

Exploring English Vocabulary Learning of Vietnamese Secondary School Students with VoiceGPT Assistance

Nguyen Hong Nhung¹, Nguyen Duy², Tran Luu Phuc Thinh¹, Tran Thi Hoang Nguyen¹

¹ The Faculty of Foreign Languages, Van Lang University, Vietnam

² Nguyen Tat Thanh University, Ho Chi Minh City, Vietnam

* Corresponding author's email: nguyenhongnhung.research@gmail.com

 <https://orcid.org/0000-0002-5024-7840>

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Abstract

With the advent of AI chatbots, many teachers' teaching practices of English as a foreign language have undergone many changes. Many of them have become accustomed to employing ChatGPT to assist their work, bringing many benefits and potential challenges that, to date, have yet to be fully tested in any aspect. Particularly, two notable research gaps involve how Vietnamese secondary school students use VoiceGPT, the Vietnamese version of ChatGPT, to assist them in learning new English words and how they perceive this support. The current case study aimed to address these gaps by employing a quasi-experimental design at Lam Son Secondary School in Ho Chi Minh City with the participation of ten sixth-grade students in two English-intensive classes. In this investigation, the teacher used the Presentation-Practice-Production teaching method to teach vocabulary to her students, who were randomly assigned into two groups with the same number of members in each group, and the data for analysis was collected from their writing samples and semi-structured interviews. The findings indicate that sixth-grade students had different ways of using VoiceGPT to help them learn English words. The participants with VoiceGPT assistance outperformed those without this A.I. support in terms of lexical performance in the writing productions on five topics surveyed. In addition, they expressed favorable attitudes toward VoiceGPT's benefits, but some concerns were raised about login difficulties, vocabulary range, and long response time.

Keywords: *chatbot, English vocabulary learning, secondary school students, personal experiences, perceptions*

Introduction

ChatGPT (Generative Pre-trained Transformer) is one of the most advanced A.I. chatbots, which brings many positive effects on language learning. Kohnke et al. (2023) studied that replicating natural interactions could help language acquisition. For example, it could recognize the meaning of a word in context, correct grammatical errors, generate writings in many genres, and provide dictionary definitions, examples, and translations. Additionally, it could be used to compose dialogues or generate several types of texts about a single topic and then alter their

difficulty to make them more suitable for learners according to their proficiency levels. Besides, Su and Yang (2023) explored the potential of this chatbot to offer students a more tailored learning experience, in which they could receive specialized training such as customized suggestions and virtual tutors. They could also benefit from a more engaged and pleasurable environment. Moreover, Guo and Wang (2023) found that this interactive web-based tool could produce a significantly greater amount of feedback compared to teachers for learners' writing tasks and that it fairly divided its attention among the three feedback foci consisting of content, organization, and language in contrast to teacher feedback, which primarily concentrates on issues about language and content. The researchers also suggested that educators collaborated with this chatbot to provide feedback on students' writing, aiming to enhance the writing skills of English as a Foreign Language (EFL) learners.

Although Vietnamese people showed considerable interest in ChatGPT, its Vietnamese version was not widely used and well-adopted even by Vietnamese educators and learners. It needs to receive more attention from EFL learners at Vietnamese secondary schools. In maximizing the benefits of using VoiceGPT for teaching vocabulary to teenage students, VoiceGPT use by Vietnamese secondary school students to support their English vocabulary learning and their perceptions of this use create two notable research gaps that need more investigation. This is the rationale behind conducting this exploratory research, entitled "*Exploring English Vocabulary Learning of Vietnamese Secondary School Students with VoiceGPT Assistance*".

Literature review

VoiceGPT: A Vietnamese version of ChatGPT

In recent years, chatbots have grown in popularity because they are advanced by natural language processing and machine learning, enabling them to interpret and respond to user input in a more human-like manner, resulting in more natural interactions (Lin et al., 2023). Smutny and Schreiberova (2020) advocated that they could communicate with humans at a particular level via text or voice by using artificial intelligence (A.I.) and natural language processing.

