Definition of "Attitude"

Up to now, "attitude" has been defined by many researchers from different angles in different fields such as psychology, education, and especially linguistics.

In Lambert's view (1987), attitudes are defined as the reactions and evaluations of a person or a group of people to social problems. Those reviews can be positive or negative and vary from person to person, from time to time. Besides, attitudes can either promote or hinder the choices people usually make in their daily lives.

Similarly, Gardner (1985) argues that attitude is an individual's evaluative response to something based on the individual's beliefs. Ajzen (1988) takes a similar view, holding that a language will not exist if a language community considers it inappropriate. Baker (1992) also emphasizes the role of attitudes in restoring, preserving, weakening, or losing language.

Wenden (1991) takes a distinct approach to attitude, providing a thorough definition that encompasses three components: affective, cognitive, and behavioral. The first component is affective, which deals with our feelings and affection for the object. The second component is perception, which concerns our beliefs about the object; the last is behavioral, which refers to how an individual acts and processes the object.

Figure 2.

The three components that make up attitudes
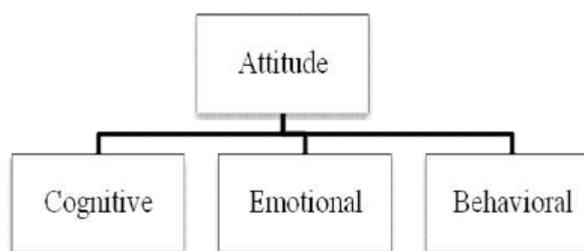
In a nutshell, attitude is a tendency to think or act in a certain way toward some object or problem, often coupled with feelings. According to Wenden, the mode has three different components: affective, cognitive, and behavioral. The cognitive component deals with a person's information or knowledge, while the affective component is based on emotions such as fear. The action component reflects how attitudes affect the way we act or behave.

Many studies have found a strong link between learners' attitudes and language learning. According to Gardner & Lambert (1972), attitude, in addition to motivation, has long been regarded as one of many elements influencing the process of language acquisition. Oxford & Shaerin (1994) also emphasize this mindset's significance in language learning.

Kouros and Abrami (2006) emphasize the role of attitudes in the educational process. They claim that once acquired, attitudes shape how students feel, think, and act. As a result, attitudes significantly impact a variety of aspects of how students learn, from their study habits to the caliber of their education.

Psychologists consider learners' attitudes as either positive, negative, or neutral. Success or failure in learning a foreign language depends on both positive and negative factors. Winston Churchill's quote, "Attitude is a little thing that makes a big difference," sums up this concept. It is believed that people who embrace a positive attitude towards language learning can achieve more.

In extensive studies, Gardner and Lambert (1972) demonstrate that a positive attitude towards a language can help improve learners' proficiency. Karahan (2007) has a similar view; he further explains that a positive attitude contributes to the orientation of learners' approach to language. He believes that when learners hold a positive attitude, they will become more positive and perform better in class.

This idea is supported by Brown (2000) and Ellis (1994), who state that learners with negative attitudes may have less chance of accessing the target language. This means that people with negative attitudes find it less easy to achieve the expected level of proficiency in language learning because they are less motivated; their input and interaction in their learning process will be reduced to a certain extent.

With the above points of view, it is clear that attitude is one of the key elements that directly impacts how well learners pick up a language. Attitudes can influence how the learning process is approached, for better or worse. People who maintain a positive attitude during the learning process will reap more results than those with a negative attitude. Therefore, it is very necessary to know learners' attitudes towards language learning because it can help adjust teaching methods or help learners promptly.

Previous studies

Han (2017) used a questionnaire to investigate the attitudes of 840 Korean students at six high schools towards PBL in the interdisciplinary curriculum of science, technology, engineering, and mathematics. The research results showed that these students expressed a preference for PBL.

In 2019, Apsari, Mulyani, and Lisdawati (2019) also surveyed the attitudes of 4th graders towards PBL. The author used a Likert Scale questionnaire. After data collection and analysis, the findings demonstrated that these pupils had a favorable attitude due to its advantages. In an intermediate Spanish classroom at a university, Parker (2020) surveyed to determine the attitudes of 15,000 students about project learning. After analyzing the obtained data, the research results indicated that the learners expressed a positive attitude toward PBL. They claimed that thanks to PBL, the lessons became more interesting and easier to inculcate.

In Vietnam, in 2017, Le & Phuong (2017) carried out a survey to throw light on the attitudes of 140 10th grade students at Bac Lieu High School towards PBL in their 10th grade English textbooks. According to the research, most students expressed their love of this learning method. In addition, the study also pointed out the difficulties that the children encountered when PBL was implemented.

A 2020 study by Tran & Tran also examined the attitudes of 155 grade 10 students at Bui Thi Xuan School, Da Lat city, toward the use of PBL in the pilot English 10 textbook. The author used a survey with 23 questions and interviewed 40 students. The results showed that most of the 10th graders embraced a positive attitude toward PBL.

In summary, there have been many studies on the advantages of PBL done by researchers around the world. However, studies on learners' attitudes towards PBL are still quite limited. In particular, in Vietnam, there is no research on the attitudes of ethnic minority students toward PBL. This study was carried out in order to better understand the perspectives of students from ethnic minorities on PBL. The study's conclusions would be useful for both teaching and learning at the Lam Dong Ethnic Minority Boarding School and Southern inter-district Ethnic Minority Boarding School. In addition, PBL would be likely to receive more attention in the current wave of education reform.

Methods

Pedagogical Setting & Participants

Lam Dong is a land of many ethnic groups throughout the country, with over 40 different ethnic groups residing and living. The largest population is Kinh, (77%), K'Ho (12%), Ma (2.5%), Nung (2%), Tay (2%), Hoa (1.5%), Chu-ru (1.5%) ..., the other ethnicities have a rate less than 1% ... According to statistics of the Department of Education and Training Lam Dong province in 2023, Lam Dong province has 673 preschools and high schools with 26.7% ethnic minorities. There are 59 high schools (18.87% ethnic minorities) in Lam Dong province. Among them are 07 lower secondary boarding schools and 02 upper secondary boarding schools. At Lam Dong ethnic minority boarding school and Southern inter-district ethnic minority boarding school in Lam Dong province, ethnic minority students come from 10 different districts, including Lac Duong, Don Duong, Duc Trong, Lam Ha, Di Linh, Dam Rong, Bao Lam, Da Hoai, Da Teh and Cat Tien. Therefore, the number of ethnic minority students at two boarding schools accounts for more than 76% of the total number of ethnic minority students in Lam Dong province.

235 10th graders from Southern inter-district Ethnic Minority Boarding School and Lam Dong

Ethnic Minority Boarding School took part in this study. All of them utilized new English 10 textbooks Global Success from Vietnam's Ministry of Education and Training.

Design of the Study

The study was designed in mixed-method, combining quantitative and qualitative methods.

Data collection & analysis

The author employed a questionnaire consisting of 19 questions with 5 points, divided into two parts. Part 1 was designed with 15 questions about students' attitudes towards PBL in English 10, including three factors: emotion, cognition, and behavior. Part 2 comprised four questions about challenges and difficulties that students handled with PBL. In order to collect the best results, the questionnaire was translated into Vietnamese to make it easy for the students to answer and avoid misunderstandings.

The questionnaire utilized in the current study was modified from research by Nassir (2014) and Tran &Tran (2020) to ensure its validity and reliability. Five semi-structured interview questions were included to increase the reliability of the survey and learn about the challenges and difficulties that students faced when using PBL. The questions were translated into Vietnamese, and the students also answered in Vietnamese.

Data collection was carried out from late April through early May in the academic year 2022-2023 at Lam Dong Ethnic Minority Boarding School and Southern inter-district Ethnic Minority Boarding School. First, 235 questionnaires were sent to 10th graders. They were required to complete the questionnaire within 2 days of receiving the survey.

Then, seven students were randomly chosen from five courses to participate in the semi-structured interview. The purpose of the interview was presented to the students prior to the interview. Each student responded to interview questions for between five and seven minutes. Student comments were recorded for content analysis.

Both qualitative and quantitative data were produced by the study's design. The mean, standard deviation, and frequency of the quantitative data from the survey were examined using SPSS. Student replies were evaluated using a five-point Likert scale with five levels: strongly disagree, disagree, neutral, agree, and strongly agree.

The meaning of the mean score of students' attitudes toward PBL was explained as follows:

Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.00–1.80	1.81–2.60	2.61–3.40	3.41–4.20	4.21–5.00

Questions from semi-structured interviews were used to gather qualitative data, and the content analysis method was used to examine the interviewees' responses.

The students interviewed were coded S1 to S7.

Results/Findings and discussion

Result

This study aimed to determine the attitudes of 10th-grade ethnic minority students towards PBL at Lam Dong Ethnic Minority Boarding School and Southern inter-district Ethnic Minority Boarding School and the obstacles they encountered while using this method.

Attitudes of 10th-grade ethnic minority students towards PBL

Emotion

Table 1.

Descriptive statistics on students' feelings towards PBL

No.	Items	n	M	SD
1	I find it interesting to work in groups to complete projects.	235	4.00	1.023
2	I feel more confident in presenting my project in front of the class.	235	4.32	1.095
3	I feel more responsible when tackling projects together	235	4.13	1.107
4	I find it interesting to express my opinions on projects	235	4.00	1.114
5	I always feel great when I finish a project	235	4.03	1.069

As shown in Table 1, (1) The average score of items E1 to E5 was 4.00 to 4.32; (2) The average of 5 items from E1 to E5 was 4,096. It was noticeable that most ethnic minority students loved and enjoyed doing projects in the English 10 textbook.

The study results indicated that 10th graders agree that PBL helped them feel more confident while presenting their projects in front of the class. (M =4.32); And when doing a project, they always received support and suggestions from group members. Also PBL helped them assert their roles, tasks, and responsibilities in completing the common lesson (M = 4.13). After completing a project, they all felt pleased because they had learned more and gained more knowledge. (M=4.03). The data in the table also showed that PBL created a great opportunity for the children to work with other students (M=4.00).

As noted from the interview, the 10th graders also said they felt excited when they started working on projects together.

"…I feel excited to work on a project together…"

"…I like project-based lessons because my friends and I can exchange ideas …"

"…we are always ready for projects…"

"…This is an opportunity to express individual creativity, and learn together…"

"…We can express our opinions and comment on other group's projects. Besides, we can learn something from other groups."

"…project lessons are always interesting…"

In summary, data obtained from questionnaires and interviews showed a similarity. The 10th graders all acknowledged that they enjoyed the project lessons. Students felt interested and excited in these classes.

Cognition

Table 2.
Descriptive statistics of students' awareness of PBL

No.	Items	n	M	SD
6	Project-based learning helps me develop essential 21st-century skills	235	3.58	1.219
7	Learning through projects helps me improve my speaking skills	235	3.68	1.033
8	Learning through the project helps me improve my academic performance in English	235	3.51	1.274
9	I must complete the textbook projects	235	3.81	1.067
10	The projects in the textbook help me apply and extend what I have learned into practice	235	3.68	1.124

Table 2 presents the perception of 10th graders about PBL. The data in the table shows that (1) The average score of items from C6 to C10 was 3.51 to 3.81; (2) The average of 5 items from C6 to C10 was 3,652. This indicated that the students were conscious of the necessity and advantages of project-based learning. These 10th classmates specifically concurred that the projects in the English 10 textbooks were crucial. (M=3.81) because PBL helped them improve their speaking skills (M = 3.68) and assisted students in using the information and material they learned in actual circumstances. (M = 3.68). According to them, PBL also helped them develop necessary skills in the 21st century (M=3.58). After all, it was PBL that helped them improve their academic achievement in English. (M = 3.51).

The data from the interview were also consistent with the data obtained from the questionnaire. Specifically, some students said:

"… In my opinion, the biggest advantage from projects is promoting self-awareness learning…"

"… project-based learning method helps develop a number of skills such as: problem solving skills, teamwork skills, communication skills, personal skills, critical thinking, creative thinking skills, communication skills. These are the techniques that are necessary skills for the 21st century..."

"… Thanks to the project-based learning method, my speaking skills have gradually improved better and better…"

"… the ability to make presentations, and use technological devices to find information gradually accelerated..."

"…During the process of doing projects, we must be self-reliant and self-aware to achieve a common goal. Therefore, we practice perseverance and endurance and self-awareness…"

"…Through carrying out projects, it helps to practice the ability to present problems logically…"

"…I can evaluate not only myself but also my classmates…"

"…I see my weaknesses and strengths. From there, I have my own direction to develop myself…"

Thus, the data from interviews and questionnaires clearly showed that the students were well aware of the significant advantages that PBL offered.

Behavior

Table 3.
Descriptive statistics on students' behavior towards PBL

No.	Items	n	M	SD
11	In order to complete the project, I searched a lot of information from different sources.	235	3.55	.561
12	I took time to practice speaking in front of the group.	235	3.39	.873
13	I appreciated every comment in the group	235	3.19	.595
14	I learned a lot of knowledge and skills from my friends in the group	235	4.10	.965
15	I made efforts to complete the assigned work.	235	3.81	1.181

Table 3 was a statistical description of students' behavior towards project activities in the English 10 textbook. According to the data, (1) The average score of items B11 to B15 was 3.19 to 4.10; (2) The average of 5 items from B11 to B15 was 3,608. This meant that the behavior of these 10th graders was aligned with emotions and perceptions. Specifically, these 10th graders agreed that the projects in the English 10 textbook helped them learn a lot of knowledge and skills from their classmates (M=4.10). They also said that because this was a common job, they always tried to complete the work divided into groups (M=3.81) by researching and finding information from different sources (M=3.55). However, in terms of practicing giving presentations in front of the group (M=3.39) and taking notes from other members of the group (M=3.19), the students were hesitant.

The quantitative and qualitative statistics are in line with each other, demonstrating that the 10th graders behave favorably toward PBL.

"…I had to spend a lot of time finding information and references for the project…"

"…I always tried to complete the assigned work because this was a common job of the whole group…"

"…My friends and I made a specific plan to complete the assignment on time…"

"…I also consulted with some teachers from other subjects…."

"…My friends and I invested a lot of time in completing a project…"

"…We tried to complete the assigned tasks in the group so we can improve our scores…"

"…We also took notes from teachers' comments from previous projects to learn from experience…"

In summary, the 10th grade ethnic minority students exhibited positive behaviors toward the project activities in the English 10 textbook. Some positive behaviors were learning from

friends, spending time with friends, self-study time, looking up information, and trying to complete the assigned work.

Challenges the ethnic minority students faced when PBL was implemented

Table 4.

Statistical table describing the challenges and difficulties faced by students when implementing projects.

No.	Items	n	M	SD
16	I didn't have enough time to finish the project.	235	4.86	.642
17	Some teammates were uncooperative in working on projects together	235	4.08	.603
18	I needed help with technology when I handled my project	235	3.71	.598
19	The teacher gave no support when we worked on the project	235	2.55	.815

As shown in Table 4, students encounter the most frequent difficulties due to time constraints, followed by a shortage of digital skills and uncooperativeness while working on projects.

As noted in Table 4, (1) The average score of items from O16 to O19 was 2.55 to 4.86; (2) The average of 4 entries from O16 to O19 was 3.80, which revealed that the 10th-grade ethnic minority students agreed with the difficulties mentioned in the survey. In particular, ethnic minority students stated that the biggest difficulty in implementing the project was that the time to do it was too limited (M=4.86). In addition, the lack of skills in exploiting information technology to support research and discovery also caused many obstacles for the students (M=4.08). Another difficulty is the uncooperativeness among team members. (M = 3.71). Regarding the lack of support from teachers, the majority of students expressed disagreement (M = 2.55). This meant that in the process of doing the project, the students received help and support from the teacher.

In addition, through the interview, the 10th graders listed more about the difficulties and obstacles they encountered

"… Some group members lack positivity and rely on other members…"

"… In my opinion, the time to carry out a project is the most difficult problem…"

"… There is no reasonable division of work…"

"… Team members lack solidarity…"

"… Carrying out projects is quite expensive for us…"

"… Some members do not cooperate and do not accept the assignment

group…"

".... Despite being guided by teachers, lack of technology skills is also a big difficulty when implementing projects…"

"…Some of you are not responsible to the group, you still escape and push the work…"

"…It takes a lot of time to do a project…"

> "…To carry out projects effectively sometimes requires appropriate physical and financial means…"

In general, the 10th graders had similar sentiments, perceptions, and behaviors toward PBL. In addition, they also mentioned some difficulties when participating in project activities, such as uncooperativeness among team members, project time constraints, digital skills shortage, and limited budget.

Discussion

The results of the present study were consistent with those of Wanchid & Wattanasin (2015), Le & Phuong (2017), Apsari, Mulyani & Lisdawati (2019), Parker (2020), Tran &Tran (2020) about the positive attitude, high awareness of learners towards PBL. PBL in English 10 was well-received by ethnic minority students who took part in the study. These learners ascribed it to engaging material, actual scenarios, authentic materials, and engaging exercises. They became enthusiastic about studying English through group activities. Additionally, the students were well aware of the advantages of the project-based activities in the English 10 textbook.

The results of the current study were aligned with those of studies by Zarif & Ahmed (2013) on how PBL fosters the development of life skills, Maftoon et al. (2013) on motivation to enhance speaking abilities, and Ergul & Kargin (2014) on enhancing academic performance.

However, students' difficulties when handling PBL varied, such as uncooperativeness among team members, project time constraints, digital skills shortage, and limited budget. In Kurzel & Rath's (2017) findings, the absence of instructor support was one of the major issues for students when working on projects. By contrast, this current study's findings showed that teachers provided excellent support to their students as they carried out their projects.

Conclusion

Research results showed that most Lam Dong ethnic minority boarding school students embraced a positive attitude and were clearly aware of the benefits of PBL. However, learners stated they also faced many different difficulties, including uncooperativeness among team members, project time constraints, digital skills shortages, and limited budgets.

The preliminary findings in this study will hopefully help teachers better understand the current views of Lam Dong ethnic boarding high school students on applying project-based teaching methods to the language teaching and learning process. From there, recommendations are made to improve and enhance the quality of English learning at two ethnic minority boarding schools in Lam Dong province in particular and Vietnam in general.

Due to the limited number of samples participating in the study, mainly at Lam Dong Ethnic Minority Boarding School and Southern inter-district Ethnic Minority Boarding School, the findings of the present study do not have a comprehensive meaning on the attitudes of 10th graders for PBL. The author hopes to expand the topic in the near future to find out the attitudes of all students throughout Lam Dong province towards PBL so that the research results will be meaningful and thorough.

References

Ajzen, I. (1988). *Attitudes, personality, and behavior.* Dorsey Press.

Apsari, Y. & Mulyani, E. & Lisdawati, I. (2019). Students' attitudes toward implementation of project- based learning. *Journal of Educational Experts*. *2*(2), 123. http://dx.doi.org/10.30740/jee.v2i2p123-128

Baker, C. (1992). *Attitudes and Language*. Clevedon: Multilingual Matters.

Bransford, J. D., Brown, A. L., Cocking, R. R. (Eds.) (1999). *How people learn: Brain, mind, experience and school*. National Academy Press.

Brown, H.D. (2000). *Principles of language learning and teaching (4th Ed.).* Englewood Cliffs NJ: Prentice-Hall.

Bruner. (1982). *The process of education*, Culture and Education Press.

Demir, C. G. (2020). An overview of project-based learning practices within the context of 21st century skills. *Paradigm Shifts in 21st Century Teaching and Learning* (pp. 36-52). IGI Global.

Ellis, R. (1994). *The study of second language acquisition.* Melbourne: Oxford University Press.