ChatGPT, a kind of artificial intelligence chatbot, was launched by OpenAI and released in October 2022 in beta mode. It belongs to the natural language processing model, employing algorithms to produce novel texts. Additionally, it is programmed to create human-like text from a massive corpus of text data, and therefore, it can conduct several linguistic tasks such as answering questions, writing tales, writing code, and so forth. Furthermore, when Schmidt-Fajlik (2023) compared ChatGPT as a grammar checker for Japanese English language learners with Grammarly and ProWritingAid, they believed that this tool excelled at detecting errors, giving detailed explanations and advice, and having a user-friendly visual interface.

VoiceGPT is considered the Vietnamese version of ChatGPT, developed by startup Tesse, residing in Phu Nhuan District in Ho Chi Minh City in Vietnam with three programming engineers since January when ChatGPT sparked many conversations around the world, including their nation. Nguyen Pham Tuan Anh, the founder of Tesse, said that ChatGPT did not enable Vietnamese citizens to register accounts at that time. In this circumstance, many people were tricked into buying accounts on social networking websites. Wishing to have a

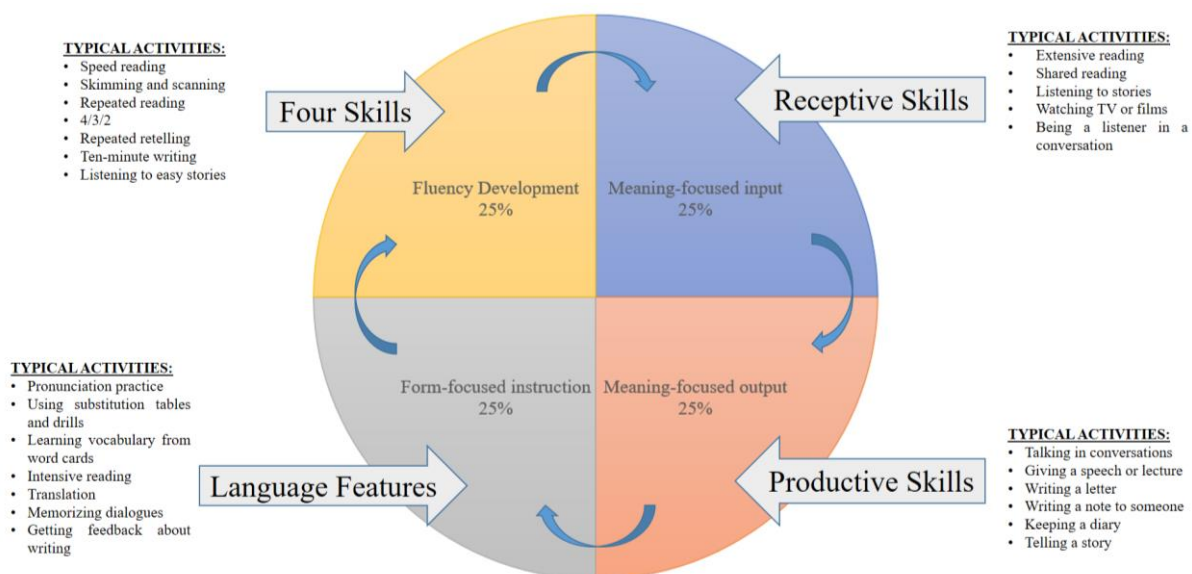
“ChatGPT” for Vietnamese people motivated the team members to contact OpenAI, the chatbot developer, to deal with a version for the Vietnamese (An, 2023).

The VoiceGPT interface with intuitive features is similar to ChatGPT and is convenient to operate. In addition, it is also integrated with a painting feature through suggestions from the text. Its innovative features also allow users to deliver messages in English and Vietnamese through written and spoken channels. To do this, the team bought Google’s A.I. tool to recognize the users’ voices and switch them into text and vice versa. Its voice recognition capacity has an accuracy of over 98% in both English and Vietnamese. Tesse wants to develop voice communication to help disadvantaged and digitally illiterate who cannot type texts (An, 2023).

Learning L2 Vocabulary

Nation (2007) determined four strands into which activities related to learning L2 vocabulary in a language course were categorized, including meaning-focused input, meaning-focused output, language-focused learning, and fluency development. According to Nation (2010), most first-language word acquisition occurs through meaning-focused input or incidental learning from reading and listening. The term “meaning-focused” refers to the notion that learners’ primary attention and interest should be on comprehending and acquiring knowledge and/or achieving pleasure from what they read and hear. Learning from the meaning-focused output acts as a precursor to transforming receptive into productive knowledge through speaking and writing. Language-focused learning is also known as focus on form, form-focused instruction, deliberate study, and deliberate teaching. It entails the purposeful learning of linguistic features such as pronunciation, spelling, lexicon, syntax, and discourse. The fluency development strand should involve all four skills, which learners are assisted in to maximize the use of what they already know.