Ergül, N. R. & Kargın, E. K. (2014). The effect of PBL on students' science success. Procedia - Social and Behavioral Sciences, 136, 537-541. https://doi.org/10.1016/j.sbspro.2014.05.371

Gardner, R. C., & Lambert, W. E. (1972). *Attitudes and Motivation in Second Language Learning*. Rowley, MA: Newbury House Publishers.

Gardner, R.C. (1985). *Social psychology and second language learning: The role of attitudes and motivation*. London: Edward Arnold

Gillies, R. M., & Ashman, A.F. (2000). The effects of cooperative learning on students with learning difficulties in the lower elementary school. *The Journal of Special Education, 34(1), 19-27.* https://doi.org/10.1177/002246690003400102

Grant, M. M. (2002). Getting a grip on project-based learning: Theory, cases and recommendations. *Meridian: A middle school computer technologies journal*, *5*(1), 83.

Gubacs, K. (2004). Project-based learning: A student-centered approach to integrating technology into physical education teacher education. *Journal of Physical Education, Recreation and Dance, 75*(7), 33-37. http://dx.doi.org/10.1080/07303084.2004.10607272

Han, S. (2017). Korean students' attitudes toward STEM project-based learning and major selection. *Educational Sciences: Theory & Practice, 17*, 529–548. http://dx.doi.org/10.12738/estp.2017.2.0264

Hilgard, E. R. (1980). The Trilogy of Mind: Cognition, Affection, and Conation. *Journal of the History of the Behavioral Sciences*, *16*, 107-117. https://doi.org/10.1002/1520-6696(198004)16:2%3C107::AID-JHBS2300160202%3E3.0.CO;2-Y

Hirsh, Å., Nilholm, C., Roman, H., Forsberg, E., & Sundberg, D. (2022). Reviews of teaching methods – which fundamental issues are identified? Education Inquiry, 13(1), 1–20. https://doi.org/10.1080/20004508.2020.1839232

Hoang, N. T. D. (2009). Magazine as project-based learning. In S. Rilling & M. Dantas-Whitney (Eds.)*, TESOL Classroom Practice Series. Authenticity in the classroom and beyond: Adult learners* (pp. 37-45). *TESOL, Inc. http://dx.doi.org/10.108 0/07303084.2004.10607272*

Hutchinson, T. (1991). *Introduction to project work*. Oxford: Oxford University Press.

Karahan, F. (2007). Language attitudes of Turkish students towards the English language and its use in Turkish context. *Journal of Arts and Sciences.* 73 – 84.

Kouros, C., Abrami, P. (2006). How do students really feel about working in small groups? The role of student attitudes and behaviors in cooperative classroom settings.

Krajcik, J. S., Czerniak, CM & Berger, CF (1999). *Teaching science: a project-based approach.* McGraw-Hill College.

Kurzel, F., & Rath, M. (2007). *Project based learning and learning environments* (Doctoral dissertation, Informing Science Institute).

Lambert, W. E. (1987). *The effects of bilingual and bicultural experiences on children's attitudes and social perspectives*. In P. Homel, M. Palij, & D. Aaronson (Eds.), Childhood bilingualism: Aspects of linguistic, cognitive, and social development (pp. 197–221). Lawrence Erlbaum Associates, Inc

Liu, C. & Long, F. (2014). The discussion of traditional teaching and multimedia teaching approach in college English teaching. *Proceedings of 2014 international conference on management, education and social science, 1951-6851.*

Maftoon, P., Birjandi, P., & Ahmadi, A. (2013). The relationship between project-based instruction and motivation: A study of EFL learners in Iran. *Theory and Practice in Language Studies*, *3*(9), 1630-1638.

Nassir, S. M. S. (2014). The Effectiveness of Project-based Learning Strategy on Ninth Graders' Achievement Level and their Attitude towards English in Governmental Schools –North Governorate. [Unpublished thesis]. The Islamic University of Gaza.

Nguyen, T.V. L (2011). Project-based learning in teaching English as a foreign language. *VNU Journal of Foreign Studies*, *27*(5). ISSN 2525-2445.

Oxford, R., & Shearin, J. (1994). Language Learning Motivation: Expanding The Theoretical Framework. *The Modern Language Journal*, *78*, 12-27.

Parker, J. (2020). Students' attitudes toward project-based learning in an intermediate Spanish course. *International Journal of Curriculum and Instruction*, *12* (1). http://orcid.org/0000-0002-1568-6987

Pham, C. B. T. (2023). Exploring the Effectiveness of Applying Project-based Learning in Teaching English Speaking Skills in Remote Learning Setting. *Proceedings of the 19th International International Conference of the Asia Association of Computer-Assisted Language Learning*, 282-293. https://doi.org/10.2991/978-2-38476-042-8_24.

Pham, D. L., Nguyen, T. T., & Phan, T. P. M. (2023). Application of Project-based Learning to Improve the Learning Styles of Tourism Students at Hanoi Open University. *Proceedings of the 20th AsiaCALL International Conference*, 4, 188-208. https://doi.org/10.54855/paic.23414

Pham, T. T. H. (2014). *Developing students' speaking skill through Project-based learning*

[Unpublished Master's thesis]. Vietnam National University.

Phuong, H. Y. & Lê, H.C.T (2017). Student' attitudes toward project activities in pilot English textbooks. *Proceedings of the 5th OpenTESOL conference*, *5*, 526-538.

Savery, J. R. (2006). Overview of problem-based learning: Definitions and distinctions. *Interdisciplinary Journal of Problem-based Learning,* 1(1), *9-20.* *https://doi.org/10.7771/2351-5015.1002*

Sri, S. (2018). Project based learning enhances student quality in vocational learning. *Advances in Social Science, Education and Humanities Research (ASSEHR)*, *247*

Sumarni, W. (2015). The Strengths and Weaknesses of the Implementation of Project Based Learning: A Review. *International Journal of Science and Research*, *4*(3), 478-84.

Thomas, J. W. (2000). *A review of research on project-based learning*. Autodesk.

Tran, P. N. T. & Tran, Q. T. (2019). The important roles of project-based learning in teaching English to high school students. *Proceedings of the 7th OPENTESOL International Conference 2019* (pp. 279-294).

Tran, P. N. T. & Tran, Q. T. (2020). Attitudes toward the Use of Project-Based Learning: A Case Study of Vietnamese High School Students. 6. 140-152. 10.17323/jle.2020.10109. http://dx.doi.org/10.17323/jle.2020.10109

Wanchid, R., & Wattanasin, K. (2015). The Investigation of Students' Attitudes toward Project Work in Enhancing Independent Learning in English I at King Mongkut's University of Technology North Bangkok. *Mediterranean Journal of Social Sciences*, *6*(5), 581. Retrieved from https://www.richtmann.org/journal/index.php/mjss/article/view/7527. http://dx.doi.org/10.5901/mjss.2015.v6n5p581

Wenden, A. (1991). *Learners Strategies for Learner Autonomy*. London: Prentice Hall.

Zarif, T., & Ahmed, A. (2013). The mind's eye of teachers regarding effects of project work for enhancing life skills in students: A qualitative study. *Interdisciplinary Journal of Contemporary Research in Business*, *4*(12), 600.

Biodata

Nguyen Thi Hoai Huong is currently a teacher of English language at Lam Dong Ethnic Minority Boarding High School, Vietnam. Her interests cover areas of English languages, teacher professional development and instructional design model.

AI-Powered Writing Tools: A Phenomenological Inquiry of Tertiary Students' Usage

Kurt Candilas[1]*, Samantha Ritz Abas[1], Danielle Joy Amores[1], Vinz Danielle Bartolata[1], Princess Angelha Getuaban[1], Myzzie Chyle Japson[1]

[1] Lourdes College, Philippines
*Corresponding author's email: mrkurtz21@gmail.com
* https://orcid.org/0000-0002-2299-8575
https://doi.org/10.54855/acoj.241523

Abstract

AI-powered writing tools have become indispensable companions for enhancing writing. This study aimed to comprehensively explore the lived experiences and contexts of the students' use of AI tools and their effects on their writing abilities and learning experiences. The study employed the transcendental phenomenological research design with six participants. Using Irving Seidman's guide, a purposeful sampling technique was utilized to select the participants before conducting the phenological Interview. Creswell's adapted Stevick-Colaizzi-Keen method was used to generate emerging themes of this study. Based on the findings drawn, results underscored the transformative impact of these tools, such as students' writing challenges without AI tools, emphasizing their grammatical issues, limited ideation, and academic writing intricacies, providing immediate support, and overcoming hurdles. Also, it highlighted students' reliance on AI while emphasizing the need for control to avoid dependency and encourage teacher feedback. The study concluded with recommendations for integrating AI writing tools in education, promoting balanced dependence, and fostering continuous improvement in these tools to meet diverse learning needs.

Keywords: AI-Powered writing tools, artificial intelligence, tertiary standards, writing practices.

Introduction

AI-powered writing tools are adopted by everyone in different situations, including professional writers, content creators, students, businesses, and individuals who are seeking help in creating engaging and clear content. These utilities are no longer just a convenience but necessary tools for expediting, augmenting, and inspiring writing greatness. AI-based writing tools provide very practical help for various users, including idea generation, grammar, and style refinement (Rogerson & McCarthy, 2017). Such support empowers them to express their thoughts better and get more engagement from their readers.

AI-based writing tools apply AI and natural language processing (NLP) technologies in their work pipelines. They possess the ability to understand and correct what needs to be fixed, as

well as make the text more readable and, in some cases, even produce new text—this is how they do all their tasks. These platforms are up-to-date and provide users with more effective means of producing and editing texts, increasing the quality of the article, academic writing, and creative writing.

The technological tendencies of today give AI a chance to be a writer's companion as it provides automated writing evaluation (AWE), automated written corrective feedback (AWCF), machine translation (MT), sentence auto-completion, grammar checking, as well as natural language processing (NLP). Among the strategies, the students are informed of the types of writing errors concerning grammar, style, spelling, credibility, and vocabulary through automating the task of the teachers of finding mistakes as opposed to the teacher-supplied feedback (Bridgeman & Ramineni, 2017; Dale & Viethen, 2021; Koltovskaia, 2020; Ranalli & Yamashita, 2022; Wang, 2013).

According to previous research, the student's interest and ability to use AI writing assistance tools might differ depending on the kinds of assignments, the level of engagement of the students, and the teacher's feedback on the proper application (Fan & Ma, 2022; Myers & Pellet, 2022; Zhang & Zhang, 2018). Researchers emphasize the importance of teachers' mediation in utilizing these tools to prevent overreliance, which could hinder students' problem-solving and critical skills (Marzuki et al., 2023; Eaton et al., 2021).

Observations reveal the prevalent usage of AI-powered writing tools in higher education classrooms, particularly among students majoring in English, for correcting academic writing (Alharbi, 2022; Frankenberg-Garcia, 2018; Fitria, 2021; Hellmich & Vinall, 2021). Students use these tools for automated feedback, language and vocabulary learning, and translation given the nature of their academic writing, where they are heavily required to practice learning the language as a discourse and a system, as provided on their prospectus on a daily basis (CHED, 2017). More so in writing essays, position papers, literary analysis, research, etc., where proficiency in the language is essential, considering writing as a progressive activity relevant to the formation (Ariyanti, 2016). While existing literature acknowledges the prevalence and potential benefits of these tools, there is a need for further investigation from students' perspectives using a qualitative approach. There needs to be a gap in understanding the lived experiences of higher education students who use AI-powered tools for academic writing, emphasizing the necessity of conducting inquiries to contribute to a comprehensive understanding of their usage in higher education writing practices.

Literature review

This phenomenological study assumes that AI-powered writing tools are essential and beneficial to tertiary students' academic writing in English. This assumption is supported by the Connectivism Learning Theory (CLT) of Siemens (2005), Downes (2005), and Giles' Communication Accommodation Theory (CAT) (1971).

The Connectivism Theory, as stated by Siemens and Downes (2005), emphasizes learning networks and technological developments as two main factors that improve the process of knowledge acquisition. It means that learning is an internal mental process and an external source of interaction. This theory also suggests that learners interact with various learning sources, including AI-powered tools, to build knowledge correlatively. As the core of the given study, it shows that students are constantly stopping, connecting, and assessing their interactions with AWTS and the other peers and resources with the aim of improving their writing skills and course outcomes.

Connectively, recent studies highlight the growing impact of AI-powered tools on EFL learners' academic writing. These tools, including ChatGPT and Grammarly, offer convenience and cater to learners' needs, enhancing writing fluency, content, and knowledge (Yuan et al., 2024; Selim, 2024; Tran & Tran, 2023; Nguyen, 2023). Research indicates that AI-assisted instruction significantly improves writing skills and motivation compared to traditional methods, exploring how L2 writers use technology-mediated strategies and multimodal strategies for content and language learning (Song & Song, 2023; Kessler, 2020; Zhou &Wei, 2018). Technology-mediated learning environments, including learning management systems and automated writing evaluation platforms, support the development of self-regulated learning strategies and improve writing performance (Han et al., 2021). While these tools positively impact writing quality and time efficiency (Phan, 2023), they may not significantly enhance lexical complexity (Han et al., 2021). This aligns with the idea that learners form learning networks with AI tools and resources. This finding resonates with connectivism's learning network concept, highlighting how learners interact with various information sources, including AI tools, to build knowledge collaboratively.

The Communication Accommodation Theory (CAT) by Howard Giles (1971) suggests that people alter their language and behavior to fit their conversational partners. Similarly, AI writing tools adjust their output to align with students' writing styles, tones, and languages, mirroring CAT principles. Studies by Liu et al. (2022) and Rahimian (2013) further established this notion by how their study relatively explored the way feedback influences user-generated content and how native speakers modify their speech to aid second language learners.

Thus, the theories mentioned above provide a foundation for understanding how college students utilize AI writing tools in their academic writing. By examining students' real-world experiences with these tools, the study aims to gain insights into how they integrate them into the writing process, and this influences their academic outcomes.

Research Questions

To answer the inquiry in this study, this phenomenological inquiry aims to explore the following research questions:

What are college students' lived experiences using AI-powered writing tools?

What are the contexts of college students' lived experiences using AI-powered writing tools?

How do college students view their future experiences of using AI-powered writing tools in their writing?

Methods

Participants & Sampling Design

The sampling design used in this study is the Purposeful sampling design. In alignment with Moustakas' (1994) principle of limited participant selection for transcendental phenomenological study, this study purposefully chose eight (8) tertiary students from the Teacher Education Program (TEP), specifically those majoring in English who are exposed to the English subject for more than a year in the tertiary level with advanced proficiency of the language. Participants are chosen based on the following criteria: they must have personal experience with the phenomenon under investigation, possess a substantial duration of experience- a year of engagement, and provide in-depth insights. Furthermore, they must have voluntarily adhered to and signed the informed consent agreement, addressing ethical concerns.

These criteria ensure that participants are suitable for the phenomenon under investigation. The purpose of this study is for the researchers to gather personal information from their lived experiences, namely the students' attitudes, observations, and preferences upon using and involving AI-powered writing tools in their academic writing.

Design of the Study

Employing the transcendental design, the study aimed to deeply understand students' nuanced and subjective experiences in utilizing these tools for academic writing. This design employed in-depth interviews following Seidman's (1991) phenomenological approach, utilizing open-ended questions to gather insights from participants on their real-life experiences and the use of AI writing tools. The Interview, lasting 45 minutes, aimed to explore spontaneous thoughts. Approval for data collection was obtained from the Dean of the Teacher Education Program. The questions were designed to focus on the lived experiences of tertiary students.

Data collection & analysis

Participants in this study significantly contributed to advancing the researcher's knowledge of AI writing tools, especially in educational contexts, enhancing their development and applications for educators, students, and the wider educational community. Their valuable insights have the potential to shape future improvements in AI-assisted writing tools, making them more effective and user-friendly. However, the participation of six participants in the study also exposed them to risks such as privacy concerns and emotional distress, which were addressed through rigorous ethical measures.

All participants gave informed consent prior to participating, ensuring they understood the study's purpose, their rights, and the confidentiality of their responses. Interviews were conducted in-depth, recorded, and transcribed verbatim, employing a phenomenological approach to analyze common themes and patterns in participants' experiences.

Approval was obtained from the Dean of the Teacher Education Program before conducting interviews to elicit responses from the purposely selected English Major students through a letter of consent. Interviews were scheduled at mutually convenient times in comfortable, private settings, with researchers emphasizing confidentiality and obtaining permission to record.

Data analysis followed Creswell's adapted Stevick-Colaizzi-Keen method, involving steps like elucidating experiences, setting aside preconceived notions, and grouping statements into themes (Creswell, 2007; Moustakas, 1994). Researchers crafted textual portrayals and structural representations of participants' experiences, ensuring clear descriptions of core essences.

Results/Findings and discussion

Four themes emerged in the findings: writing hurdles, technological dependency, assistance to writing, and technology-enhanced language learning in writing. These themes are based on the cluster of sub-themes, as shown in Table 1.

Table 1 shows the extracted statements from the participants' narratives, coded and clustered as sub-themes. The sub-themes and their implied meanings are considered significant in forming the foundation of the four main themes.

Table 1. Tertiary Students' Experiences Before Using AI-powered Writing Tools

Main Themes	Sub-Themes	General Description of the Theme	Significant Statements
Theme 1: Writing Hurdles	Grammar and Syntax Issues	Grammar and Syntax Issues refer to problems with language use and rules that the participants encountered in writing.	*"I focused more on grammatical errors, particularly those that I may not realize."* (Participant 6, 1st interview)
	Limited Ideas	Limited Ideas refer to a certain boundary or non-detailed ideas in which the participants use simple words to explain the ideas more easily.	*"My vocabulary was also limited to simple words."* (Participant 3, 1st interview)
Theme 2: Technological Dependency	Familiarity and Adeptness	Familiarity and Adeptness is defined as a level of understanding and competence	*"...remember on how to arrange and the structure in my grammar."* (Participant 1, 2nd Interview)
	Reliance	Reliance refers to the participants with the dependency in the AI powered writing tools in making their writing task and for correction in their structure and errors.	*"I see AI writing tools as an integral part of my writing process."* (Participant 4, 3rd Interview)
Theme 3: Assistance to Writing	Intelligibility in Writing	Intelligibility in writing refers to the quality of written content being clear enough to be understood.	*"...requires you to have intensive learning reflections where simple thought processing and word choices won't cut it."* (Participant 7, 1st Interview)
Theme 4: Technology-Enhanced Language Learning in Writing	Enhanced Writing Mastery	Enhanced Writing Mastery is defined as a degree of proficiency in writing that requires an understanding of grammar, syntax, and vocabulary.	*"I believe it would greatly assist me in becoming a better writer."* (Participant 6, 3rd Interview)
	Writing Achievement	Writing achievement refers to measuring the participants' proficiency and progress in their written work assisted by AI tools.	*"These opportunities include learning and skill development."* (Participant 6,

·Data from semi-structured interviews were obtained to identify the participant's experiences

and the context of their lived experiences using AI-powered writing tools. Participants were given pseudonyms (P1, P2, P3, P4, P5, P6, P7, and P8) for confidentiality purposes.

Theme 1: Writing Hurdles *(Grammar and Syntax Issues, Limited Ideas)*

Writing Hurdles or Writing difficulties refers to the challenges that the eight (8) participants encountered without the assistance of AI-powered writing tools. This theme specifically includes the participants' Grammar and Syntax Issues and Limited Ideas.

Grammar and Syntax Issues

Grammar and syntax issues refer to the problems in the use of language and the rules that the participants encountered in writing. With that, the writer must consider the following aspects in academic writing: structure, formal and objective, as well as terminology, which is often abstract and technical (Taylor., 2009). Participants expressed concerns about their writing quality, with one acknowledging, *"I focused more on grammatical errors, particularly those that I may not realize"* (P6, Transcript 6, lines 700-701)*,* while others noted, *"the essay is not appealing to read"* (P1, Transcript 1, lines 22-23) *"I feel like my writing is not that good"* (P1, Transcript 1, line 10)*.* This suggests the uncertainty of their writing abilities due to grammar structure and language use difficulties. According to Lin and Morrison (2021), academic writing demands critical thinking and high-quality writing skills, making it challenging and complex. Considering that the majority of participants do not have an easy time drawing up their grammar and standards, another study by Halim et al. (2022) and Grammarly (2017) defined Grammarly as a tool that improves students' writing. However, despite the availability of tools like Grammarly, participants in this study continue to face issues with grammar and syntax, which reveals ongoing problems with grammar structures and language use that contribute to poor construction in their academic writing.

Limited Ideas

Limited Ideas refer to a certain boundary or non-detailed ideas wherein the participants make use of simple words to explain the ideas more easily. Without the use of AI-powered writing tools, the participants would commit errors in their writing, especially in their writing tasks. Before using the AI writing tools as described by researchers in their interviews, participants experienced various linguistic problems to which they said in the Interview that *"writing didn't always make sense"* (P3, Transcript 3, first Interview, line 341) *"limited to simple words",* (P3, Transcript 3, line 348). *"I had issues with punctuation, which they said in the Interview that "writing didn't always make sense" (P3, Transcript 3, first Interview, line 341) and "limited to simple words" (P3, Transcript 3, line 348). "I had issues with punctuation. My sentences were often too long and felt like run-on sentences…" "When I had to write an essay within a specific period, it became challenging because I felt pressured and lacked immediate ideas"* (P5, Transcript 5, lines 551-552).

In this study, participants showed a lack of ideas when constructing their write-ups before being acquainted with AI-powered writing tools, as they did not have enough knowledge of deeper vocabulary terms and proper punctuations. Moreover, the difficulty arose from a combination of feeling pressured by the time constraint and struggling to generate immediate ideas for the essay, making the writing process more challenging. This implies that with the help of the AI writing tools, the participants would be able to overcome this problem in writing, developing the skills that enable them to write more effectively and express their ideas in a more organized structure.

Theme 2: Technological Dependency *(Familiarity and Adeptness, Reliance)*

Technology Dependency is a term that describes the participants' reliance on technology, particularly on AI-powered writing tools, wherein they have experienced different assistance from the tools. This theme includes Familiarity and Adeptness and Reliance.

Familiarity and Adeptness

Familiarity and adeptness with AI-powered writing instruments refer to a level of understanding and competence in using them. To support this statement, this application controls or maintains the flow of writing correctly so that no more errors come out (Qassemzadeh & Soleimani, 2016). With that being said, the participants have set the evidence of writing without difficulty with the assistance of AI that the participants' writing tasks are more efficient and well-structured when they are utilizing the AI powered writing tools. The participants highlighted that they have encountered different language difficulties prior to the use of AI writing tools that were provided by researchers in their interviews, to which they said in their interviews that, *"what to do first", "remember on how to arrange the word that I will use, the structure in my grammar"* (P1, Transcript 1, lines 83-84) suggesting a prioritization or a need to establish a sequence of actions particularly in their writing tasks, *"As I take note of the errors I committed in the past, I do my best to avoid them the next time."* (P5, Transcript 5, lines 664-665) *"I take note of my past mistakes and apply what I've learned in my current work."* (P6, Transcript, lines 750-751).

The statements from the participants postulate that they acknowledge their mistakes, indicating self-awareness and an ability to evaluate their actions. Implying that the participants would take concrete steps to integrate the suggestions that were provided by the AI-powered writing tools into their current writing outputs and apply those suggestions in their further writing tasks. In addition, AI-powered writing tools help participants to familiarize the feedback given and apply it on their writing tasks which agrees to Saeed's (2020) study that the feedback provided on the Internet Platform may encourage students to actively participate in the writing process, as it provides them with the opportunity to revise and engage in the writing process.

Reliance

Reliance refers to the participants' dependency on AI-powered writing tools to complete their writing tasks and correct their structure and errors. The participants' reliance on AI-powered writing tools made them say that it is an advantage for error corrections and immediate feedback but a disadvantage as well because it can cause dependency on AI-powered writing tools.

They were shaped by the participants' reliance on artificial intelligence writing tools, which made it easier for the participants to write. Although they don't rely on them much, they tend to see them as corrective tools and play a substantial role in shaping their final written work whether in terms of improving the quality of writing, streamlining the editing process, or aiding in generating ideas for participants to which they said that, *"I see AI writing tools as an integral part of my writing process"* (Participant 4, third Interview, line 513). *"A key benefit of using AI writing tools is that it is less time-consuming."* (Participant 2, second Interview, line 277).

Although AI is assisting them, they are also maintaining a dependency on it. Hence, they balance their usage of AI-powered writing tools whilst relying on their originality. With that note, Skolverket (2016) assumes that using digital tools contributes to students' general comprehension of English courses and their personal learning process.

Theme 3: Assistance to Writing *(Intelligibility in Writing)*

Assistance to writing refers to tools, powered by artificial intelligence, which assist and support participants in writing so that they can write more smoothly and effectively. This theme includes Intelligibility in Writing.

Intelligibility in Writing

Intelligibility in writing refers to the quality of written content being clear enough to be understood and proficient. This intelligibility in writing can integrate self-efficacy, defined as the expression of personal beliefs related to their capability to succeed in a specific behavior or to learn or perform a particular task effectively (Zimmerman & Kitsantas, 2007).

The participants throughout using the AI power writing tools have improved in the way they write with each mistake becoming a potential source of knowledge and experience that can be used to make better-informed decisions in their future writing tasks. *"I gain an understanding of my mistakes"* (Participant 6, Transcript 6, lines 749-750), *"Through the use of AI, I've learned various skills, such as proper punctuation, word usage, and vocabulary enhancement."* (Participant 4, Transcript 4, lines 539-540). These statements imply a reflective self-aware attitude towards the construction of their writing task, acknowledging incorrect actions contrary to the desired outcome, and the participants' experience of significant improvement in language-related skills through the utilization of AI-powered writing tools.

In a simple manner, the discourse is about how they have ameliorated their writing task with the help of the AI writing tools. In addition to the previous points cited, there is preliminary evidence that was purposefully implemented. These are the technologies that may positively influence student engagement (Wang et al., 2019; Schindler et al.,2017).

Theme 4: Technology-Enhanced Language Learning in Writing *(Enhanced Writing Mastery, Writing Achievement)*

Technology-Enhanced Language Learning in Writing refers to the integration of digital technologies and tools, specifically writing tools into the process of language learning writing. This learning involves using online tools as resources to support and improve language learners' writing skills. This theme includes Enhanced Writing Mastery and Writing Achievement.

Enhanced Writing Mastery

Enhanced Writing Mastery is defined as a degree of proficiency in writing that requires not only the basic understanding of grammar, syntax, and vocabulary but also the ability to effectively express feelings, intentions, and information through writing. Based on the participants' responses, the AI-powered writing tools assist them in achieving better writing outcomes.

Results from the data show how the use of AI-powered writing tools has improved their ability to write, organize, and structure tasks for all feedback or suggestions they've applied over time. One participant said, *"I believe it would greatly assist me in becoming a better writer"* (Participant 6, Transcript 6, lines 766-767).

In addition, the utilization of AI-powered writing tools has positively influenced the participants' writing. A participant stated, *"it is helpful and it really enhances the grammar conventions of my writings, and it even helps me emphasize my point or the thought I want to express in my paragraph."*(Participant 2, Transcript 2, line 235-237).

Therefore, participants do not just plainly copy and paste what the tools have suggested, but rather, they reflect on these suggestions to gain knowledge and employ the tools' suggestions in their work. Because learners have the tendency to benefit from suggestions provided by AI-

powered writing tools, mobile teaching and learning (m-learning) is emerging as a promising approach in higher education (Pedro et al., 2018). M-learning can afford new opportunities to enhance pedagogical flexibility, learning processes or outcomes, and feedback immediacy (Cheung, 2015), making it a great option for integrating immediate feedback into the learning experience.

Writing Achievement

Writing achievement refers to measuring the participants' proficiency and progress in their written work assisted by AI tools. With that, the participants portioned out: *"These opportunities include learning and skill development"* (Participant 6, Transcript 6, line 815) *"it really developed my skills. I am conscious of my own writing."* (Participant 1, Transcript 1, lines 173-174). These statements highlight the positive impact of using AI-powered writing tools on learning, skill development, and self-awareness in the participants' writing. The phrase "learning and skill development" suggests that the opportunities presented involve not only acquiring new knowledge but also honing one's skills.

Participants with or without assistive technologies achieve different results in terms of writing academic papers, essays, and other written tasks. This demonstrates how AI writing tools have enhanced the way they write, organize, and structure their tasks. For all feedback or suggestions they received during continuous use of these Writing Tools, one participant stated, "*I can deliver my thoughts clearly"* (Participant 7, Transcript 7, lines 831-832).

The statements suggest that the most important contribution of AI in education and meaningful learning is giving immediate feedback to the students about the learning progress to some extent, and from that corrective feedback, they have learned the proper ways of writing and fostering student engagement, improve achievement, motivation, and self-regulation (Zimmerman & Labuhn, 2012), formative feedback needs to be immediate.

Conclusion

This study inquired about college students' lived experiences and contexts utilizing AI-powered writing tools. The findings of this study revealed significant implications: firstly, it exposed students' writing challenges without AI tools, emphasizing grammatical issues, limited ideation, and academic writing intricacies. Secondly, it underscored AI tools' pivotal role in refining writing skills, providing immediate support, and overcoming hurdles. Thirdly, it highlighted students' reliance on AI while emphasizing the need for control to avoid dependency and encourage teacher feedback. Aligned with the Connectivism Learning Theory, the study depicted AI tools as cognitive aids, extending learning beyond internal processes. Moreover, participants adapting to AI suggestions and leveraging networks for learning aligns with the principles of Communication Accommodation Theory, which also found resonance in how AI writing tools personalize suggestions by adapting to the users' writing styles, supporting their potential to personalize suggestions.

While acknowledging limitations inherent to the study design, the findings offer valuable recommendations for promoting the effective use of AI-powered writing tools. First, the results suggest that students should utilize these tools as supplementary resources to avoid over-reliance. Second, to minimize potential dependence, the study emphasizes the importance of teachers providing comprehensive feedback and guidance throughout the writing process, particularly regarding the strategic integration of AI-powered writing tools. Finally, to gain a broader understanding of user experiences, future research is encouraged to employ quantitative

or mixed-method approaches that facilitate comparative and/or explorative analysis across diverse AI writing tool usage perspectives.

References

Alharbi, W. H. (2022). The affordances of augmented reality technology in the English for specific purposes classroom: its impact on vocabulary learning and students motivation in a Saudi higher education institution. *Journal of Positive School Psychology*, vol. 6, no. 3, pp. 6588–6602, 2022. https://www.journalppw.com/index.php/jpsp/article/download/3849/2521/4400

Ariyanti, A. (2016). Shaping Students' Writing Skills: The Study of Fundamental Aspects in Mastering Academic Writing. https://doi.org/10.21462/IJEFLL.V1I1.5

Bridgeman, B., & Ramineni, C. (2017). Design and evaluation of automated writing evaluation models: Relationships with writing in naturalistic settings. *Assessing Writing*, 34, 62–71. https://doi.org/10.1016/j.asw.2017.10.001

Creswell, J. W. (2013). Qualitative Inquiry & Research Design: Choosing among Five Approaches (3rd ed.). Thousand Oaks, CA: SAGE. https://revistapsicologia.org/public/formato/cuali2.pdf

Dale, R., & Viethen, J. (2021). The automated writing assistance landscape in 2021. Natural Language Engineering 27, 511–518. https://doi.org/10.1017/S1351324921000164

Downes, S. (2005). *Connective knowledge*. https://www.downes.ca/post/33034

Dron, J., & Anderson, T. (2014). Teaching crowds: Learning and social media. Athabasca University Press. https://doi.org/10.15215/aupress/9781927356807.01

Eaton, S. E., Mindzak, M., & Morrison, R. (2021, May 29–June 3). Artificial intelligence, algorithmic writing & educational ethics [Paper presentation]. Canadian Society for the Study of Education [Société canadienne pour l'étude de l'éducation] (CSSE) 2021, Edmonton, AB, Canada. http://hdl.handle.net/1880/113569

Fan, N., & Ma, Y. (2022). The effects of Automated Writing Evaluation (AWE) feedback on students' English writing quality: A systematic literature review'. *Language Teaching Research Quarterly*, 28, pp. 53–73. https://doi.org/10.32038/ltrq.2022.28.03

Fitria, T. (2021). Grammarly as AI-powered English writing assistant: Students' alternative for writing English. Metathesis: Journal of English Language, Literature, and Teaching, 5(1), 65-78. http://dx.doi.org/10.31002/metathesis.v5i1.3519

Frankenberg-Garcia, A. (2018). Combining user needs, lexicographic data and digital writing environments. *Language Teaching*, *53*(1), 29–43. https://doi.org/10.1017/s0261444818000277

Giles, H. (2016). *Communication Accommodation Theory of Howard Giles* (pp. 423-427). CORE https://core.ac.uk/download/pdf/147103741.pdf

Han, Y., Zhao, S., & Ng, L.L. (2021). How Technology Tools Impact Writing Performance, Lexical Complexity, and Perceived Self-Regulated Learning Strategies in EFL Academic Writing: A Comparative Study. *Frontiers in Psychology, 12*. https://doi.org/10.3389/fpsyg.2021.752793

Kessler, M. (2020). Technology-Mediated Writing: Exploring Incoming Graduate Students' L2

Writing Strategies with Activity Theory. Computers and Composition. https://doi.org/10.1016/j.compcom.2020.102542

Koltovskaia, S. (2020). Student engagement with automated written corrective feedback (AWCF) provided by Grammarly: A multiple case study. Assessing Writing, 44, 1–12. https://doi.org/10.1016/j.asw.2020.100450

Liu, D., Gong, C., Zhang, S., & Ma, Y. (2022). The influence of firm's feedback on user-generated content's linguistic style matching–an explanation based on communication accommodation theory. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.949968

Marzuki, Utami Widiati, Diyenti Rusdin, Darwin & Inda Indrawati (2023) The impact of AI writing tools on the content and organization of students' writing: EFL teachers' perspective, Cogent Education, 10:2, 2236469, https://doi.org/10.1080/2331186X.2023.2236469

Moustakas, C. (1994) Phenomenological research methods. Thousand Oaks: Sage. https://doi.org/10.4135/9781412995658

Nguyen, Q. H. (2023). AI and Plagiarism: Opinion from Teachers, Administrators and Policymakers. *Proceedings of the AsiaCALL International Conference*, *4*, 75–85. https://doi.org/10.54855/paic.2346

Pellet, S., & Myers, L. (2022). What's wrong with "What is your name?" > "Quel est votre nom?": Teaching responsible use of MT through discursive competence and metalanguage awareness. L2 Journal, 14(1), 166–194. https://doi.org/10.5070/l214151739

Phan, T. N. L. (2023). Students' Perceptions of the AI Technology Application in English Writing Classes. *Proceedings of the AsiaCALL International Conference*, *4*, 45–62. https://doi.org/10.54855/paic.2344

Rahimian, M. (2014). *Communication accommodation theory in conversation with Second language learners*. Library and Archives Canada = Bibliothèque et Archives Canada.

Ranalli, J., & Yamashita, T. (2022). Automated written corrective feedback: Error-correction performance and timing of delivery. Language Learning & Technology, 26(1), 1–25. http://hdl.handle.net/10125/73465

Rogerson, A. M., & McCarthy, G. (2017, January 26). *Using internet based paraphrasing tools: Original work, patchwriting or facilitated plagiarism? - International Journal for Educational Integrity*. BioMed Central. https://edintegrity.biomedcentral.com/articles/10.1007/s40979-016-0013-y

Saeed, M.A., & Al Qunayeer, H.S. (2020). Exploring teacher interactive e-feedback on students' writing through Google Docs: factors promoting interactivity and potential for learning. *The Language Learning Journal, 50*, 360 - 377.

Seidman, I. (1991). *Interviewing as Qualitative Research: A guide for researchers in education and the Social Sciences*.

Siemens, G. (2005). Connectivism: A theory for the digital age. *International Journal of Instructional Technology and Distance Learning*, 2 (1). 1-9.

Song, C., & Song, Y. (2023). Enhancing academic writing skills and motivation: assessing the efficacy of ChatGPT in AI-assisted language learning for EFL students. *Frontiers in*

Psychology, 14. https://doi.org/10.3389/fpsyg.2023.1260843

Tran, T. N., & Tran, H. P. (2023). Exploring the Role of ChatGPT in Developing Critical Digital Literacies in Language Learning: A Qualitative Study. *Proceedings of the AsiaCALL International Conference*, *4*, 1–17. https://doi.org/10.54855/paic.2341

Wang, Pei-ling. (2013). Can Automated Writing Evaluation Programs Help Students Improve Their English Writing? International Journal of Applied Linguistics & English Literature. 2. 6-12. 10.7575/ijalel.v.2n.1p.6.

Yuan, Y., Li, H., & Sawaengdist, A. (2024). The impact of ChatGPT on learners in English academic writing: opportunities and challenges in education. *Language Learning in Higher Education, 14*, 41 - 56. https://doi.org/10.1515/cercles-2023-0006

Zhang, Victor & Zhang, Yue. (2018). Automated Writing Evaluation System: Tapping its Potential for Learner Engagement. IEEE Engineering Management Review. 46. 29-33. 10.1109/EMR.2018.2866150.

Zhou, Y., & Wei, M. (2018). Strategies in technology-enhanced language learning. *Studies in Second Language Learning and Teaching*. https://doi.org/10.14746/SSLLT.2018.8.2.13

Zimmerman, B. J., & Labuhn, A. S. (2012). Self-regulation of learning*: Process approaches to personal development.* https://doi.org/10.1037/13273-014

Biodata

Dr. Kurt S. Candilas is the Dean of the Arts and Sciences Program of Lourdes College, Cagayan de Oro City, Philippines. He earned his undergraduate degree of Arts in English at Bukidnon State University, Malaybalay City. He obtained his Master's degree in Education major in Teaching English Communication Arts at Lourdes College, Cagayan de Oro City. He finished his Doctorate degree in English with a major in Literature at the University of San Jose Recoletos, Cebu City, Philippines. Dr. Candilas also earned his TESOL advanced certification with the American TESOL Institute of the Philippines, Inc.

Myzzie Chyle N. Japson is a fourth-year student taking Bachelor of Secondary Education Major in English at Lourdes College, Cagayan de Oro. Her love for English and literature extends beyond the classroom, as evidenced by her leadership skills on an international level as the dedicated Junior Vice President of Internationalization for the Teacher Education Program. Her outstanding efforts were recognized with a special Internationalization Award for her work as Secretary General in the international EYAF Summit 2022. Driven by a desire for continuous improvement, Myzzie aims to develop her personal and professional skills further.

Vinz Danielle R. Bartolata is a fourth-year college student taking Bachelor of Secondary Education with a major in English at Lourdes College. Outside of academics, Vinz has a keen interest in reading manga, immersing herself in the vibrant worlds created by Japanese comics. This interest in manga has also sparked a fascination with Japanese culture and language, motivating Vinz to learn more about the rich traditions and history of Japan. As she approaches the completion of her degree, Vinz is excited to combine her love for English education with her interests in Japanese culture, aiming to foster a global perspective in her future classrooms.