Nation (2007) and Nation (2010) claimed that each strand in a well-balanced language course should be presented at approximately equal time. It should account for about 25% of the total training duration. This is the rationale behind why the writers use a circular shape with four equal pieces to demonstrate the four strands. Half-circle-shaped arrows illustrate mutual effects among these strands. Elgort (2007) studied that including deliberate vocabulary learning in a vocabulary learning program was essential. As a result, it could lead to a very rapid (and sustained) increase in lexicon size, which must then be enhanced and solidified through meaning-focused input and output and fluency development. It could produce both explicit knowledge and implicit knowledge, which are necessary for normal language use.

Figure 1. Learning L2 Vocabulary (Adapted from Nation, 2007)

Related Studies

The potential benefits and challenges of ChatGPT use in assisting vocabulary learning were found by antecedent studies such as Kohnke et al. (2023), Bin-Hady et al. (2023), and Farrokhnia et al. (2023), and the EFL learners' perceptions toward this chatbot was studied by Thái (2023) and Ho (2024).

Kohnke et al. (2023) conducted qualitative research to explore the use of ChatGPT in language teaching and learning. They did not propose a conceptual framework and their research methods. This article came up with initial ideas on how ChatGPT could support language teaching and learning. The findings revealed that it could provide linguistic inputs, stimulate learners' interests, provide real-time assistance, and allow students to practice their language skills anytime and anywhere. The authors also discussed ChatGPT's capabilities in supporting language learning tasks. To be more precise, it could identify the meaning of words in context, correct language mistakes, and create texts in various genres. Nonetheless, they reported some drawbacks related to ChatGPT in three aspects encompassing assessment, its responses' accuracy, and non-neutral cultural tones.

The article of Bin-Hady et al. (2023) explored the use of ChatGPT in English language learning. In their study, they collected and analyzed data from 20 researchers through a two-week discussion on the ResearchGate platform. The preliminary findings showed that ChatGPT could be used to develop learners' language skills and scaffold their learning process by providing feedback and recommendations and could act as partners in language practice. In addition, their research highlighted the potential benefits of using ChatGPT in language learning, such as improving conversation practice, reading and writing skills, grammar, vocabulary, and pronunciation.

Farrokhnia et al. (2023) conducted a SWOT analysis to evaluate the strengths, weaknesses, opportunities, and threats of ChatGPT in higher education. The strengths of ChatGPT included

its sophisticated natural language model, personalized and real-time responses, and increased access to information. The threats to education included a lack of understanding of the context, threatening academic integrity, creating discrimination, democratizing plagiarism, and declining higher-order cognitive skills.

Thai (2023) conducted a study using a convergent mixed-methods design to assess English-major students' attitudes toward ChatGPT and its potential to support future learning and teaching, which data was collected through surveys and interviews. According to the findings, most students were aware of ChatGPT, and some had used it for educational purposes. The participants showed positive attitudes towards its potential to support learning and praised its instant and precise responses and the potential to improve language abilities. However, they voiced doubts regarding the dependability and quality of the data supplied by ChatGPT. They also supported the idea that this tool could have a detrimental effect on users' critical thinking. The author encouraged more research to explore its effectiveness and ethical implications when integrating ChatGPT and other A.I. tools into English language teaching in the future.

Ho (2024) conducted a mixed-method case study to learn more about I.T. students' attitudes and usage patterns when exposed to ChatGPT. To gather quantitative data, a structured questionnaire was distributed to 120 I.T. students at the Korea University of Information and Technology. Moreover, ten students participated in a group interview to gain deeper insights that complemented the questionnaire data, improving the comprehension of their perspectives. The results emphasized these students' need for instructor guidance and a traditional classroom despite acknowledging ChatGPT's effectiveness for English for Specific Purposes vocabulary learning, translation, grammar checking, and paraphrasing. Students mostly used this chatbot to get immediate help for their English language learning problems. The study also highlighted the need to assist students in using it responsibly and highlighted the necessity for more research into plagiarism-detecting software to reduce the possibility of technological misuse.