Danielle Joy R. Amores is a fourth-year college student taking a Bachelor of Secondary Education major in English at Lourdes College, Cagayan de Oro City. Her passion for pursuing education developed from her admiration for learning so she could teach more. She is also fond of writing as this serves as an outlet for her to share and express both her academic and personal

writings. Through God's guidance and grace, together with her research team, she was able to write and publish their very own research study.

Samantha Ritz S. Abas is a fourth-year college student taking a Bachelor of Secondary Education major in English at Lourdes College, Cagayan de Oro City. As a student, she has stepped out of her comfort zone and joined multiple organizations to gain experiences that will benefit her future profession. Though she is easygoing, she often finds herself hurt by the judgments of others. Nevertheless, she stands firm despite these challenges. She hopes to develop more advanced and accurate knowledge to become an excellent educator, enabling her future students to experience the world beyond the four corners of the classroom. Beyond academics, Samantha is known for her love of butterflies, which, to her, symbolize the patient and transformative journey of growth—a metaphor that aligns closely with her aspirations as both an educator and a researcher.

Princess Angelha M. Getuaban is a fourth-year student taking a Bachelor of Secondary Education Major in English at Lourdes College Cagayan de Oro City. She is interested in reading self-help books, especially the book "What on earth am I here for?", to be reminded that everything is from God and to be grateful for what we have and don't have in life. As someone who fears heights, for her, education is like a breathtaking place she has to conquer and be proud of.

Stakeholder's Perceptions of ChatGPT in Teaching and Learning English Paragraph Writing at Van Lang University

Lam Ngoc Thanh Hai[1], Le Thi Ngoc Diep[1*]

[1] Faculty of Foreign Languages, Van Lang University, Ho Chi Minh City, Vietnam
[*]Corresponding author's email: diep.ltn@vlu.edu.vn
[*] https://orcid.org/0000-0002-7490-995X
https://doi.org/10.54855/acoj.241524

Abstract

This research investigates the stakeholders' perceptions, including teachers and students, in terms of integrating ChatGPT into teaching and learning English paragraph writing at Van Lang University (VLU). Employing both qualitative and quantitative methods, data were collected from 241 survey respondents and ten interviewees. Apart from positive views on ChatGPT's effectiveness in providing instant feedback and giving diverse writing examples, the stakeholders had neutral opinions regarding ChatGPT's ability to support teaching, learning, and user creativity. Additionally, they were skeptical about the reliability and accuracy of its responses. To maximize the benefits of ChatGPT, it is advised to utilize it cautiously, confirm the correctness of its outputs through verification, and enhance quick ways for the best answers. The findings highlight the importance of a balanced approach incorporating AI tools in language education, emphasizing the need to leverage its strengths and mitigate its limitations. Future research needs to explore the benefits and drawbacks of ChatGPT in different aspects and conduct empirical studies for the chatbot to gather more valuable information.

Keywords: ChatGPT, Artificial intelligence, English paragraph writing, English teaching and learning, Stakeholders

Introduction

The rapid advancement of artificial intelligence (AI) technologies has profoundly influenced many disciplines, including education. Among these AI advancements, ChatGPT, a language model developed by OpenAI, has shown considerable promise in educational settings. ChatGPT can help students improve their writing abilities by offering instant comments and recommendations.

ChatGPT has given teachers and students many benefits; however, there are arguments related to ChatGPT in education and language learning among researchers. Ortega-Martín et al. (2023) praise ChatGPT for helping teachers and students with language learning and writing paragraphs. Meanwhile, Chan and Hu (2023) are concerned that ChatGPT can make its users

overly dependent on it; they are worried about ChatGPT's accuracy, transparency, privacy, ethical issues, or holistic competencies.

Writing is one of the most important skills in language learning as it serves as the major criterion for achieving good academic status and educational success (Hosseini et al., 2013). Writing skills appear in every aspect of human life in different forms, such as messages, letters, blogs, essays, and academic research. Ariana (2010) stated that having good writing skills forms an independent and comprehensive person who can put their thoughts meaningfully and well. Seeing the significant importance of writing skills, more tools are made to help learners improve and for teachers to teach writing skills. ChatGPT is potentially one of those numbers. According to Nguyen (2023), most EFL teachers who have positive points of view and are willing to adapt ChatGPT in their teaching also stated some concerns about the chatbot. Similarly, students have a relatively positive view toward ChatGPT in writing, while others claim to use ChatGPT support in their academic writing (Fontenelle-Tereshchuk, 2024).

This study aims to explore the perceptions of teachers and students on using ChatGPT to study English paragraph writing among EFL intermediate students at Van Lang University (VLU) as a case study for this research. Understanding these perceptions is crucial because it directly affects how well ChatGPT is adopted and used in educational settings. Insights from this study can help shape teaching methods and course content, improve the learning experience, solve any issues that might come up, and add valuable information to the research on using AI in education, especially for EFL students. The objectives are to find out the advantages and disadvantages of integrating ChatGPT into teaching and learning English paragraph writing from stakeholders' perspectives.

Literature review

ChatGPT and English Studies

ChatGPT is a form of generative AI (GenAI) that makes it capable of generating unlimited amounts of new content. ChatGPT is a powerful language model that can sort through textual data and give unique responses for the prompt given to the chatbot (Kostka & Toncelli, 2023). Thanks to these characteristics, ChatGPT can serve as a teaching assistant in English writing and a personal tutor who can always answer students' questions (Sabzalieva & Valentini, 2023). It is also a tool used for solving problems and a launching pad for students' projects or writing exercises (Rudolph et al., 2023).

As stated in her study, Ho (2024) explores how English language learners use ChatGPT and their attitudes, perceptions, and actions toward it. Consequently, despite acknowledging ChatGPT's effectiveness for ESP vocabulary acquisition, translation, grammar checking, and paraphrasing, the results emphasize the requirement of teachers' guidance and practical classrooms for students who mostly use ChatGPT to get immediate help for their English language learning problems (Ho, 2024).

Additionally, Nguyen and Tran (2023) investigate the potential of using AI, specifically ChatGPT, for language training. They evaluate students' writing assignments, and their results

reveal a significant correlation between the grades assigned by the teacher and ChatGPT for the set of writing essays. As a result, ChatGPT is a good tool for decreasing instructors' workloads associated with planning, material selection, and evaluation, but it can only partially replace human teachers (Ferreiro-Santamaria, 2024; Nguyen & Tran, 2023). Furthermore, Nguyen et al. (2024) studied how Vietnamese secondary school students use VoiceGPT to learn new English vocabulary, and they bring positive sentiments towards the benefits of VoiceGPT.

Interestingly, students do not admit to utilizing chatbots for academic assignments; instead, they view employing virtual agents without authorization as fraud and cite the ability to do research and enhance writing abilities as benefits of using Chat GPT for English language learning; they also listed the loss of critical thinking abilities as a drawback (Ferreiro-Santamaria, 2024). Along the same line, ChatGPT can be an advanced type of plagiarism since the chatbot gathers information from different sources but fails to provide the citation of the sources it gets the information from (Ali, 2023). ChatGPT also poses the threat of being an unreliable tool of information since the AI lacks filtered sources (Chan & Hu, 2023).

In sum, most people agree that this technology is here to stay and can be very helpful when used properly; thus, more guidelines and explicit policies are required for how to utilize it properly.

Advantages and Disadvantages of ChatGPT

Advantages

Mondal and Mondal (2023) complimented ChatGPT's ability to give personalized feedback and scoring; they believed the chatbot could help users' paragraphs significantly improve word choice and grammar accuracy. Thanks to this function, the users effectively produce high-quality English paragraphs using ChatGPT. Similarly, Baskara (2023) mentions the real-time feedback of ChatGPT that can give suggestions and guidance on improving vocabulary, grammar, and syntax. The chatbot can also generate ideas, activities, and exercises, which are extremely suitable for supporting the users in learning English paragraph writing. Furthermore, AlAfnan et al. (2023) state that ChatGPT can replace traditional search engines; moreover, this chatbot can explore large data systems and then come up with the needed information for its users, minimizing the time of scanning through a long list of websites manually and generating ideas effectively for paragraph writing.

As stated by Baidoo-Anu and Ansah (2023), ChatGPT can bring students an adaptive and interactive learning experience since ChatGPT provides one-on-one sessions with users using human-based language integration. This trait eliminates the nervous feeling of the student when asking questions, which frees the worried feeling of bothering their teachers. With the consistency in real-time feedback of the chatbot and the repetition in practicing the students, students can learn and improve their writing ability.

Ningrum's research (2023) highlights several benefits of using ChatGPT to learn and teach paragraph writing. One key advantage is ChatGPT's ability to generate text. This means users can get clear and relevant paragraphs written by the chatbot, which they can study to improve their own writing. Another benefit is ChatGPT's translation feature. It can translate passages

into other languages, helping users understand topics better, and it often performs better than Google Translate (Ningrum, 2023).

To sum up, ChatGPT has an extravagant number of advantages for paragraph writing. With its fast response and feedback, it can help users write a good paragraph, giving suggestions and guidance on improving vocabulary, grammar, and syntax. It can also be a text generator, translator, and idea giver.

Disadvantages

Although ChatGPT has proved to bring numerous benefits to education, there are various drawbacks that it can cause to paragraph writing teaching and learning. Firstly, ChatGPT is gathering information from different sources and the lack of ability to filter out unreliable ones, leading to inaccurate answers (Karthikeyan, 2023). Even though ChatGPT has access to the vast data systems, it lacks the ability to verify whether the information is correct. Students who do not check the information carefully while using ChatGPT when learning paragraph writing might accidentally learn incorrect information.

Secondly, according to Sok and Heng (2023), because of the easy access to information and the fast response of ChatGPT, the users can grow dependent on the chatbot, which can harm the development of essential skills such as generating correct grammar and vocabulary, producing critical thinking, and forming ideas independently. Over-reliance on ChatGPT can cause users to lack innovation, creativity, and motivation to improve. Moreover, the misuse and dependence on ChatGPT can make students unable to recognize mistakes in learning language in general and in specific English paragraph writing (Sok & Heng, 2023).

Another significant disadvantage is the inherent bias in ChatGPT's responses, which requires filtering out information or conducting thorough research from other sources (Baidoo-Anu & Ansah, 2023). Furthermore, relying on this chatbot can reduce social interaction between teachers and students, potentially affecting the dynamics of traditional classroom engagement (Baidoo-Anu & Ansah, 2023)

Although ChatGPT can provide paragraph feedback and scoring, it does not guarantee accuracy. Students need the teacher's interaction and knowledge to support their learning path. A teacher knows what their students need and can give appropriate answers for each student and learning strategies that are suitable for everyone. ChatGPT cannot do these tasks and can accidentally hurt students' learning experience.

Paragraph Structure & Characteristics

A paragraph is one of the common elements of English writing. Understanding a paragraph structure and its characteristics is crucial to initiate good paragraph writing. For the structure of one paragraph, Rohim (2019) and Wali and Madani (2020) state that a paragraph is a group of sentences that develop an idea or a topic. Those authors state that a paragraph includes a topic sentence and several supporting sentences to explain the topic in more detail. Importantly, supporting sentences are considered the main part of the whole paragraph, and the concluding sentence is to sum up the paragraph (see Figure 1).

Figure 1. *Paragraph Structure*

Bi-Yu and Li (2020) emphasize that the opening sentence is used to grab readers' attention, which is a hook such as a question, quote, statistic, or anecdote. The authors highlight the opening sentence can be absent from the paragraph. Topic sentences, supporting sentences, and concluding sentences serve the same function as mentioned by Rohim (2019) and Wali and Madani (2020). A transition sentence appears throughout the paragraph and connects two sentences and/or two paragraphs. This sentence is sometimes added to the paragraph to connect meaning and form a smooth paragraph.

In a study by Wau (2022), the author found that students often face various challenges when writing paragraphs. These challenges include problems with creating strong supporting details and evidence, writing effective concluding sentences, and organizing ideas in a clear and logical way. Students also struggle with grammar, such as using adjective clauses and correctly using plural and singular nouns. Additionally, they may find it difficult to choose appropriate academic words and encounter spelling, punctuation, and capitalization issues.

Previous Studies

Ali (2023) shed light on ChatGPT's opportunities and challenges in language learning from EFL teachers' points of view. Questionnaires and open-ended questions were given to 58 English faculty members. The results showed that teachers had positive opinions about ChatGPT's benefits to English Majors. ChatGPT provided sample material related to English learning and teaching and did the job extremely effectively, which helped both teachers and students save significant time. However, there are various drawbacks, such as the negative impact on students' creativity and distinct writing. The author also worried about the pose of plagiarism and the lack of reliability in ChatGPT's responses, and he concluded that ChatGPT was a very promising helper in English learning. However, due to problems such as plagiarism, originality, and reliability, more workshops on ChatGPT should be organized to teach students how to appropriately use such AI to ensure the sustained benefits of ChatGPT.

Chan and Hu (2023) studied university students' perception of the potentials and challenges of ChatGPT in language learning in higher education. The quantitative research gave some positive results towards the usage of ChatGPT. The scholars stated that ChatGPT and its siblings had numerous advantages, such as helping users save time researching and feel more comfortable thanks to its anonymity. Moreover, it could be a very potential learning material since students can access deeper learning and unlock unknown knowledge; for teachers, ChatGPT could complement and improve traditional teaching methods. Ultimately, ChatGPT could harm social interaction between teachers and students. The study came up with some limitations, such as the small sample size, the potential biases caused by the reliance on self-reported data, and the fact that GenAI was still new and not commonly used in formal academic writing. The authors' suggestions for future studies were to conduct larger and more diverse samples, and they also

advised using longitudinal designs to keep updated with students' changes in perceptions toward ChatGPT.

Baskara and Mukarto (2023) believed ChatGPT had some limitations and potential challenges in language learning. Specifically, ChatGPT posed the threats of bias and lack of accuracy. The answers given by ChatGPT could potentially cause ethical concerns and inappropriate language. However, ChatGPT also had many advantages; ChatGPT could shorten the time in finding information for users, which could proficiently assist language teaching and learning; ChatGPT could also provide personalized exercises for learners and generate language materials. The conclusion of this study showed the significant potential ChatGPT could bring to language learning. There were still some drawbacks, such as cultural awareness and language appropriateness. The scholars finally left the gap for future research, i.e., the implications of other new platforms like ChatGPT in language study.

Pham (2024) studied the views of Vietnamese TESOL graduate students regarding the use of ChatGPT, and he aimed to explore their perceptions of ChatGPT as a learning tool and whether they believe it could replace a teacher. The study utilized a mixed-method approach, incorporating mixed methods to gather data from 32 graduate students at a university. The findings revealed that ChatGPT was considered a productive language tool. They also believed that ChatGPT improves classroom comprehension, boosts engagement, and builds self-confidence, making it well-suited for project development and generating ideas. However, all of the participants agreed that ChatGPT could not replace teachers, highlighting the limitations of technology in language education.

Few studies focus on both students' and teachers' views. Therefore, this present study strives to fill this gap by exploring the perspectives of these stakeholders.

Research Questions

To fulfill the aims of the present study, the investigation was seeking to answer the following research questions:

1. What potential advantages does ChatGPT offer for improving English paragraph writing?

2. What are the main challenges of using ChatGPT for English paragraph writing?

3. What are the solutions for effectively adapting ChatGPT in teaching and learning English paragraph writing?

Methods

Pedagogical Setting & Participants

This research applied convenience sampling for questionnaires and purposive sampling for interviews, which means choosing participants based on how easy they are to reach (Stratton, 2021) and whether they meet predefined criteria, respectively. We invited students to fill out a questionnaire by posting it in Facebook groups, aiming to get as many responses as possible.

The participants were students from the Faculty of Foreign Languages at Van Lang University, ranging from first-year to fourth-year students. This variety of students helps give a complete view of different stages of their studies, making them suitable for understanding the impact of ChatGPT on language learning. Emails were sent to 61 teachers of the same faculty to invite them to answer the questionnaires. These teachers were chosen because they have experience teaching English and using ChatGPT as an assistant tool, so their opinions are important for understanding how ChatGPT can be used in language education. For one-on-one interviews, the author invited four teachers and six students to participate in 15–20-minute meetings. The participants were informed via email and messages about the interview arrangements.

By selecting these participants, who are actively involved in language learning and teaching at Van Lang University, the study collects relevant and useful data for evaluating the effectiveness of ChatGPT in an educational setting.

Design of the Study

This current study employed a mixed method, which was believed to compensate for the weaknesses, highlight the strengths, and offset the bias factors in each method (Almalki, 2016). First, the quantitative method was conducted using an electronic survey sent to participants. The questionnaires were designed in two forms: one for students and one for teachers, using a Likert scale. Second, the interviews were conducted with teachers and students using a set of semi-structured questions. This approach aimed to provide in-depth insight into the problem and reduce potential bias from the quantitative method.

Data Collection & Analysis

To collect data, we employed two instruments: questionnaires and interviews. The questionnaire consists of two sessions, and Google Form was used to deliver questionnaires, using the Likert Scale, ranging from 1-5, namely 1-totally disagree, 2- disagree, 3-neutral, 4-agree, and 5-totally agree. The questionnaires consisted of five parts. The first section was regarding the participants' age, gender, how long they have used ChatGPT, and how often they use it. The second one asked about participants' perception of ChatGPT in general. The third part was about the advantages of ChatGPT for English paragraph writing teaching (for teachers' form) and learning (for students' form); the fourth part covered the disadvantages of ChatGPT for English paragraph writing teaching (for teachers' form) and learning (for students' form). The last one mentioned the participants' perception of ChatGPT in English paragraph teaching and learning. Furthermore, one open-ended question regarding individuals' experiences or challenges in using ChatGPT for writing essays. The formulation of these questions was informed by previous studies, including Ali (2023), Chan and Hu (2023), Baskara and Mukarto (2023), and Pham (2024). Before implementation, the questionnaire underwent validation and reliability checks, and a pilot study was conducted with 30 participants to ensure its suitability for this research. Microsoft Excel was used to import data to support the analysis progress, and then the SPSS Application was employed to perform the analysis step. The respondents' orders were coded from T1 to T14 for teachers and S1 to S241 for students in the findings section.

In addition to the questionnaire, semi-structured interviews were conducted to collect qualitative data that would provide deeper insights into the participants' experiences with ChatGPT. Using purposive sampling, six students (coded as SI01-SI06) and four teachers (coded as TI01-TI04) were selected. The interviews were conducted online using Google Meet and Microsoft Teams, each lasting approximately 15-20 minutes. The interview questions were designed from the results of a pilot study of the questionnaire and from the literature review to conduct the conversations to explore stakeholders' perspectives regarding ChatGPT functions. The interview content was organized into four sections: (1) general information (six questions), (2) ChatGPT and its advantages (six questions), (3) ChatGPT and its disadvantages (five questions), and (4) ChatGPT's application in teaching and learning English writing (one question). Using Vietnamese during the meetings allowed participants to respond more naturally and comfortably, resulting in richer and more detailed data. All the interviews were recorded with the agreement of all interviewees. The Vietnamese transcriptions were sent back to each interviewee to check the accuracy of their answers before translating them into English. Finally, the English versions were double-checked and used for content analysis.

Findings and Discussion

Research Question 1: What are the potential advantages that ChatGPT can bring to English paragraph writing?

Table 1

Teachers' Perceptions Regarding ChatGPT's Benefits

No.	Statements	Mean	SD
1	ChatGPT suggests many great ideas for teaching English paragraph writing.	3.57	0.756
2	ChatGPT helps save time while searching for ideas and editing English paragraphs.	3.71	0.825
3	ChatGPT enhances the creative abilities of teachers when teaching English paragraph writing.	3.29	1.069
4	ChatGPT effectively supports teaching English paragraph writing.	3.57	0.938
5	ChatGPT can assist students in generating initial ideas for English paragraphs.	4.00	0.784
6	ChatGPT can help establish a solid structure for an English paragraph.	3.50	1.019
7	ChatGPT can assist with editing English paragraphs using grammar and syntax.	3.36	1.151
8	ChatGPT can help overcome writer's block when writing English paragraphs.	3.93	0.475
9	ChatGPT provides quick and accurate feedback on student assignments.	3.14	1.099
10	Students can refer to paragraphs written by ChatGPT for their English paragraph writing.	3.57	1.222
11	ChatGPT's responses are reliable.	2.64	1.008

According to Table 1, most of teachers acknowledged the advantages of ChatGPT in teaching English paragraph writing. They believed that ChatGPT could help them with generated ideas (M=4.00; SD=0.784) and save time, which aligned with feedback from T1, T3, and T4. This suggests that ChatGPT could be an effective tool for brainstorming and reducing preparation time, reflecting the mean score that supports this positive perception.

However, they had a neutral opinion on the ability to suggest ideas for teaching English paragraph writing. The teachers did not strongly lean towards either agreement or disagreement on their ability to suggest ideas (M=3.57; SD=0.756). This neutrality could be due to varying experiences with the tool's suggestions, indicating that while ChatGPT can provide useful ideas, it may not always align with the specific needs of every lesson or teaching style.

They were slightly above neutral about ChatGPT's ability to enhance creativity while teaching English paragraph writing (M=3.29); the higher standard deviation of 1.069 indicates a wider range of opinions among teachers, suggesting less consensus on this aspect. This spread suggests that while some teachers find ChatGPT to be a creative aid, others may not perceive significant benefits in this area. This is further evidenced by the moderate spread of responses, indicating less consensus among teachers.

Similarly, the teachers somewhat agree that ChatGPT is efficient in assisting with English paragraph teaching (M=3.57) and indicating a moderate spread of responses (SD=0.938). The moderate spread of responses suggests varying degrees of satisfaction, pointing to the potential for ChatGPT to be useful, but also highlighting areas for improvement. Furthermore, a mean score of 3.50 indicated teachers believed ChatGPT is reasonably capable of helping students establish a solid structure for an English paragraph and its ability to assist in editing paragraphs for grammar and syntax (M=3.36; SD=1.151). This indicates that ChatGPT is viewed as a helpful tool in guiding students towards better-structured and grammatically correct paragraphs, although the significant spread in responses points to differing levels of trust in its editing capabilities.

They also had neutral views on its quick and accurate feedback on students' assignment (M=3.14; SD=1.099), and the ability to serve as references for students (M=3.57; SD=1.222). The variability in responses suggests that while some teachers see the potential in these areas, others may have reservations about the accuracy and reliability of ChatGPT's feedback.

Despite this neutral stance, the teachers expressed more positive views on ChatGPT's time-saving nature in finding ideas for writing and editing English paragraphs (M=3.71; SD=0.825). They agreed that ChatGPT assisted in generating initial ideas for English paragraph writing and overcoming writers' block (M=3.93; SD=0.475), highlighting its usefulness in the early stages of writing. However, teachers disagreed with the reliability of answers generated from ChatGPT (M= 2.64; SD= 1.008), indicating concerns about the accuracy and dependability of the provided information.

They also made several remarks on ChatGPT benefits in the written replies, such as efficacy, responses answering the user's issues, or a fantastic resource for students on their self-study learning path. For instance, T2 highlighted ChatGPT's ability to encourage word discovery and

sentence cohesion, while T3 mentioned its effectiveness in addressing users' issues. T5 praised ChatGPT as a great helper for students in their self-study learning journey.

> *ChatGPT is an artificial intelligence system that extracts structured sentences from the Internet. It is a useful tool for teaching English paragraph writing because it encourages word discovery and sentence cohesion* (T2)*.*

> *ChatGPT is quite good for teaching English specifically and other languages in general. Most of ChatGPT's answers do address the user's issues* (T3*).*

> *ChatGPT is a great helper for students in their self-study learning journey* (T5)*.*

The teachers highlighted the positive aspects of using ChatGPT, emphasizing that ChatGPT could help writers learn new words and create well-structured sentences with good coherence. It was praised for addressing users' issues and being a helpful tool for students in their self-study learning journey.

Table 2

Students' Perceptions Regarding ChatGPT's Benefits

No.	Statements	Mean	SD
1	ChatGPT helps expand vocabulary when writing English paragraphs.	3.66	1.096
2	ChatGPT saves time while searching for ideas and editing English paragraphs.	3.84	1.145
3	ChatGPT enhances students' creativity when they learn to write English paragraphs.	3.39	1.240
4	ChatGPT effectively supports learning to write English paragraphs.	3.71	1.105
5	ChatGPT can assist students in generating initial ideas for English paragraphs.	3.85	1.112
6	ChatGPT can help establish a solid structure for an English paragraph.	3.59	1.140
7	ChatGPT can assist with editing English paragraphs using grammar and syntax.	3.61	1.135
8	ChatGPT helps overcome writer's block when writing English paragraphs.	3.71	1.121
9	ChatGPT provides quick and accurate feedback on students' assignments.	3.54	1.183
10	It is possible to refer to essays written by ChatGPT for your own writing.	3.76	1.129
11	Students feel more comfortable asking ChatGPT questions than a teacher.	3.79	1.252
12	ChatGPT's responses are reliable.	3.25	1.095

According to Table 2, VLU students expressed neutral perspectives toward ChatGPT's assistance in various aspects of writing English paragraphs. They viewed its ability to expand vocabulary and grammar range (M=3.66), enhance students' creativity in learning English paragraph writing (M=3.39), establish a solid structure (M=3.59), assist in editing grammar and

syntax (M=3.61), give quick and accurate feedback (M=3.54); and the reliability of answers as neutral (M= 3.25). These findings suggest that while students acknowledge some benefits of ChatGPT, they are not convinced of its effectiveness in these specific areas. In other words, students may have some reservations about the consistency and accuracy of the tool, requiring a need for further improvements in these areas to enhance student trust and reliance on ChatGPT.

However, students had more positive points of view on ChatGPT's time-saving nature in finding ideas and editing paragraphs (M=3.84), its efficiency in assisting English paragraph learning (M=3.71), its assistance in generating initial ideas (M=3.85), overcoming writers' block (M=3.71), its utility as a reference tool (M=3.76), and their comfort in using it (M=3.79). These mean scores indicate that students particularly appreciate ChatGPT's ability to design the writing process and aid in the early stages of writing.

> *I find that using ChatGPT helps improve my English writing skills. The suggestions and feedback from ChatGPT helped me better understand how to use vocabulary, sentence structure, and organize ideas. ChatGPT can suggest ideas or content that students might not have thought of. This helps expand creativity in writing* (S34).

> *Using ChatGPT in writing also encourages me to develop my self-learning abilities* (S57).

These comments highlight students' positive experiences using ChatGPT to learn writing. They said that its suggestions and feedback helped them understand vocabulary and sentence structure and organize ideas better. They were also satisfied with how ChatGPT could suggest creative ideas for writing. The students found that using ChatGPT saved them time because they did not need to do as much research or develop ideas independently. Getting positive feedback from ChatGPT also made them feel more confident. Overall, the students felt that using ChatGPT helped them learn and improve their writing skills on their own.

Research Question 2: What are the potential disadvantages that ChatGPT can bring to English paragraph writing?

Table 3

Teachers' Perceptions Regarding ChatGPT's Drawbacks

No.	Statements	Mean	SD
1	ChatGPT poses risks related to plagiarism.	3.86	0.864
2	ChatGPT can diminish students' distinct language skills.	3.93	1.072
3	ChatGPT can erode students' creativity and critical thinking abilities.	3.64	1.216
4	Relying on ChatGPT makes students dependent on technology.	4.00	1.038
5	ChatGPT may reduce direct interaction between teachers and students.	3.21	0.975
6	It is necessary to use ChatGPT to teach and learn English paragraph writing.	3.50	1.092

In Table 3, the teachers had mixed opinions about the risks of using ChatGPT. They were neutral about ChatGPT possibly harming students' creativity and critical thinking (M=3.64). From this point, teachers are uncertain about whether ChatGPT restrains students' ability to think independently and creatively. It is possible that while some teachers see the potential for ChatGPT to provide structured support, others are concerned that reliance on the tool might limit students' own creative and critical thinking processes.

The teachers also expressed neutral views on ChatGPT's impact on reducing direct interaction between teachers and students (M=3.21). This view indicates a lack of consensus on whether ChatGPT might interfere with the important teacher-student relationship. Direct interaction is crucial for personalized feedback and mentorship, and the mixed responses suggest that teachers are divided on whether ChatGPT can complement or detract from these interactions.

Furthermore, teachers were neutral regarding the necessity of using ChatGPT to teach and learn English paragraph writing (M=3.50), reflecting a balanced perspective. While teachers may recognize the potential benefits of integrating ChatGPT into the curriculum, they may also question its indispensability.

However, teachers were more concerned about the risk of plagiarism with ChatGPT (M=3.86), meaning that students can use the tool to generate texts potentially lead to academic dishonesty. Additionally, ChatGPT might weaken students' unique language skills (M=3.93) and could decline their ability to develop and refine their own language and writing skills. The teachers agreed that students may become too dependent on technology and ChatGPT (M=4.00). Suppose students rely too heavily on technology to create ideas, structure paragraphs, or edit their work. In that case, they may miss out on critical learning experiences that build resilience, problem-solving abilities, and deeper understanding.

In the written responses, the teachers stated various drawbacks that ChatGPT could bring to teaching and learning English paragraph writing regarding reliability, errors, or accuracy.

> *I don't really like ChatGPT because the answers I get haven't truly satisfied me. I also don't trust ChatGPT's answers, so I think it shouldn't be used in teaching* (T1).

> *Since the texts provided by ChatGPT come from the internet, there can be errors in the meaning of sentences* (T2).

> *Not every answer is correct, and it greatly depends on the amount of information provided by the user and how the user asks the questions* (T3).

These statements showed that the teachers had reservations about using ChatGPT for teaching. They were not satisfied with the answers it gave and did not fully trust its responses. They were also worried about possible errors in the meaning of sentences. Additionally, they believed the correctness of ChatGPT's responses depended on how much information it had and how the questions were asked.

Table 4

Students' Perceptions Regarding ChatGPT Drawbacks

No.	Statements	Mean	SD
1	ChatGPT poses risks related to plagiarism.	3.67	1.178
2	ChatGPT can diminish students' distinct language skills.	3.33	1.223
3	ChatGPT can erode students' creativity and critical thinking abilities.	3.33	1.199
4	Relying on ChatGPT makes students dependent on technology.	3.43	1.230
5	ChatGPT may reduce direct interaction between teachers and students.	3.26	1.202
6	It is necessary to use ChatGPT to teach and learn English paragraph writing.	3.44	1.064

Table 4 showed that students were neutral about every statement in the questionnaires regarding the risks and necessity of using ChatGPT. Specifically, they were neutral about the risk of plagiarism posed by ChatGPT (M=3.67), the possibility of ChatGPT diminishing students' distinct language skills (M=3.33), the risk of ChatGPT eroding students' creativity and critical thinking (M=3.33), the risk of students being overly dependent on technology and ChatGPT (M=3.43), the potential reduction in direct interaction between teachers and students (M=3.26), and the necessity of using ChatGPT in teaching and learning English paragraph writing (M=3.44).

Furthermore, in written answers, they expressed more ideas regarding the speed of learning, dependence, the relevance of answers, accuracy, similarity, and lack of emotional language.

> *ChatGPT gives answers very quickly but does not help me learn how to write that much* (S11)

> *Paragraphs generated by ChatGPT are somewhat similar to each other* (S42).

Research Question 3: What are the solutions for effectively adapting ChatGPT in teaching and learning English paragraph writing?

Stakeholders' opinions on the solutions for adapting ChatGPT in teaching and learning were gathered from the interviews. The participants had different suggestions for using ChatGPT and suitable behavior in using the tool. The participants' answers showed that ChatGPT is not an almighty tool; it has various flaws and can provide false information. It mainly depends on the user's behavior and knowledge when using ChatGPT. In sum, detailed and straightforward prompts and the ability to double-check and filter out information are essential for users to receive more accurate and appropriate information. Moreover, users should only view ChatGPT as a reference type and have a learning mindset when accessing the chatbot to reduce their reliance on ChatGPT.

> *Users should learn how to give straightforward and detailed prompts. This is essential for ChatGPT to give good answers* (SI05).

Students should reach a certain level to clarify the accuracy of the information provided by ChatGPT. ChatGPT is just a tool of reference; students should have a mindset of learning when using it instead of recklessly using it (TI02).

Instead of banning it, teachers should establish guidelines so students know what they can and cannot do with GPT. Teachers should be open-minded and think positively about AI (TI03).

We should use ChatGPT as a reference only or to fix errors, not use it for everything, and not be overly reliant on it (SI01).

Students should learn how to filter the information given by ChatGPT and not fully trust the AI. Ask multiple questions and compare the answers given by ChatGPT with more research outside the AI, which is important (SI06).

While learning vocabulary and grammar in ChatGPT, students shouldn't apply the vocabulary and grammar suggested by ChatGPT, which is too difficult for their level; instead, students should understand the new knowledge more and conduct more practice (SI04).

Students should ask teachers or friends more questions about the answers given by ChatGPT to clarify the information (SI02).

In sum, the findings from stakeholders' questionnaires showed that ChatGPT "helps save time," "generates initial ideas," and "helps overcome writer's block" received the highest means in Tables 1 and 2. The participants believed ChatGPT could provide ideas and suggestions and help writers construct a paragraph effectively. This statement aligns with Ali (2023), Chan and Hu (2023), and Baskara and Mukarto (2023). These authors had positive opinions about ChatGPT's benefits, considering it as a potential tool for learning and teaching. Furthermore, it helps students engage in their learning and craft self-confidence (Pham, 2024) to overcome their initial obstacles. The statement regarding ChatGPT replacing traditional search engines and teaching materials was also noted. Students believed that ChatGPT could effectively support them in learning English paragraph writing; additionally, they could refer to paragraphs written by ChatGPT, and they also felt comfortable using ChatGPT since they did not always need to ask teachers for help. This statement aligns with the studies by Chan and Hu (2023) and Baskara and Mukarto (2023) that the students can shorten time finding information for their personalized learning and the teachers generating language materials. Moreover, except for ChatGPT's reliability in teachers' responses, every mean score in the stakeholders' tables was above 3.00, showing that the participants might have a positive view of ChatGPT's influence.

On the other hand, teachers remained skeptical about the reliability of ChatGPT's answers, as shown in Table 1. This finding matched the statements made by Ali (2023), Chan and Hu (2023), and Baskara and Mukarto (2023) regarding the lack of accuracy in ChatGPT's answers. From their viewpoints, the tool might reduce students' creativity, language appropriateness, and inaccurate information if the teachers and learners are not vigilant about real-like information provided by ChatGPT. In Tables 3 and 4, Participants were concerned about the potential of students being excessively reliant on technology and their particular language abilities being reduced via ChatGPT. This aspect matched Ali's (2023) and Chan and Hu's (2023) perspectives

that the fast response of ChatGPT could lead to depending on the chatbot. The tool is an effective language tool (Pham, 2024) or a promising tool (Ali, 2023) that might mislead the ways of learning languages. Every mean score in both tables was above 3.00, showing that the participants might be aware of the potential threats that ChatGPT could pose to teaching and learning English paragraph writing.

Conclusion

Summary of the Study

This study aims to investigate the benefits and drawbacks of ChatGPT for teaching and learning English paragraph writing, and it can have some significant contributions to Van Lang University (VLU). First, the university has a diverse group of students from different academic backgrounds and levels of English proficiency, which helps make the findings relevant to many learners. Second, VLU focuses on English language education, making it a perfect place to study how ChatGPT can be used in teaching and learning English. Third, the university uses innovative teaching methods and technology, providing a practical view of how ChatGPT works in real classrooms. Finally, by involving both teachers and students, the study gets a balanced understanding of ChatGPT's benefits and challenges. These factors help to understand ChatGPT's advantages and disadvantages in English language education.

Inversely, the study finds some drawbacks regarding the stakeholders' perspectives. They are risk of plagiarism, lack of accuracy, and reliability in answers. Although ChatGPT can give answers and feedback exceptionally quickly, this trait can make users overly dependent on the chatbot, consequently diminishing the risk of reducing human interaction between teachers and students and the risk of reducing human creativity.

It is a promising tool for teaching and learning English paragraph writing. However, users should be highly cautious when accessing ChatGPT. Suggestions for maximizing ChatGPT's function are to use it as a reference and avoid being dependent on it. Finally, users should learn how to give appropriate and accurate prompts to the chatbot to receive good answers. In education, teachers should also guide students appropriately on how to use this chatbot.

Limitations of the Study

This study only focuses on understanding perspectives on the use of ChatGPT, including its advantages and disadvantages. Therefore, ChatGPT has not been experimentally tested to better understand its actual effectiveness in teaching and learning English. Limiting the study to user perspectives restricts the ability to evaluate its practical applications in educational settings comprehensively. Moreover, we did not implement practical experiments to measure ChatGPT's effectiveness in improving learners' language skills. We conducted the research with a limited sample size that could not generalize the target population and collected deeper data on various aspects of using it.

Future research needs to explore more specific aspects of ChatGPT's effectiveness in teaching and learning English. Practical experiments are necessary to accurately assess the improvement in learners' language skills. Additionally, further studies should investigate factors such as

ChatGPT's interactive capabilities with learners, changes in learning motivation, and the long-term impacts of using this tool in education.

Implications

For teachers, ChatGPT can serve as a supplemental tool to provide instant feedback on practice writing, identify common grammatical and stylistic errors, and suggest improvements. The tool can also be a great helper in planning lessons, designing activities, and grading. Automating routine correction tasks can help teachers manage their workload, allowing them to focus more on personalized instruction and complex teaching activities.

ChatGPT can be a helpful resource for students practicing writing skills outside the classroom. It can assist students in generating ideas, structuring paragraphs, and refining their drafts through iterative feedback. Additionally, it can help students develop their self-editing skills by pointing out areas of improvement and providing examples of well-constructed sentences. By incorporating ChatGPT into their learning routine, students can gain more confidence in their writing abilities and improve their overall proficiency in English paragraph writing.

References

AlAfnan, M. A., Dishari, S., Jovic, M., & Lomidze, K. (2023). ChatGPT as an educational tool: Opportunities, challenges, and recommendations for communication, business writing, and composition courses. J*ournal of Artificial Intelligence and Technology*. https://doi.org/10.37965/jait.2023.0184

Ali, J.K.M. (2023). Benefits and challenges of using ChatGPT: An exploratory study on English language program. *University of Bisha Journal for Humanities, 2*(2), 629-641.

Almalki, S. (2016). Integrating quantitative and qualitative data in mixed methods research--Challenges and benefits. *Journal of Education and Learning*, *5*(3), 288-296.