Two research gaps, including population and methodological gaps, were noted after examining pertinent literature. For the population gap, although many studies determined ChatGPT use in higher education, a few explored how secondary school students used VoiceGPT to support their English vocabulary learning and how they felt about this assistance. For the methodological gap, most previous researchers used surveys and interviews for their research, but a few employed tests to explore their lexical performance on writing productions after receiving the intervention. As a result, this case study was an attempt to address the two research gaps aiming to determine the VoiceGPT use of sixth-grade students and their attitudes toward this support.

Research Questions

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

1. How do sixth-grade students use VoiceGPT to learn new words in English?
2. How do they perceive using VoiceGPT to support their English vocabulary learning?

Methods

Pedagogical Setting & Participants

This study was conducted in the second semester (between February and April 2023) in two English-intensive classes at Lam Son Secondary School, a Vietnamese state school in District Six in Ho Chi Minh City. In terms of the educational setting, this school was focusing on investing and developing English-related activities to create a favorable environment for students to practice listening, reading, speaking, and writing skills. The school authorities also encouraged the appropriate use of technology for students' learning purposes. The number of students in each class was usually around 45, and the textbook surveyed was English 6 i-Learn Smart World (Vo et al., 2021).

After having careful evaluations of students' academic performance in the first semester, the researchers randomly selected ten sixth-grade students with the same English proficiency from the two classes to participate in this research. The main author of the current study was the main teacher of these classes, so the variables such as VoiceGPT literacy, time, participants' language proficiency, learning styles, and so forth were tightly controlled.

Design of the Study

This case study employed a quasi-experimental design, gathering both quantitative and qualitative data for analysis. This study took place during extended school hours. In addition to the commentary and scoring assessments of participants' academic performance in the first semester, the teacher asked those in both groups to write a 50-60-word paragraph on an unfamiliar topic individually before joining the survey, and then their works were sent to two examiners to assess so that the researchers could ensure the homogeneity of the sample.

The research instruments in the current study from which the researchers collected data for analysis involved semi-structured interviews, small tests, and a scoring rubric.

- The semi-structured interviews: They investigated how sixth-grade students use VoiceGPT to search for new words, study those words in context, and provide them with practice exercises and their perceptions of this use.
- The small tests: A small test whose designers were the researchers included two sections. The first part was a matching exercise in which the participants had to match the words with their definitions. To design this task, the researchers collected all new words that the participants found out; therefore, this part aimed to assess the memorization of new words that they learned from VoiceGPT. Another part was writing a 50-60-word paragraph in which the use of vocabulary in sentences with specific contexts would be assessed.

In this survey, the interviews were conducted after the lessons to collect feedback from sixth-grade students on how they used VoiceGPT to learn English vocabulary and how they felt about this use. Then, their small tests were collected and delivered to two examiners to assess their overall lexical performance in their writing productions.

The student-VoiceGPT interactions in the current study have three main principles. Firstly, VoiceGPT is integrated as a supplementary tool for teaching English new words. In other words, it does not replace the teacher's role in the surveyed lessons. Secondly, the students have to

interact regularly with this chatbot to maintain continuous language learning engagement and reinforce English vocabulary acquisition after the lessons. Lastly, the teacher gains their awareness of the ethical and effective use of A.I. chatbots, including VoiceGPT, in advance. This means they need to use it wisely in English language learning and other subjects such as Vietnamese literature, science, history, etc.

Data Collection and Analysis

There were two groups of random participants in this survey, including Group 1 and Group 2, with five members for each group. Both groups did similar tests during the research, and their mutual communication was strictly controlled. Regarding the differences, although the teacher did not introduce VoiceGPT to students in Group 1 and provide them with opportunities to practice using this chatbot, these instructions took place in the other group.

To be more precise, the teacher employed the Presentation-Practice-Production teaching method in this current investigation. She asked Group 2 to use VoiceGPT to find and report vocabulary that was relevant to five assigned topics by using VoiceGPT in advance, and then she taught them these new words while those in Group 1 had to learn topic-related words in their textbook at the presentation stage. In the following phase, the teacher instructed them how to use this chatbot to generate exercises for them to practice and memorize those words and encouraged them to explore other ways to employ it for vocabulary learning. Besides, those in Group 1 only learned topic-related words in the textbook. At that moment, she also encouraged them to introduce English words that they remembered beyond their current lesson. In this group, the teacher supplied them with exercises so that they could practice and recall the new words they had learned. In the production step, the students in both groups were asked to write a passage, in which they wrote their paragraphs individually in thirty minutes and under the supervision of their teacher. They were not allowed to use VoiceGPT while they were writing the passage.