Ariana, S. M. (2010). Some thoughts on writing skills. Annals of Faculty of Economics, *1*(1), 127-133. https://doaj.org/article/6d041bcc9eaf47df8115d36259570a55

Baidoo-Anu, D., & Ansah, L. O. (2023). Education in the era of generative artificial intelligence (AI): Understanding the potential benefits of ChatGPT in promoting teaching and learning. *Social Science Research Network*. https://doi.org/10.2139/ssrn.4337484

Baskara, F. R. (2023). Integrating ChatGPT into EFL writing instruction: Benefits and challenges. *International Journal of Education and Learning*, *5*(1), 44-55. https://doi.org/10.31763/ijele.v5i1.858

Baskara, R., & Mukarto, M. (2023). Exploring the implications of ChatGPT for language learning in higher education. *Indonesian Journal of English Language Teaching and Applied Linguistics, 7*(2), 343-358. https://dx.doi.org/10.21093/ijeltal.v7i2.1387

Bi-Yu, W., & Yan, L. (2020). English paragraph construction rules and implementation techniques. *Journal of Literature and Art Studies*, *10*(3). https://doi.org/10.17265/2159-5836/2020.03.006

Chan, C. K. Y., & Hu, W. (2023). Students' voices on generative AI: Perceptions, benefits, and challenges in higher education. *International Journal of Educational Technology in Higher Education*, *20*(1). https://doi.org/10.1186/s41239-023-00411-8

Ferreiro-Santamaria, G. (2024). Exploring the role of ChatGPT in English teaching within higher education settings. *International Journal of Trends and Developments in Education*, *4*(1), 44–58. https://jtade.com/index.php/jtade/article/view/244

Fontenelle-Tereshchuk, D. (2024). Academic writing and ChatGPT: Students transitioning into college in the shadow of the COVID-19 pandemic. *Discover Education*, *3*(1), 6. https://doi.org/10.1007/s44217-023-00076-5

Ho, Phuong. (2024). Using ChatGPT in English Language Learning: A Study on I.T. Students' Attitudes, Habits, and Perceptions. *International Journal of TESOL & Education*. 4. 55-68. https://doi.org/10.54855/ijte.24414

Hosseini, M., Taghizadeh, M. E., Abedin, M. J. Z., & Naseri, E. (2013). In the importance of EFL learners' writing skill: Is there any relation between writing skill and English essay test content score? *International Letters of Social and Humanistic Sciences*, 6, 1-12. https://doi.org/10.18052/www.scipress.com/ilshs.6.1

Karthikeyan, C. (2023). Literature review on pros and cons of ChatGPT implications in education. *International Journal of Science and Research* (IJSR), *12*(3), 283-291.

Kostka, I., & Toncelli, R. (2023). Exploring applications of ChatGPT to English language teaching: Opportunities, challenges, and recommendations. *TESL-EJ, 27*(3). https://doi.org/10.55593/ej.27107int

Mondal, H., & Mondal, S. (2023). ChatGPT in academic writing: Maximizing its benefits and minimizing the risks. *Indian Journal of Ophthalmology*, *71*(12), 3600-3606.

Nguyen, T. T. H. (2023). EFL teachers' perspectives toward the use of ChatGPT in writing classes: A case study at Van Lang University. *International Journal of Language Instruction*, *2*(3), 1-47. https://doi.org/10.54855/ijli.23231

Nguyen, H. N., Nguyen, D., Tran, L. P. T., & Tran, T. H. N.(2024).Exploring English Vocabulary Learning of Vietnamese Secondary School Students with VoiceGPT Assistance. *AsiaCALL Online Journal*, 15(1), 55-70. https://doi.org/10.54855/acoj.241514

Nguyen, T. H. B., & Tran,T. D. H.(2023). Exploring the Efficacy of ChatGPT in Language Teaching. *AsiaCALL Online Journal*, 14(2), 156-167. https://doi.org/10.54855/acoj.2314210

Ningrum, S. (2023). ChatGPT's impact: The AI revolution in EFL writing. *Borneo Engineering & Advanced Multidisciplinary International Journal*, *2*(Special Issue), 32-37.

Ortega-Martín, M., García-Sierra, Ó., Ardoiz, A., Álvarez, J., Armenteros, J. C., & Alonso, A. (2023). Linguistic ambiguity analysis in ChatGPT. arXiv (Cornell University). https://doi.org/10.48550/arxiv.2302.06426

Pham, V.P.H. (2024). Vietnamese Graduate Students' Perspectives on the Use of ChatGPT. In: Bui, H.P., Namaziandost, E. (eds) Innovations in Technologies for Language Teaching and Learning. Studies in Computational Intelligence, vol 1159. Springer, Cham. https://doi.org/10.1007/978-3-031-63447-5_9

Rohim, A. (2019). An analysis of students writing skill in paragraph writing. Globish: An English-Indonesian Journal for English, Education, and Culture, *8*(1), 38-45.

Rudolph, J., Tan, S., & Tan, S. (2023). ChatGPT: Bullshit spewer or the end of traditional assessments in higher education? Journal of Applied Learning and Teaching, *6*(1), 342-363.

Sabzalieva, E., & Valentini, A. (2023). ChatGPT and artificial intelligence in higher education: Quick start guide. International Journal of Educational Technology in Higher Education.

Sok, S., & Heng, K. (2023). ChatGPT for education and research: A review of benefits and risks. Available at SSRN. https://doi.org/10.2139/ssrn.4378735

Stratton, S. J. (2021). Population research: Convenience sampling strategies. *Prehospital and Disaster Medicine, 36*(4), 373-374.

Wali, O., & Madani, A. Q. (2020). The importance of paragraph writing: An introduction. Organization, *3*(7), 44-50.

Wau, C. S. W. (2022). Students' difficulties in writing definition paragraph at the third semester students of English language education study program of STKIP Nias Selatan. FAGURU: Jurnal Ilmiah Mahasiswa Keguruan, *1*(1), 1-9.

Biodata

Lam Ngoc Thanh Hai is currently a senior English major in the Faculty of Foreign Languages at Van Lang University.

Le Thi Ngoc Diep has been working as an EFL lecturer for over 20 years at Van Lang University, Vietnam. Her research focuses on linguistics, TESOL, education management, and teaching quality.

Synchronous and Asynchronous Online Communication for Developing Foreign Language Speaking Skills

Nami Takase[1*]

[1]Faculty of Informatics, Shizuoka University, Japan
*Corresponding author's email: t.shizuoka11@gmail.com
* https://orcid.org/0009-0008-8391-9544
https://doi.org/10.54855/acoj.241525

Abstract

This study examined the effects of synchronous and asynchronous online communication using video conferences and video letters (VLs) on the development of foreign language speaking skills for Common European Framework of Reference for Languages (CEFR) A1 and B1 level learners of English. Two groups, one using the VLs and the other video conferencing (ZOOM), were constituted to compare the impact of the modes. Both groups were provided with the same topic for interaction with native English-speaking university students from the United States. Pre- and post-tests were conducted to examine the effects of each practice mode. The transcribed speaking tests were analyzed using the Complexity, Accuracy, and Fluency (CAF) framework (Housen et al., 2012). The post-test results revealed that in the ZOOM group, sentence complexity score and total number of words decreased significantly. The VL group showed no differences in word complexity and maintained sentence complexity. This study highlighted the influence of synchronous and asynchronous computer-mediated communication (CMC) approaches on speaking skills.

Keywords: computer-mediated communication, synchronous and asynchronous communication, speaking skills development

Introduction

The intersection of virtual environments and communication modalities has gained attention in foreign-language learning. The immersive possibilities offered by recent technologies have pushed the boundaries of language practice in virtual realms. Education frameworks in Asian countries has emphasized the use of technology in language classrooms (Pham et al., 2024; Wang, 2014). The use of technology alleviates challenges faced by Asian language learners, where access to authentic English is limited in face-to-face settings. It has been reported that e-learning tools provide valuable opportunities for student interaction and can be effectively used in classes (Pham et al., 2024). However, a critical gap remains in understanding the comparative benefits of synchronous versus asynchronous computer-mediated communication (CMC) for authentic language exchange.

Recent research highlights that speaking skills, the most commonly used aspect of communication, may not sufficiently develop through the Communicative Language Teaching (CLT) approach alone (Qhobosheane & Phindane, 2022). According to Qhobosheane and Phindane (2022), encouraging peer interaction in small groups inside and outside of claasrooms

may offer learners more authentic speaking opportunities while helping them feel comfortable to participate. Yanguas (2012) emphasized the benefits of using videos to enhance foreign language speaking skills and noted that learners had positive attitudes toward video-based learning, comparable to traditional face-to-face or audio-only methods. While synchronous communication with its fast-paced nature can be challenging for language learners, it can also be adapted to asynchronous communication, allowing learners to engage at a slower pace.

This paper examines how the differences between synchronous and asynchronous activities impact various aspects of speaking skills in foreign language learning. It also examines the effect of using videos in both synchronous and asynchronous modes in CMC on measuring the impact on language development. Through an in-depth analysis of the language by the learner, this study explores the pivotal role of technology in current language teaching practices. It provides valuable insights into the nuanced dynamics of synchronous and asynchronous communication, shedding light on their implications for effective foreign language instruction in virtual environments.

Synchronous Computer-Mediated Communication and Foreign Language Learning

Synchronous activities, by replicating face-to-face interactions, can enhance second language (L2) acquisition (Wang, 2014; Yang, 2022). Yang (2022) found that synchronous learning generally boosts the motivation of EFL learners. Despite some negative feedback, such as issues with interpersonal interactions, time management, and minimal reduction of anxiety, the study highlighted significant positive outcomes, including improved English learning attitudes, better concentration, and increased autonomous learning.

Ample evidence based on theoretical practices supports the hypothesis that synchronous videoconferencing activities contribute to foreign language learning. The Output Hypothesis (Swain, 1985, 1995) posits that allowing learners to express complete thoughts orally in the target language can enhance their conversational ability. Additionally, synchronous videoconferencing activities align with the Interaction Hypothesis (Long, 1996), suggesting that negotiated interaction aids learners in achieving a more target-like output. Studies examining language development using CMC tools (Guillén & Blake, 2017; Yanguas, 2010) have demonstrated its positive impacts on L2 speaking development. However, it remains unclear whether the use of video extends to subsequent speaking tasks for CEFR A1-B1 students learning English as a target language. This study aims to explore this question through a quasi-experiment by comparing pre- and post-test results between asynchronous and synchronous video exchanges.

Studies have explored the effects of using videos in languages other than English. Guillén and Blake (2017) focused on intermediate Spanish learners. Their test results, measured using the Versant speaking test, suggested overall improvement using CMC tasks. Yanguas (2010) compared how learners negotiated meaning in video, audio, and face-to-face interactions with Spanish L2 learners. The findings suggest that while audio-only input focuses on language, the use of video and face-to-face interactions adds visual cues that may support the context without relying solely on linguistic resources. Although studies claim that the use of synchronous CMC (SCMC) and asynchronous CMC (ACMC) is effective in foreign language learning, gaps remain in understanding how these different modes impact the linguistic aspects of speaking skills. Although theoretical foundations exist for investigating the potential benefits of SCMC for L2 learners, empirical research is necessary to scrutinize the widespread claims regarding its advantages. Therefore, this study aims to investigate the effects of using asynchronous and synchronous videos on English language learning to improve different aspects of speaking skills.

SCMC and Development of Foreign Language Speaking Skills

The efficacy of online language exchange programs in fostering speaking skills has been carefully investigated (Canals, 2020; Kawaguchi, 2016; Rahimi & Fathi, 2022; Ware & Kessler, 2016). Although the type of interlocutor is found to affect learner outcomes (Ziegler, 2016), interaction in synchronous computer-mediated communication (SCMC) with native speakers in online interactions has been shown to enhance speaking skills (Canals, 2020). Ware and Kessler (2016) highlighted the positive impact of active student participation in online discussions and formulating inquiries on language skill improvement. Ziegler (2016) noted that interaction in SCMC contexts can assist learners in identifying discrepancies between their interlanguage and the features of the target language. Kobayashi (2021) explained that online communication is found to be less intimidating than face-to-face interactions. It reduces the anxiety associated with face-to-face communication and allows students to focus on speaking. Additionally, SCMC tools using video can aid communication by conveying nonverbal elements in the same way as face-to-face communication (Canals, 2020).

An alternative investigation in SCMC using written text involved students from Japan and Australia engaging in online dialogues to learn Japanese as a second language (Kawaguchi, 2016). Focused discussions on specific topics and reciprocal feedback on written expressions affected participants' morphological and syntactic development. According to a recent study, English as a Foreign Language (EFL) students who used a dedicated app for interacting online with English speakers substantially improved their speaking abilities and willingness to communicate. Students expressed a positive reception toward these online speaking activities (Rahimi & Fathi, 2022). This collective research implies the substantial utility of online language exchange through SCMC facilitates learners' speaking skills.

However, precise linguistic competencies attainable through CMC learning remain inadequately established. Ziegler (2016) asserted that the connection between diverse CMC contexts and learner outcomes remains unexplored, particularly concerning the disparities between synchronous and asynchronous modalities. This study aims to explore the differences in language learning between synchronous and asynchronous speaking practices. To investigate this effect, delineating specific areas of potential enhancement achievable through CMC practices is imperative. Nevertheless, extant research on CMC tasks has predominantly assessed general speaking skills, posing challenges in pinpointing areas that improve speaking proficiency. For instance, Canals's (2020) study involving Spanish learners employed an oral assessment comprising interactive tasks to evaluate task achievement. The assessment encompasses scores based on fluency, intonation, pronunciation, grammar, and vocabulary precision. The analysis was based on the overall score and failed to examine specific improvement areas. While administering both previous and subsequent online engagement activities, the overall score was cautiously interpreted as it lacked a detailed description of the results. Zhou's (2023) examination of online exchanges used the International English Language Testing System (IELTS) speaking test as an assessment tool for speaking skills. While this test offers a snapshot of students' overall speaking proficiency at specific points in time, the results do not indicate the impact of interventions on factors influencing speaking skills. If we were to understand how online engagement in synchronous and asynchronous CMC modes affects specific speaking skills, it would enable instructors to select the most appropriate mode for each task and set goals that match the practice.

CMC and Connectivity

Another factor that has remained unexplored in CMC methodology and language development is connectivity with the interlocutor. The connection with online partners can vary because the

task can be synchronous or asynchronous, depending on how the activity is organized. The current CMC methodologies employed to develop L2 oral skills focus on diverse synchronous and asynchronous activities. Synchronous activities necessitate interlocutors to respond at a natural pace, facilitating the prompt reception of feedback and fostering seamless conversational development. However, as responses should be quick, they are less structured, and the words are informal. Responses do not have to be in sentences; pauses and fillers occur more frequently. The advantage of asynchronous activities is language production without immediate interaction, affording participants the autonomy to progress at individually tailored paces. The language in ACMC allows for more preparation; the structure is organized using sophisticated words and complex sentences. Asynchronous activities provide participants additional preparation time, potentially aiding beginners' readiness for FTF communication and supporting foreign language learners. However, these assertions warrant caution in the absence of empirical evidence.

Language Learning in ACMC and SCMC

Studies have explored the effects of different modalities and connectivity (Yanguas, 2010; 2012, Guillén & Blake, 2017). However, comparative analyses of ACMC and SCMC in language learning remain limited, and the findings are inconclusive. Both synchronous and asynchronous studies allow for authentic communication, which may lead to language learning (Yanguas, 2010), and observe no difference regarding vocabulary learning (Yanguas, 2012). In a study conducted by Yanguas in 2010, the impact of oral language proficiency was examined by comparing video, audio, and a face-to-face (FTF) group during a meaning-focused communicative task. This study involved 15 pairs of intermediate-level Spanish learners and analyzed the meaning of negotiation in task-based interactions. The outcomes revealed that both the video and audio groups exhibited results similar to those of the FTF group, particularly in turn-taking patterns and meaning negotiations during instances of misunderstanding. The video and audio SCMC with FTF modes were closely aligned, concluding that video and FTF interactions provide comparative opportunities for comprehensible input, feedback, and modified output during learner-to-learner task interactions.

In a subsequent study, Yanguas (2012) explored the differences between the two modes of oral SCMC (audio and video) and FTF interaction, focusing on vocabulary development. The study involved 58 Spanish learners undertaking a jigsaw task in pairs which incorporated new vocabulary. Although no significant differences were revealed between the groups regarding oral production or written recognition of vocabulary, the investigation clarified vocabulary-related aspects in the SCMC context.

Contrastingly, Guillén and Blake (2017) found disparities in the results of syntactic complexity between synchronous and asynchronous practices in their study with intermediate Spanish students pursuing hybrid courses. This study incorporated an asynchronous video forum followed by synchronous Tandem learning and chat exchanges. Their qualitative analysis observed that asynchronous video posts exhibited greater syntactic complexity than spontaneous conversations or chat posts.

Although these studies provided valuable insights into the effects of ACMC and SCMC on language learning, their specific impact on speaking skills remains uncertain. The present study attempted to elucidate the nuances of these effects in the context of language acquisition.

Task Assessment

Evaluating speaking skills is challenging because teachers might not employ tests that encompass the diverse distinctive features of speaking (Hatipoğlu, 2021). This action raises

concerns about L2 research and language instruction because of their holistic nature, making detailed monitoring of language proficiency development challenging. Therefore, this study adopts objective measures, such as the complexity, accuracy, and fluency (CAF) framework, and incorporates quantifiable metrics, such as speech rate. CAF assessment is a task-based language teaching approach that adopts a cognitive perspective, using the three dimensions of mastery and the key stages in L2 acquisition. These dimensions include 1) internalization of new L2 items (complexity), 2) modification of L2 knowledge (accuracy), and 3) consolidation and proceduralization of L2 knowledge (fluency) (Housen et al., 2012; Norris & Ortega, 2009; Skehan, 1998). For example, Housen et al. (2012) found that complexity influences the internalization of a new L2 target object during the knowledge development phase. Subsequently, it allows a more sophisticated and accurate language to be obtained, ultimately consolidating L2 knowledge for enhanced fluency and performance. These objective measures have gained prominence in contemporary L2 acquisition research (e.g., de Jong & Mora, 2019; Tavakoli, 2016; Tavakoli, Campbell, & McCormack, 2016; Tavakoli, Nakatsuhara, & Hunter, 2017).

The advantages and challenges of synchronous and asynchronous language practice for efficient foreign language speaking skills has not been explored and delineated, especially when compared against each other.

This study investigates the research question of how participation in authentic language practice through both synchronous and asynchronous methods distinctly affects subsequent speaking performance.

Considering the CAF assessment framework, the research question posits that synchronous online exchanges requiring immediate real-time responses are more likely to improve the distinctive features of spontaneous speaking. Conversely, asynchronous exchanges allow participants to prepare, potentially enhancing aspects of written language such as complexity and accuracy.

Methods

Participants

The study included 24 first- and second-year students at a private university in Japan. Participants were randomly selected from the English class, and only those who submitted consent forms participated in the full data collection for this study. All participants were non-native English speakers whose L1 was Japanese, with English proficiency levels of A1-B1 in the CEFR and scores of approximately 250-500 in the Test of English for International Communication (TOEIC).

Participants were divided into two groups. One group engaged in asynchronous activity using recorded videos, referred to as the video letter group (VL group), and the other with synchronous activity using the real-time video conferencing tool Zoom (Zoom group). The Japanese students were assigned native English-speaking university students from the US as language partners. Partners remained the same throughout the study period.

Task

The current study adopts the E-Tandem activity for its authentic communication and beneficial outcomes in addition to improving language skills. This study was conducted between October 2020 and June 2021. The pairings were established at different times of the year, but all participants followed the same five-week procedure. The students were instructed to exchange

ideas based on each topic selected by the instructor. Students made topic-related videos, and their language partners were asked to respond with their videos. The participants were asked to brainstorm ideas before the VL recording. Weekly tasks included self-introductions, describing personalities, and discussing personal idols and role models. Before starting the tasks, a pre-test was conducted in which the participants recorded a one-minute speech about themselves. After completing the tasks, at the end of the five-week period, participants also made a post-test one-minute speech (see Figure 1). The participants were also asked to submit their TOEIC scores in December 2020. The TOEIC score was used to screen and select the target participants for this study. After the post-test, the participants completed a short survey on their experiences in the study. The learners were presented with two survey items: 1. Do you think the topic was interesting? and 2. Please share your comments regarding this activity. Their native English-speaking language partners were also asked to share their comments to determine whether the activity was not an overload.

Figure 1.

Weekly task and topic

CMC Tools

The asynchronous online tool employed in this study was a video-sharing application called Flipgrid (https://info.flip.com). Flipgrid is an interactive video discussion platform enabling users, often students and educators, to generate and distribute concise video responses. This asynchronous video communication empowered participants to share video responses to stimuli or questions. Widely employed in educational contexts and research (Edwards & Lane, 2021), this platform fosters dynamic and collaborative discussions and allows individuals to articulate their thoughts, ideas, and insights using videos, unlike conventional written responses. Synchronous online exchanges were facilitated using the ZOOM conference tool. ZOOM was selected because of its familiarity with most participants.

Data Analysis

Pre- and post-test sound files were collected and transcribed for analysis. Two transcribers, highly proficient in English, checked the data. All discrepancies were checked before data analysis. The transcribed data were examined using CAF to reflect the major stages of L2 acquisition (Norris & Ortega, 2009), and an objective score was calculated for comparison. The data were analyzed using paired t-tests and computer statistical analysis software R.

Fluency

Language fluency was assessed based on words per minute and speech breakdown. The number of words was measured using the phonation time ratio and total number of words. Speech breakdown was calculated based on the number of silent and filled pauses. Silent pauses were analyzed using the Praat phonological analysis software (Boersma & Weenink, 2018). The silence threshold was set to -25dB, and the minimum duration was set to 0.3s, referring to the finding from de Jong & Bosker (2013) on the correlation between pauses and L2 proficiency. The filled pauses are counted manually.

Accuracy

To evaluate the language production accuracy, the percentage of error-free clauses per Analysis of Speech-unit (AS-unit) was calculated. The counted errors were based on vocabulary, grammar, and syntax. The errors included misuse or inaccurate use of words, including L1, repetition, deletion of words, articles, singular/plural misuse, tense, and word order. The fillers were deleted before analysis. After the evaluation, the rater scores for 20% of the data were compared with those of another rater to calculate inter-rater reliability, yielding 90% agreement. Discrepancies between the two raters were discussed. After reaching an agreement, the first rater independently examined the remaining data.

Syntactic Complexity

Before text analysis, repeated, self-repaired, and filler words and L2 use were deleted. Syntactic complexity was calculated based on the number of words per AS-unit (Foster et al., 2000). AS-unit is a spoken data unit that counts utterances of single speakers using independent clauses or subclausal units, together with any associated subordinate clause(s) (Foster et al., 2000, p.365). The AS-unit has been widely used in spoken data research.

Lexical Diversity

McCarthy's Measure of Textual Lexical Diversity (MTLD) was adopted to quantify lexical and vocabulary diversity regarding words used in a single task. McCarthy and Jarvis (2010) claimed that MTLD does not depend on text length in the 100–2,000-word range. The MTLD analysis was based on the same type-token ratio, set to 0.72. A higher MTLD score indicated a more diverse vocabulary.

Lexical Complexity

An additional vocabulary analysis was conducted to explore potential differences in vocabulary usage across various task types. The percentage of words employed was within each level of the New JACET List of 8,000 Basic Words (2016). The New JACET List of Basic Words was based on the British National Corpus (BNC) and the Corpus of Contemporary American English (COCA) and serves as an educational word list for Japanese learners of English. Base Level 1,000 comprises the most frequently used 1,000 words in English, whereas Base Level 2,000 encompasses the 2,000 most commonly used words. Word-level percentages were computed for the initial 1,000 words, and that exceeded the Base Level of 2,000 words. Notably, proper nouns, vocabulary specific to the first language, and fillers were excluded from the base-level list.

Results

Quantitative analysis was conducted using the Wilcoxon signed-rank pair test, a non-parametric statistical test, in the R statistical computing environment. Table 1 shows pre-and post-test CAF scores. The comparison on the right shows the outcomes.

Fluency

Regarding fluency, while no statistically significant difference was observed ($p > .05$), the ZOOM group exhibited a decline in articulation rate, as evidenced by a reduction in the number of words produced during phonation time (VL Pre: M = 2.62, SD = 0.51, VL Post: M = 2.44, SD = 0.44; ZOOM Pre: 2.15, SD = 0.90, ZOOM Post: 1.57, SD = 0.58).

Table 1.

Results of pre-and post-test CAF scores

				Pre Test			Post Test		Pretest-Posttest comparison				Power (1-β)
			n	M	SD	n	M	SD	p	Z	r		
Accuracy	Error Rate	VL	13	1.93	2.03	13	2.19	2.05	0.74	0.34	0.09		
		ZOOM	9	4.18	4.25	9	4.32	2.43	0.66	0.44	0.12		
Fluency	Speech Rate	VL	13	101.34	14.93	13	81.48	25.45	0.06	1.90	0.52		
		ZOOM	9	76.49	25.36	9	52.11	20.91	0.07	1.77	0.49		
	Articulation Rate	VL	13	2.62	0.51	13	2.44	0.44	0.29	1.07	0.30		
		ZOOM	9	2.15	0.90	9	1.57	0.58	0.16	1.40	0.38		
Complexity	Syntactic Complexity	VL	13	11.40	2.92	13	9.00	4.68	0.24	1.16	0.32		
		ZOOM	9	10.35	5.01	9	4.88	7.04	0.02	2.25	0.62	***	0.96
	Lexical Diversity	VL	13	30.07	12.98	13	33.30	15.41	0.61	0.50	0.14		
		ZOOM	9	25.71	12.21	9	28.00	10.30	0.39	0.87	0.24		

Note. *small r = .10, **medium r = .30, ***large r = .50 (Mizumoto & Takeuchi, 2011)

Accuracy

There was no statistically significant difference in accuracy between the pre and post-test in both VL and ZOOM groups (VL Pre: M = 1.93, SD = 2.03, VL Post: M = 2.19, SD = 2.05; p = .74; ZOOM Pre: 4.18, SD = 4.25, ZOOM Post: 4.32, SD = 2.43, p = .66).

Syntactic Complexity

The results reveal a statistically significant difference in syntactic complexity when using ZOOM (Z =2.25, r = .62, p =.02) (Figure 2). The statistical power obtained was higher than .80, indicating strong significance (ZOOM power = 0.96). This was evidenced by a decrease in the number of words per AS-unit between the pre- and post-test results (VL Pre: M = 11.40, SD = 2.92, VL Post: M = 9.00, SD = 4.68; ZOOM Pre: 10.35, SD = 5.01, ZOOM Post: 4.88, SD = 7.0).

Figure 2.

Syntactic complexity in pre- and post-test
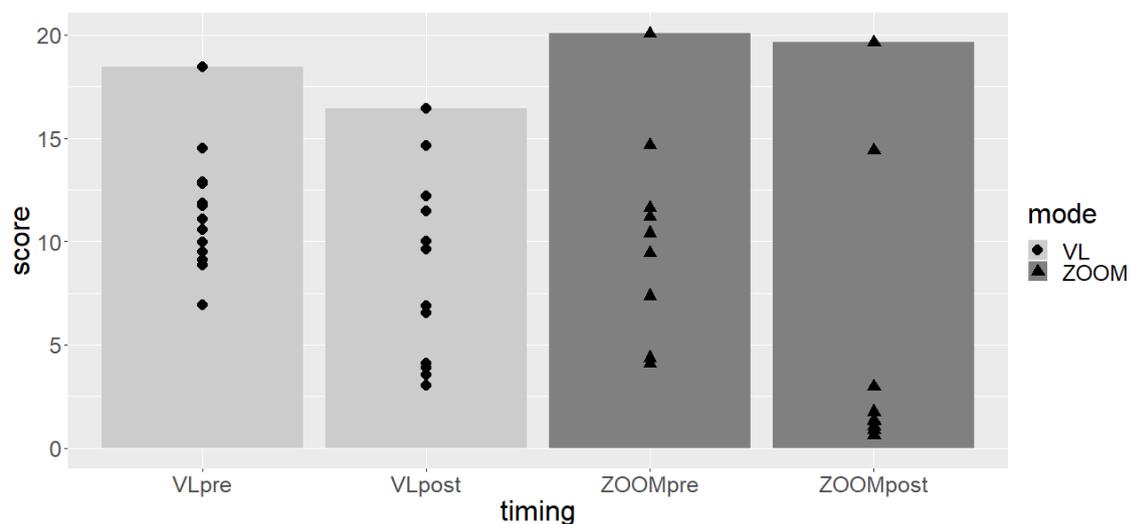
Total Number of Words

The paired Mann-Whitney test revealed a notable disparity within the ZOOM group (ZOOM: Z = 1.92, r = .45, p =.05, Power = .42)(Table 2), which exhibited a discernible decrease in the overall number of words (VL Pre: M = 59.62, SD = 20.05, VL Post: M = 70.08, SD = 26.59;

ZOOM Pre: 64.55, SD = 21.86, ZOOM Post: 51.9, SD = 25.02) (Figure 3).
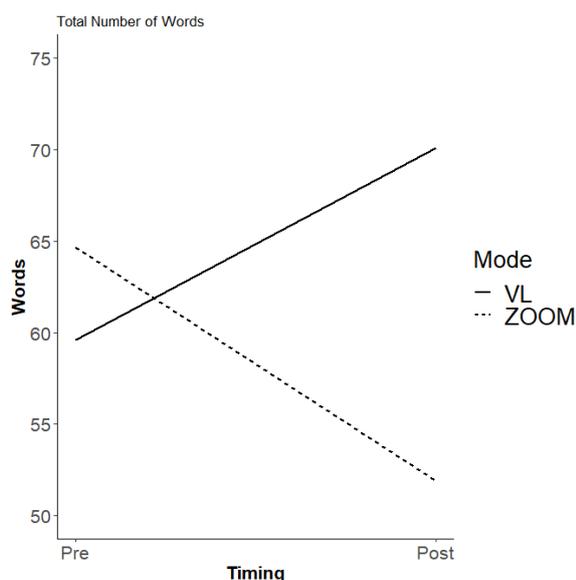
Table 2.

Result of pre-and post-test score on total number of words

	Pre Test			Post Test			Pretest-Posttest comparison				Power (1-β）
	n	*M*	*SD*	*n*	*M*	*SD*	*p*	*Z*	*r*		
VL	13	59.62	20.05	13	70.08	26.59	0.28	1.19	0.22		0.42
ZOOM	9	64.66	21.86	9	51.9	25.02	0.05	1.92	0.45	**	0.42

Note. *small *r* = .10, **medium *r* = .30, ***large *r* = .50 (Mizumoto & Takeuchi, 2011)

Figure 3.

Total number of words in pre- and post-test

Lexical Diversity

There was no difference in lexical diversity between the pre- and post-test in both VL and ZOOM groups (VL Pre: M = 30.07, SD = 12.98, VL Post: M = 33.30, SD = 15.41; *p* = .61; ZOOM Pre: 25.71, SD = 12.21, ZOOM Post: 28.00, SD = 10.30, *p* = .39).

Lexical Complexity

Table 3 and Figure 4 show the word usage from pre- to post-test. The left graph illustrates the average percentage of vocabulary at the 1000-word level in the pre-and post-test, while the right graph represents vocabulary levels ranging from 2000-8000 words. The post-test results for the ZOOM group exhibited a higher percentage of vocabulary at the 1000-word level and a correspondingly lower percentage within the 2000-8000 word range. In contrast, the post-test results for the VL group indicated a decrease in the percentage of vocabulary at the 1000-word level and a concurrent increase in the percentage within the 2000-8000 word range compared to the ZOOM group.

This discrepancy suggests that the VL group more sophisticatedly used the vocabulary, filtering out basic and extraneous terms. Conversely, the vocabulary employed by the ZOOM group appeared to be more rooted in basic lexical items.
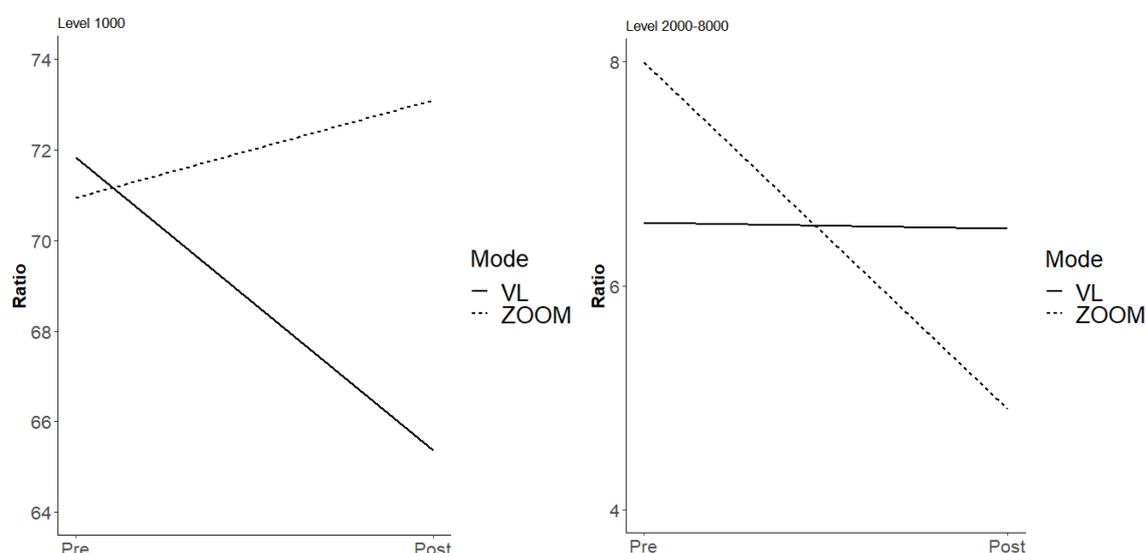
Table 3.

Results for average word level percentage of pre-and post-test

	VL_Pre	VL_Post	ZOOM_Pre	ZOOM_Post
Word Level 1000	71.83	65.37	70.93	73.08
Word Level 2000-8000	6.56	6.51	7.99	4.9
Words not on the list	6.28	8.39	6.39	7.14

Figure 4.

Average word level percentage for pre- and post-tests

Practice Sessions

The data represents the total word count per topic during the three exchanges conducted in this study. In Figure 5, the left graph shows the results of the learners, and the right shows those from native English-speaking partners. In both instances, the ZOOM group had higher total word counts. This discrepancy is attributable to the extended time allocated for the task in the ZOOM setting (15 mins) compared to 5 mins recording in the VL group.

Table 4 shows that native English speakers had a greater total word count than the learners under both experimental conditions.
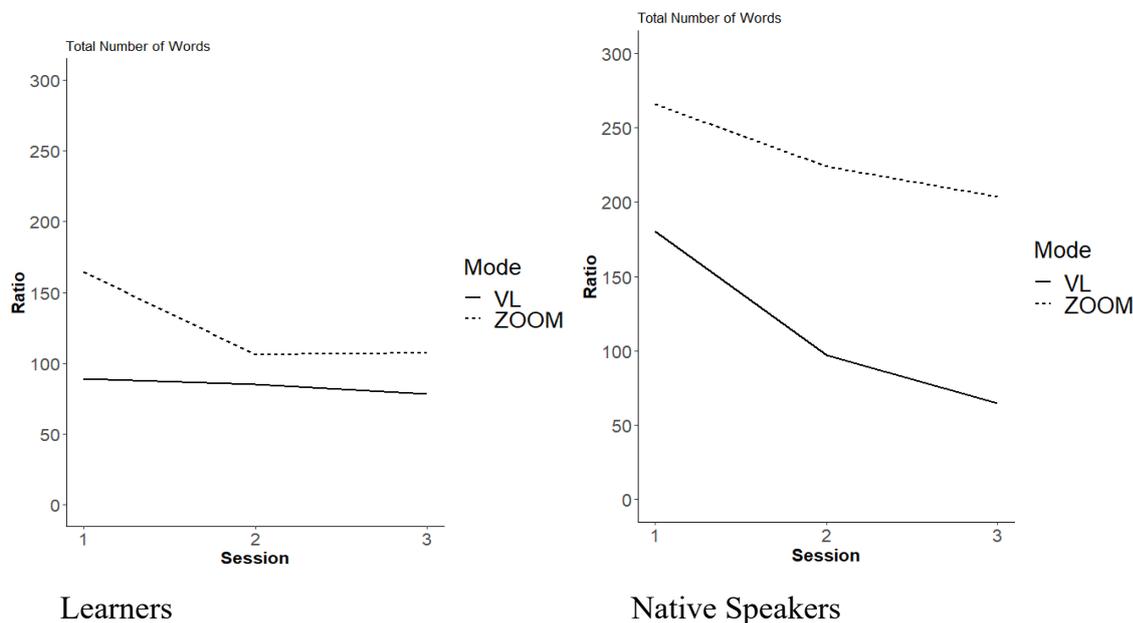
Table 4.
Descriptive statistics of total number of words for each practice session

		Session 1			Session 2			Session 3		
		n	*M*	*SD*	n	*M*	*SD*	n	*M*	*SD*
Learners	VL	13	89.38	27.76	13	85.13	37.51	13	78.31	20.16
	ZOOM	9	164.22	165.37	9	105.89	95.86	9	107.44	90.81
Native	VL	13	180.33	117.85	13	97.33	42.97	13	65.00	33.14
	ZOOM	9	265.67	119.47	9	224.00	97.53	9	203.33	65.58

Figure 5.

Total number of words for each practice session

Learners   Native Speakers

Practice Session Word Level

In the case of vocabulary level 1000, learners in the ZOOM group used more level 1000 words than those in the VL group (Table 5, Figure 6). In session 2, the VL group used more level 1000 words. For native speakers, the VL group consistently used more level 1000 words than the ZOOM group.
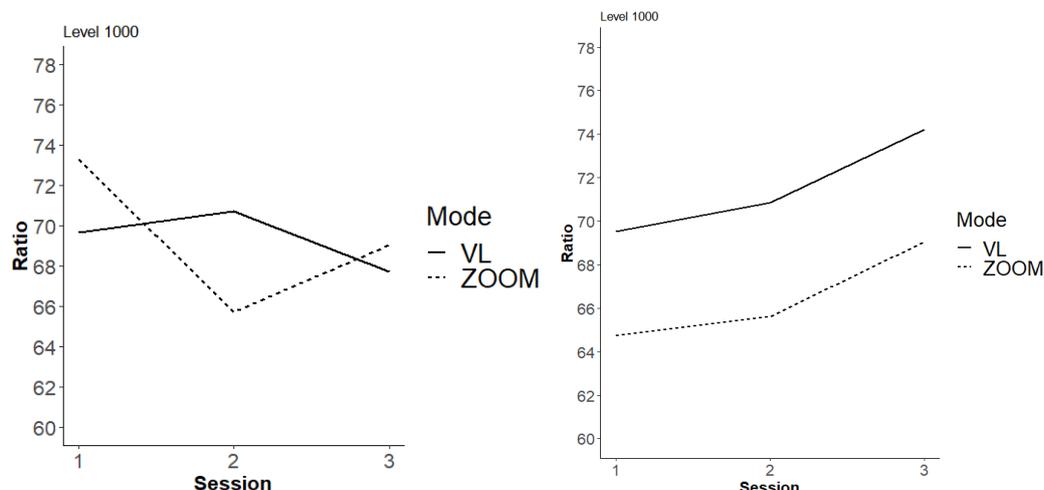
Table 5.

Descriptive statistics of Level 1000 for each practice session

		Session 1			Session 2			Session 3		
		n	*M*	*SD*	n	*M*	*SD*	n	*M*	*SD*
Learners	VL	13	69.67	5.07	13	70.73	7.12	13	67.73	4.63
	ZOOM	9	73.27	10.02	9	65.72	9.11	9	70.68	6.16
Native	VL	13	69.51	2.29	13	70.86	3.64	13	74.21	2.24
	ZOOM	9	64.73	6.11	9	70.73	2.41	9	69.06	2.65

Figure 6.