The vocabulary learning of participants in Group 2 was assessed through two-part tests. Their memorization of new words' meanings was tested by the task that asked them to match the words with their definitions. This task was designed based on their reports on noted new words while searching VoiceGPT. After the vocabulary acquisition process, their lexical performance was evaluated by writing 50-60-word paragraphs in English. Five topics were delivered to the students in both groups, and they were allowed to choose a topic according to their preferences. The topics were:

- (1) writing a short paragraph about Seoul,
- (2) writing a short movie review,
- (3) writing a paragraph about the World Wide Fund for Nature (WWF),
- (4) writing a short paragraph about ways to save the environment, and
- (5) Write a short paragraph about a party.

In terms of data collection, each member of Groups 1 and Group 2 composed a paragraph on their own in thirty minutes under the supervision of their teacher. They were not permitted to utilize VoiceGPT while they were writing the passage. Once they had finished, their writing

productions were delivered to two examiners to assess, score, and deliver feedback. The examiners were working in other secondary schools using the same textbook, were experienced in teaching students in grade six and assessing young learners' writing skills, and needed to learn each other. Moreover, semi-structured interviews were carried out at the end of the survey with five students in Group 2 to gather qualitative data on how they use VoiceGPT to learn new English words and how they perceive this A.I. support in their vocabulary learning.

To ensure the test's validity, the researchers picked up the topics from English 6 i-Learn Smart World, the official textbook that the participants had to learn at school. In addition, the expertise of the examiners was guaranteed. Furthermore, the scoring rubrics were adapted from the Aptis rating scales for Speaking and Writing (O'Sullivan et al., 2020), in which their writings were specifically assessed in six aspects, including task fulfillment, register, vocabulary range, vocabulary accuracy, cohesion, and coherence.

The qualitative data selected from semi-structured interviews were codified from S1 to S5 for each group and transcribed for analysis. To be more particular, the codes of S1-CG to S5-CG were for the participants in Group 1 (without VoiceGPT's assistance), and those from S1-EG to S5-EG indicated those in Group 2 (with VoiceGPT's assistance).

Table 1. Codes of the participants in Group 1 and Group 2

Participants	Group 1 (C.G.)	Group 2 (E.G.)
Participant 1	S1-CG	S1-EG
Participant 2	S2-CG	S2-EG
Participant 3	S3-CG	S3-EG
Participant 4	S4-CG	S4-EG
Participant 5	S5-CG	S5-EG

Findings

Research question 1: How do sixth-grade students use VoiceGPT to learn new words in English?

Most sixth-grade students in Group 2 employ VoiceGPT to learn new words, like the ways that they learn from their teacher, and a few utilize this tool in another way. To be more particular, S1-EG and S5-EG use it to provide many texts for their topic, thereby enabling them to be exposed to new words on that topic. As a result, it can assist them in studying the words' context and part of speech so that they can use them more appropriately. Besides, S2-EG employs it to translate his ideas and expressions from Vietnamese to English so that he can write paragraphs based on his writing style and learn new words tailored to his preferences. In addition, S3-EG utilizes it to provide her with vocabulary for unfamiliar topics and their contexts, resulting in her ability to deal with such topics more easily. Moreover, S4-EG creatively uses it to identify the words he uses inaccurately and recommend synonyms or replace them; therefore, he can learn English words beyond those in his textbook.

Concerning exercise generation, the majority of Group 2 members used the prompts suggested by their teacher to ask VoiceGPT to generate exercises so that they could practice the words

provided by VoiceGPT in the presentation stage. They need to use the teacher-recommended prompts because they need more vocabulary to create effective prompts for this A.I. tool. One student in that group additionally uses Google Translate to help him translate his requests from Vietnamese to English and then gives them to VoiceGPT. As a result, he can use VoiceGPT to create many types of exercises, such as matching definitions, filling in the blanks, and circling the correct answers by himself. Furthermore, he uses VoiceGPT to produce a word list that summarizes the new words he notes so that he can easily learn and remember them. His list has six columns encompassing (1) words, (2) their parts of speech, (3) their U.K. phonetic transcriptions, (4) their Vietnamese meanings, (5) their English meanings, and (6) their example sentences (in English).

Table 2. The student's word list generated by VoiceGPT

Words	Parts of Speech	U.K. Phonetic Transcriptions	Meanings (Vietnamese)	Meanings (English)	Example Sentences (English)
collect	verb	/kə'lekt/	thu thập	to gather or bring things together	I like to collect stamps.
collection	noun	/kə'lek.ʃən/	bộ sưu tập	a group of things gathered or accumulated	My book collection is very diverse.
collector	noun	/kə'lek.tər/	người sưu tầm	a person who collects things	He is a collector of ancient coins.
collective	adjective	/kə'lek.tɪv/	tập thể	done by people acting as a group or team	We need to have a collective working spirit.
differ	verb	/'dɪf.ər/	khác biệt	to be unlike or distinct from something	This one differs from the other in size.
different	adjective	/'dɪf.ər.ənt/	khác nhau	not the same as something or someone else	We have different opinions on this issue.
differently	adverb	/'dɪf.ər.ənt.li/	khác nhau	in a way that is not the same as something else	They solve this problem differently.

According to their test results, most of them do well in the matching tasks despite a few incorrect answers. In addition, five participants in Group 2 used approximately three-quarters of the new words that they learned from VoiceGPT to write their paragraphs. The assessment for writing productions' lexical performance of ten participants in two groups is reported in Table 3.

Table 3. Students' lexical performance with VoiceGPT assistance (unit: marks)

No.	Assessment criteria	Topic 1		Topic 2		Topic 3		Topic 4		Topic 5	
		S1-CG	S1-EG	S2-CG	S2-EG	S3-CG	S3-EG	S4-CG	S4-EG	S5-CG	S5-EG
1.	Task Fulfillment	8,5	8,5	7,0	6,5	8,0	7,0	7,0	6,5	8,0	8,0
2.	Register	8,0	8,5	7,5	9,0	7,5	9,0	7,5	9,0	8,0	8,5
3.	Vocabulary Range	7,5	7,5	7,0	8,5	7,0	9,5	7,5	9,0	7,0	8,5
4.	Vocabulary Accuracy	8,5	8,0	8,0	8,5	8,0	9,0	6,5	9,0	8,5	9,0
5.	Cohesion	7,5	8,0	7,0	8,5	7,0	8,0	7,0	8,0	8,0	8,5
6.	Coherence	7,5	8,0	7,0	8,0	8,0	8,0	7,0	8,0	8,0	8,5

Table 3 illustrates how many marks for each assessment criterion the participants in both groups receive from two examiners based on the scoring rubric. Overall, the performance of those in Group 2 on five topics is better than that of Group 1.

As can be seen from this table, students' vocabulary range and accuracy constitute the biggest difference between the scores of two group members, achieving 2,5 points. To be more precise, most students' scores in Group 1 are approximately 7,0 points for vocabulary range and 8,0 points for vocabulary accuracy in topics two to five, whereas those in Group 2 are marked around 9,0 points for both criteria. In other words, the students can use English words at a broader and more precise level in their passages when they learn new words with VoiceGPT. Furthermore, the marks for register, cohesion, and coherence are not considerably different between the two groups (from 1,0 to 1,5 points). The numbers for cohesion range from 7,0 to 8,5 points, and a similar pattern is evident for coherence.

By contrast, in the task fulfillment criterion, the scores of the sixth graders who participated in the survey in the experimental group are not as good as those of the control participants, which are about 0,5 points lower. Additionally, their marks are the same in topics one and five for this criterion. Another remarkable feature occurring in the first topic is that S1-EG gets a lower score for vocabulary accuracy when compared to S1-CG (8,0 and 8,5 points, respectively), but their scores are equal in the third criterion (7,5 points).

Research question 2: How do the secondary school students perceive using VoiceGPT to support their English vocabulary learning?