Level 1000 words for each practice session

Learners   Native speakers

In contrast, with vocabulary levels ranging from 2000–8000 words, disparities emerged within the VL groups concerning the average percentage between learners and native English speakers (Table 6). Specifically, native English speakers consistently demonstrated a higher percentage of vocabulary at the 2000-8000-word level for Topics 1 and 2 in the VL group (Figure 7). For the learners, the ZOOM group scored slightly higher than the VL group. In session 3, the ZOOM group showed a decline, whereas the VL group remained stable. Session 3 showed a decline in vocabulary at the 2000-8000-word level for the VL group, which was noted among native English speakers.
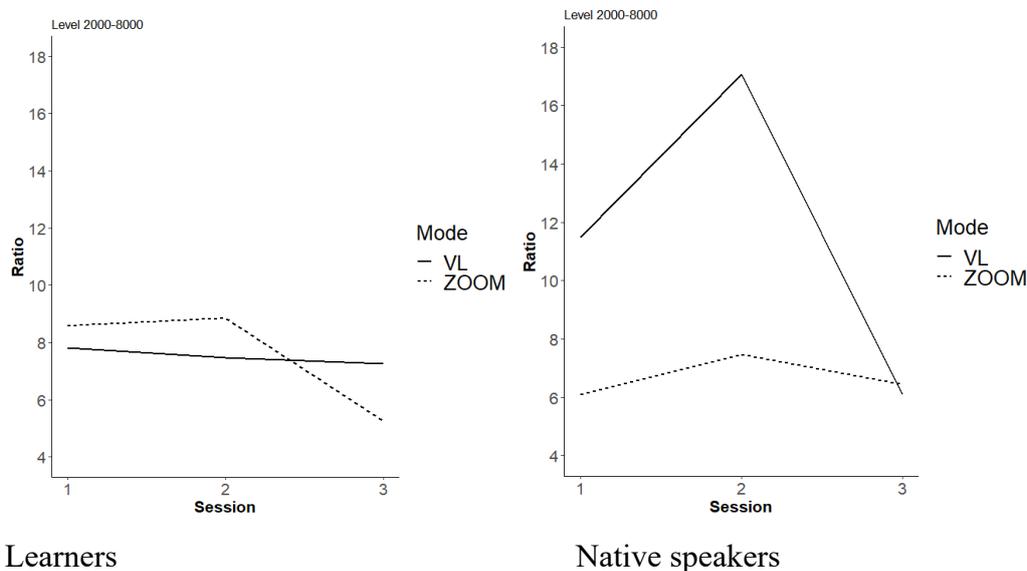
Table 6.

Descriptive statistics for levels 2000–8000 for each practice session

			Session 1			Session 2			Session 3	
		n	*M*	*SD*	n	*M*	*SD*	n	*M*	*SD*
Learners	VL	13	7.82	2.32	13	7.48	2.56	13	7.27	3.58
	ZOOM	9	8.59	3.19	9	8.86	5.34	9	5.26	3.24
Native	VL	13	11.50	3.01	13	17.06	0.53	13	6.11	3.61
	ZOOM	9	6.09	2.51	9	7.49	0.52	9	6.45	0.32

Figure 7.

Level 2000–8000 words for each practice session

Learners   Native speakers

Discussion

While addressing the first research question, the distinction between the two modes of practice is evident. Notable differences were found in the pre-and post-test results on sentence complexity, the total number of words, and, particularly, the vocabulary level of 2000-8000 words. In the ZOOM group, the sentence complexity score and total number of words decreased significantly in the post-test, while the VL group observed no statistically significant difference when comparing the pre- and post-test outcomes.

The decrease in the syntactic complexity score was affected by the total number of words produced in the post-test in the ZOOM group. The score indicated that after practicing in ZOOM, the sentences were simplified. Practice in ZOOM reduced the use of word level 2000-8000 in session 3, which may be due to difficulties in using higher-level words during the instant exchange. Although the difference was not statistically significant in the VL group, the average number of words increased in the post-test. Owing to the increase in the total number of words, the percentage of word-level 1000 also declined. However, the percentage of level 2000-8000 remained stable, implying that more difficult words were used in the VL post-test.

The ZOOM group exhibited an augmentation of fewer complex expressions using basic vocabulary. This characteristic indicated spontaneous spoken discourse and may be attributed to prioritizing instantaneous exchange and conversational flow over intricate vocabulary selection and expressions. The decrease in the total number of words may be attributed to a reduced word count during the practice exchange. In certain instances, learners encountered challenges in understanding native English speakers and thus responded with short, fixed expressions or brief answers.

In the practice session of the VL group, similarly to its native group, the number of level 1000 words increased after each session, whereas it was constant for level 2000–8000 words. This fact can be attributed to the interaction with native English speakers in the video, the knowledge acquired by repeatedly replaying the video, and looking for difficult or unfamiliar expressions used in the video by native speakers. Furthermore, if learners could not solve the problems

themselves, they could stop watching the video and ask the teacher in their native language, which occurred several times weekly in the VL group. However, for the ZOOM group, it was difficult for ZOOM partners to seek help and obtain responses that the learners could understand when faced with language problems.

Another reason the ZOOM group showed a decrease in the syntactic complexity score and the total number of words in the post-test is that the preparation may not successfully help in responding to the questions instantly. Although both groups of learners were allowed to prepare before each session, the exchange seemed to have stalled in the ZOOM group because the conversation did not proceed in the expected direction, and any prepared answers or explanations were not helpful. In the VL group, when they received questions, the learners had time to respond to questions or requests until the next video was sent. This act allowed them to prepare the necessary language with the appropriate content.

The pre-and post-test results have proven that the difference in practice between ZOOM and VL affects subsequent speech in sentence complexity, although practiced with both native English speakers. Notably, native English speakers in the ZOOM practice group employed more than twice as many words as the learners. For learners unaccustomed to conversing with native English speakers, difficulties in comprehension may have allowed them to adopt concise expressions or limited responses. Another important factor to consider is the time allowed for the VL groups. For VL groups, brainstorming time was allowed before the 5-minute recording. This preparation time may have affected the results for syntactic complexity.

Investigating the Impact of Video-Based CMC on EFL Speaking Skills

In the context of English as a Foreign Language studies, research on SCMC and ACMC using videos has not sufficiently elucidated its effect on speaking skills. Based on the finding that video use creates opportunities to practice the target language with native speakers across borders (Wang, 2014) and reduces anxiety (Yanguas, 2012), this study focuses specifically on the impact on speaking in English language learning, rather than overall language proficiency. This study determined the effects of asynchronous and synchronous interactions with native speakers on accuracy, fluency, and sentence complexity. The differences in CMC methods and their effects on English language learning can be considered and applied to future learning and teaching methods.

Limitations and Future Research

This study conducted a comparative examination of SCMC and ACMC and observed distinct impacts on subsequent speech outcomes. Specifically, engagement in SCMC practice influenced sentence complexity, with participants avoiding complex sentences during real-time conversations. Despite the same engagement in the ACMC, no negative changes were observed in the subsequent speaking tests. These findings underscore the differential effectiveness of each mode when incorporating CMC tools for language learning purposes.

Several considerations must be focused on when extrapolating these results to educational settings. First, this study has a small sample size of limited exchange sessions that comprise learners at the basic proficiency level. Additionally, the absence of a control group precludes exploring the effects of ACMC by comparing it with a group that did not use any CMC tools. Furthermore, the variability in individual preparation and practice times should be considered carefully to assess the accurate impact of each mode. Especially in the first session, both learners and native speakers were nervous about the activity, which affected the preparation time. With participants familiarizing themselves with the activity and their partners, the preparation time may have changed. Another limitation was the assessment of speaking skills.

Pre- and post-tests may be advantageous for the VL groups in recording video practices for this type of limited-time test.

Future research endeavors might involve intermediate-level learners because their linguistic awareness could enable a more detailed understanding of native speakers' linguistic nuances. Such investigations could shed light on the diverse impacts of different CMC tools on speaking skills.

Conclusion

The current study revealed that synchronous language exchange using a video conference tool negatively impacted syntactic complexity and the total number of words in the subsequent speaking test, while asynchronous language exchange using VL did not show a significant statistical difference. Further investigation revealed that complex words were constantly used in the practice sessions for the VL group. The use of VLs may be more effective for beginner-level learners because they can replay videos to understand native speakers' speech at their own pace. In future studies with more sessions, the VL groups may develop well-balanced speech with simple and complex words.

The use of VL for the E-Tandem activity received positive feedback regarding interactions with native speakers. The use of asynchronous online communication tools supports classroom learning. However, teachers should consider how the amalgamation of both synchronous and asynchronous tools may best suit each language goal.

Acknowledgments

References

Boersma, P., & Weenink, D. (2019). *Praat*(Version 6.1). Praat: doing phonetics by computer. https://www.fon.hum.uva.nl/praat/

Canals, L. (2020). The effects of virtual exchanges on oral skills and motivation. *Language Learning*, *24*(3), 103–119.

De Jong, N. H., & Bosker, H. R. (2013). Choosing a threshold for silent pauses to measure second language fluency. *TMH-QPSR*, *54*(1), 17–20.

Edwards, C. R., & Lane, P. N. (2021). Facilitating student interaction: The role of Flipgrid in blended language classrooms. *Computer Assisted Language Learning Electronic Journal*, *22*(2), 26–39.

Foster, P., Tonkyn, A., & Wigglesworth, G. (2000). Measuring spoken language: A unit for all reasons. *Applied linguistics*, *21*(3), 354–375.

Garcia, M., & Appel, C. (2016). *Synchronous tandem language learning in a MOOC context: A study on task design and learner performance* (pp. 144–149). https://doi.org/10.14705/rpnet.2016.eurocall2016.552

Guillén, G., & Blake, R. (2017). Can you repeat, please? L2 complexity, awareness, and fluency development in the hybrid "classroom". *Online language teaching research:*

Pedagogical, academic and institutional issues, *7*(1), 55–77.

Hatipoglu, C. (2021). Testing and assessment of speaking skills, test task types and sample test items chapter IV. *Language assessment and test preparation in English as a foreign language (EFL) education*, 119–140.

Housen, A., Kuiken, F., & Vedder, I. (2012). *Dimensions of L2 performance and proficiency: Complexity, accuracy and fluency in SLA* (Vol. 32). John Benjamins Publishing.

JACET Committee of Basic Words Revision. (2016). *The New JACET list of 8000 basic words: JACET 8000*. Kirihara Shoten.

Jong, N. H. D., & Mora, J. C. (2019). Does having good articulatory skills lead to more fluent speech in first and second languages?. *Studies in Second Language Acquisition*, *41*(1), 227–239. https://doi.org/10.1017/S0272263117000389

Kawaguchi, S. (2016). Synchronous CMC e-tandem learning in Japanese as a second language: linguistic environment and language development. *J Modern Educ Rev*, *6*, 439-448.

Kobayashi, S. (2021). Psychological changes following L2 e-tandem learning: A case study. *Electronic Journal of Foreign Language Teaching*, *18*(2). https://doi.org/10.56040/skpc1821

Lewis, T., & Qian, K. (2021). Designing and supporting virtual exchange: The case of Chinese–English e-Tandem. *Modern Languages Open*, *1*. https://oro.open.ac.uk/81583/

Long, M. H. (1996). The role of the linguistic environment in second language acquisition. *Handbook of second language acquisition*, *26*, 413–468.

McCarthy, P. M., & Jarvis, S. (2010). MTLD, vocd-D, and HD-D: A validation study of sophisticated approaches to lexical diversity assessment. *Behavior Research Methods*, *42*(2), 381–392. https://doi.org/10.3758/BRM.42.2.381

Mizumoto, A. & Takeuchi, O. (2011). Introduction to effect size and statistical power analysis: For proper use of statistical tests. *Proceedings of the 2010 Sectional Meeting of The Japan Association for Language Education and Technology, 2010*, 47–73. https://www.mizumot.com/method/mizumoto-takeuchi.pdf

Norris, J. M., & Ortega, L. (2009). Towards an organic approach to investigating CAF in instructed SLA: The case of complexity. *Applied Linguistics*, 555–578.

Edwards, C. R., & Lane, P. N. (2021). Facilitating student interaction: The role of Flipgrid in blended language classrooms. *Computer Assisted Language Learning Electronic Journal*, *22*(2), 26–39.

Pham, N. K. T., Huynh, T., Tran, V. M. Q., Pham, N. N. P., Ho, H. T., & Nguyen, L. H. K. (2024). EFL students' perceptions of E-learning tools' effects on students' engagement in English speaking skill online classes. *AsiaCALL Online Journal*, *15*(1). https://doi.org/10.54855/acoj.241513

Qhobosheane, M. E., & Phindane, P. (2022). *Speaking in a language versus speaking a language in communicative competence attainment*. Proceedings of the International Conference on Education and New Developments Volume I. https://doi.org/10.36315/2022v1end125

Rahimi, M., & Fathi, J. (2022). Employing e-tandem language learning method to enhance speaking skills and willingness to communicate: The case of EFL learners. *Computer Assisted Language Learning*, 1–37. https://doi.org/10.1080/09588221.2022.2064512

Swain, M. (1995). Three functions of output in second language learning. *Principle and practice in applied linguistics: Studies in honour of HG Widdowson*, 125–144.

Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its vevelopment. In S. Gass, & C. Madden (Eds.), *Input in Second Language Acquisition,* (pp.235-253). Newbury House.

Tavakoli, P. (2016). Fluency in monologic and dialogic task performance: Challenges in defining and measuring L2 fluency. *International Review of Applied Linguistics in Language Teaching*, *54*(2). https://doi.org/10.1515/iral-2016-9994

Tavakoli, P., Campbell, C., & McCormack, J. (2016). Development of speech fluency over a short period of time: Effects of pedagogic intervention. *TESOL Quarterly*, *50*(2), 447–471. https://doi.org/10.1002/tesq.244

Tavakoli, P., Nakatsuhara, F., & Hunter, A.-M. (2017). Scoring validity of the Aptis Speaking Test: Investigating fluency across tasks and levels of proficiency. *ARAGs Research Reports Online*. https://centaur.reading.ac.uk/73379/

Wang, Z. (2014). On-line time pressure manipulations. *Processing perspectives on task performance*, *27*, 62.

Ware, P., & Kessler, G. (2016). Telecollaboration in the secondary language classroom: Case study of adolescent interaction and pedagogical integration. *Computer Assisted Language Learning*, *29*(3), 427–450. https://doi.org/10.1080/09588221.2014.961481

Yang, P. L. (2022). Exploring synchronous learning during COVID-19 pandemic: Taiwan EFL college learners' motivation and learning experience. *AsiaCALL Online Journal*, *13*(5). https://doi.org/10.54855/acoj.221351

Yanguas, Í. (2012). Task-based oral computer-mediated communication and L2 vocabulary acquisition. *CALICO Journal*, *29*(3).

Yanguas, Í. (2010). Oral computer-mediated interaction between L2 learners: It's about time!. *Language Learning*, *14*(3), 72–93.

Zhou, A. (2023). Investigating the impact of online language exchanges on second language speaking and willingness to communicate of Chinese EFL learners: A mixed methods study. *Frontiers in Psychology*, *14*. https://www.frontiersin.org/articles/10.3389/fpsyg.2023.1177922

Ziegler, N. (2016). Synchronous computer-mediated communication and interaction. *Studies in Second Language Acquisition*, *38*(3), 553–586. http://dx.doi.org/10.1017/S027226311500025X

Biodata

Nami Takase is a lecturer at Shizuoka University. Her professional interests revolve around leveraging computer-mediated communication for foreign language learning, as well as implementing task-based language learning approaches.

AsiaCALL Online Journal (acoj)

About the Journal

The AsiaCALL Online Journal [ACOJ] (ISSN 1936-9859) is a fully peer-reviewed international publication of AsiaCALL, the Asia Association of Computer-Assisted Language Learning. It is an Open Access journal because it makes its contents available to all with no restriction. The authors are the owners of their published articles.

Focus and Scope

The purpose of this international peer-reviewed online Open Access journal is to advance international scholarship and pedagogic practice in the area of Computer-Assisted Language-Learning (CALL) or Technology-Enhanced Language-Learning (TELL). The journal is multidisciplinary, international, multi-paradigmatic, and multicultural in scope and welcomes original contributions from all theoretical perspectives.

Computer-Assisted Language Learning (CALL) or Technology-Enhanced Language-Learning (TELL) is defined as any scholarship and pedagogical practice from researchers and practitioners, which values and prioritizes modern technology use in language/culture learning and teaching across all learning settings. While the primary focus of the journal is the enhancement of language-learning (in all its forms, including culture) and teaching, the journal may accept contributions where the focus may not be language in the strict sense, provided the submitted material could, arguably, contribute to language learning and teaching in due course.

The AsiaCALL Online Journal is a multidisciplinary and interdisciplinary publication located within, across, and between the Humanities, the Social Sciences (including Education/Pedagogy), and Information/Computer Technology and other developing technologies. It accepts theoretical and practical contributions, including intellectual/conceptual research and data-driven research, book, software reviews, reflective notes, and commentaries.

Finally, in keeping with making research available rapidly to the community, the journal accepts contributions at any time of the year. It will seek to publish accepted articles within a period of eight weeks from the time of receipt.

All contributors and readers interested in broadly defined and dynamic perspectives on CALL/TELL and closely related areas are warmly welcomed.

Indexed

ACOJ has been indexed in Google Scholar, ORCID, Crossref, DOI, Library of Congress, PKP PN, LOCKSS, CLOCKSS, Semantic Scholar, Mendeley, EuroPub, J-Gate.

Check plagiarism

The ACOJ will conduct a plagiarism check on all submitted papers using Turnitin's program. ACOJ will immediately reject any paper that involves plagiarism.

Publication Frequency

The journal is volume-organized. All unrelated articles are published as soon as they are ready for publication. The journal volume is defined by the year of publication of articles.

From 2023, AsiaCALL Online Journal will publish 2 issues per year, one in June and the other in December. The ACOJ will publish manuscripts as soon as they are accepted.

Article Processing Charge

All the reviewing processes are free of charge. The acoj only charges author(s) when the paper is accepted for publication in an issue.

The acoj will charge a fee of $70 for each published article. It will be applied since October 2022.

There are no other charges, including polishing the language and fixing errors (if any) for the authors.

In case the author(s) are in need of a fee waiver, they may send an email to the managing editor to provide explanations for their situations. A fee waiver would then be considered.

Open Access Policy

This journal provides immediate open access to its content. AsiaCALL believes that it has an obligation to make new information, research findings, and novel ideas available to the community as rapidly as possible.

Brief Information

Country of Publication: 45 Nguyen Khac Nhu, Dist. 1. Ho Chi Minh City, Vietnam
Publisher: AsiaCALL Press, https://asiacall.info/press
Open Access: Yes
ISSN: 1936-9859
Frequency: 2 issues per year
Publication Dates: June and December
Language: English
Scope: Languages & Linguistics, Pedagogies & Language Teaching, Social Sciences, Education
Article Processing Charges: $70 (will be applied since October 2022)
Types of Journal: Academic/Scholarly Journals
Indexed:Google Scholar, ORCID, Crossref, DOI, Library of Congress, PKP PN, LOCKSS, CLOCKSS, Semantic Scholar, Mendeley, EuroPub, J-Gate
Policy: Double-blind peer review
Plagiarism check: Turnitin
Contact & Submission e-mail: editor@asiacall.info; acoj.editor@gmail.com