The majority of sixth-grade students in Group 2 think that VoiceGPT is an extremely useful application, and they point out many positive impacts of using this chatbot on learning vocabulary, such as exposure to a wider range of vocabulary, translation, and error checking. Additionally, they have both positive and negative feelings when using this tool. In terms of good emotions, S1-EG is excited about this tool because it can help her provide words in context. S2-EG is also interested in it since it helps him to translate his expressions from his mother tongue to English, which enables him to self-regulate his vocabulary learning. Besides, S3-EG perceives that it is supportive when she encounters strange writing topics by providing her with vocabulary related to them. Moreover, S4-EG thinks that VoiceGPT can support EFL

learners' study more than vocabulary learning, so he is extremely curious to seek out other ways to employ it. However, S5-EG expresses her anxiety about using this tool. For her, registering a VoiceGPT account with her Gmail address is challenging and time-consuming. In addition, she realizes that most of the vocabulary provided by this chatbot only occurs in the textbook and beyond her English proficiency.

Discussion

The main research findings provide valuable insights into how secondary school students use VoiceGPT to support their English vocabulary learning and how they feel about this assistance when they learn new English words. Firstly, the diverse ways in which they leverage VoiceGPT for L2 vocabulary learning, such as generating texts, translating, accessing vocabulary for unfamiliar topics, and error identification, illustrate the adaptability of this technology. This suggests that VoiceGPT can cater to a wide range of learning preferences and needs, promoting engagement and flexibility in the learning process. Secondly, the substantial improvement observed in the six aspects of lexical performance, including task fulfillment, register, vocabulary range, vocabulary accuracy, cohesion, and coherence, when they use this tool to support them underscores its potential to enhance overall language proficiency. This finding carries profound importance as it indicates that it can contribute comprehensively to students' linguistic competence, equipping them with a broader vocabulary and better language use skills. Finally, it is crucial to recognize that one of the findings reveals their mixed perceptions of this intervention. Although they acknowledge the benefits it offers, such as a great source of vocabulary, real-time assistance, and an enjoyable learning experience, they encounter many difficulties, including creating an account with their Gmail address, resulting in the need for a well-prepared approach to this technology integration in EFL classrooms at Vietnamese secondary schools.

When compared to the findings in previous investigations, those in the current study collaborate with Kohnke, Moorhouse, and Zou (2023) and Farrokhnia et al. (2023) by revealing that this type of A.I. chatbot can help to provide larger linguistic input, identify the meaning of words in context, and increase access to information. Additionally, the research results that reveal this interactive online chatbot can help secondary school students scaffold their learning process, including English vocabulary learning, are similar to those of Bin-Hady et al. (2023) and Ho (2024). Besides, their favorable perceptions and concerns about the potential difficulties in promoting learning new English words support the findings of Thái (2023). Furthermore, the results of this study are compatible with those of Ho (2024), which highlighted the importance of learners' instructor supervision.

Conclusion

In conclusion, this study set out to achieve two primary research objectives: first, to investigate the VoiceGPT usage patterns among sixth-grade students for learning English words, and second, to understand their attitudes toward this intervention. The findings of this research have not only fulfilled these objectives but have also shed light on more general implications of incorporating it into secondary school curricula.

The two research objectives of this study are well achieved by clearly answering the two research questions. The first objective is addressed through the exploration of diverse ways in which sixth-grade students maximize the potential of using VoiceGPT to assist them in learning English words. This study reveals that students utilized this tool for various purposes, including generating texts, translating, accessing unfamiliar topic-related vocabulary, and identifying errors within texts. These results highlight its flexibility as a support tool that can be customized to meet teenage learners' various requirements and preferences, encouraging a more flexible and enjoyable vocabulary learning experience. The second aim, which focused on their perceptions of this help, is accomplished by concluding both positive and negative views of the interviewed students regarding the use of this chatbot to support their vocabulary learning in English. These attitudes are shaped by the benefits and difficulties they encounter in their interactions with this tool. This finding underscores the importance of considering the complex interplay between technology and student experiences in high school educational settings.

In terms of implications for learning English vocabulary at Lam Son secondary school, these findings advocate for the integration of VoiceGPT with English lessons at school as an assistant tool to foster student engagement, improve vocabulary acquisition, and enhance overall writing proficiency. The study also emphasizes these teenage students' diverse experiences and perceptions and addresses the challenges that they may face when interacting with this chatbot.

This investigation has two limitations related to the participants' age, the study's scope, and the small number of participants. First, sixth-grade students do not have a wide range of vocabulary to give VoiceGPT detailed inquiries, so they cannot resolve the difficulties they face when using this tool to learn new words effectively. Secondly, this research explores how middle school students employ this tool to support vocabulary learning, including using it to create exercises for practice. Other general education aspects, and L2 learning in particular, have yet to be investigated. Finally, there needs to be more than the number of ten participants to lead to the generalization of the research.

To further advance this research area, future studies can explore strategies to maximize the benefits of secondary school students' VoiceGPT use to learn English vocabulary while mitigating its limitations. Furthermore, investigating the long-term effects of VoiceGPT on English language learning and tailoring its use to different student profiles and learning contexts will provide valuable insights for educators and researchers alike.

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Biodata

Nguyen Hong Nhung obtained a B.A. degree in TESOL at Saigon University. She is currently an M.A. student in English Language Studies at Van Lang University. Now, she is teaching English at Lam Son Secondary School in Vietnam. Her research interests mainly cover Cognitive Linguistics, Contrastive Linguistics, Teaching English Language Skills and Vocabulary, and Technology in English Language Teaching.

Nguyen Duy is an accomplished graduate of the Translation and Interpretation field in English Language at Nguyen Tat Thanh University. Recently, he is an English teacher specializing in Listening and Speaking and an English-Vietnamese translator. His research interests are focused on Translation and Interpretation, Language Teaching Methodology, Applied Linguistics, and Language Assessment.

Tran Luu Phuc Thinh had a B.A. degree in English teaching methodology at Saigon University. She is currently working at Dang Thuc Vinh Secondary School and VUS English Center in Vietnam. She is also an M.A. student in the English Language at Van Lang University. Her research interests consist of Theoretical Linguistics, Teaching Methodology, and Second Language Acquisition.

Tran Thi Hoang Nguyen possesses a bachelor's degree in English with a major in teaching from Van Lang University, where she is also pursuing an M.A. She is presently a freelance educator who works mainly via the Internet. Her main research interests are in Technology in Learning and Intercultural Communication.

Appendix

The Scoring Rubrics for Participants' Writing Productions: adapted from the Aptis rating scales for Speaking and Writing (O'Sullivan et al., 2020)

	Scoring criteria	Insufficient (1-4, 9 pts)	Average (5-7, 4 pts)	Good (7, 5-8, 9 pts)	Excellent (9, 0-10, 0 pts)
1.	Task Fulfilment	The student needs to meet the task requirements, and the writing needs to be revised or revised.	The student partially meets the task with some clarity and coherence, but there may be notable lapses in fulfilling the task.	The student mostly meets the task with good clarity and coherence but minor lapses.	The student fully meets all the requirements of the task with exceptional clarity, coherence, and sophistication.
2.	Register	The student rarely uses appropriate language for the audience and purpose, and language use may interfere with comprehension.	The student sometimes uses language that is somewhat appropriate for the audience and purpose, but there are occasional slips in the register.	The student usually uses appropriate language for the audience and purpose, with some inconsistency.	The student consistently uses appropriate and consistent language for the audience and purpose.
3.	Vocabulary Range	The student demonstrates a very limited range of vocabulary, mostly simple and repetitive.	The student demonstrates a limited range of vocabulary, with limited variety and simplicity.	The student demonstrates a good range of vocabulary.	The student demonstrates a wide range of vocabulary to convey ideas effectively.
4.	Vocabulary Accuracy	The student's language could be more accurate, and errors significantly hinder comprehension.	The student's language is mostly accurate, but errors may hinder comprehension.	The student makes some accurate language, but noticeable errors may affect comprehension.	The student consistently demonstrates accurate language with very few errors.
5.	Cohesion	The student uses inconsistent, and we could be more consistent, and stronger to a disjointed and hard-to-follow passage.	The student attempts to use linking devices to connect ideas, but they may only sometimes connect ideas logically.	The student uses linking devices to connect ideas, although some may need to be more varied or clear.	The student consistently uses appropriate linking devices to connect ideas effectively, creating smooth transitions

					between ideas.
6.	Coherence	The writing lacks coherence. It is difficult to follow the ideas, and there needs to be more logical progression.	The writing needs coherence, and it is easier to follow the ideas. Numerous errors in language and structure.	The student's writing maintains coherence, but some parts may need stronger connections.	The student's writing maintains a clear and logical progression of ideas throughout the passage.