HUFI's English-majored Students' Perceptions of the Effectiveness of Online Educational Games on Vocabulary Learning

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ABSTRACT

In the era of technology, the wind of invention had a tremendous influence on education, notably with the effective impact of online educational games on English vocabulary acquisition. This research paper discusses the students' perspectives on the effectiveness of those games on students' lexical development. Data was collected from a mix of quantitative and qualitative methods with 100 English-majored students at the Faculty of Foreign Languages of Ho Chi Minh City University of Food Industry (HUFI) for shedding light on how online educational games affect vocabulary acquisition from the sense of students. The survey results revealed that a prominent proportion of English language majors at HUFI held a positive attitude towards the use of online games as a tool for vocabulary learning and believed it to be beneficial in enhancing their vocabulary acquisition. The focus group interviews provided additional insights into the students' experiences and perceptions of the potential effectiveness of online games in vocabulary learning. Overall, the findings suggest that the integration of online educational games in English vocabulary teaching would be an effective learning method for HUFI English major undergraduates' perception.

Keywords: Vocabulary learning, Online educational games, Digital games

1 Introduction

State-of-the-art and effective means of learning have largely supplanted traditional approaches, resulting in numerous universities' growing utilization of web-based activities. These changes have led to many studies investigating the possibility of digital games as an educational tool for language learning, and their findings have been largely positive.

Mubaslat (2012) stated that vocabulary learning is a demanding process for English learners since it necessitates constant revision and maintenance over a long period of time, which students find laborious when learning in a disinterested environment. Yet, digital game-based learning shows its potential for bettering students' competence as they offer a wide range of catching illustrations and engaging activities facilitating opportunities for students to take part in material learning without much teaching effort (Diana, 2010). Wood (2001) also examined the application of digital games as a learning means and came to the conclusion that game-like techniques might be more successful in capturing learners' attention than traditional media like textbooks.

Currently, online educational games are used by numerous English language teachers and curriculum designers in students' vocabulary learning to boost the learning process and promote engagement among their students. There have been a lot of articles written on this topic by different linguists, but there haven't been many studies done in the setting of Vietnam. This study will discuss the attitudes of students at HUFI toward the effectiveness of online game activities on their English vocabulary-learning methods.

2 Literature review

2.1 The challenges of vocabulary learning

According to Thornbury (2002), six reasons contributing to vocabulary difficulties are pronunciation; spelling; length and complexity; grammar; meaning; range, connotation, and idiomaticity. Following the study of Rohmatillah (2014), the author also stated that English learners had to deal with a variety of problems or difficulties, such as pronunciation, writing, spelling, and grammar. Pronunciation is considered to be the most difficult part of learning vocabulary (Susanto, 2017) due to the uncommon and unique nature of the spelling rules in the English language, which makes it hard for learners to know how to pronounce words correctly, leading to confusion and miscommunication, especially for those whose first language does not share similar sounds or intonation patterns with English (Zhang & Yin, 2009).

Deslauriersa *et al.* (2019) conducted a study on the effectiveness of different vocabulary learning strategies by comparing the effects of using standard methods and active learning strategies. Randomly, half of the class was placed in an active learning environment, whereas the other half attended lectures on standardized methodologies. The study indicated that even though students believed they learned more from lectures, they performed better on exams after participating in active learning sessions. In addition, the study suggested that a non-progressive mindset and a lack of self-learning can also be barriers to learners learning new words.

2.2 Students' attitudes toward online educational games in the classroom

When it comes to students' attitudes toward online educational games, Bourgonjon *et al.* (2010) conducted research with the contribution of 852 secondary school students. The results revealed that boys prefer to play digital games in the classroom, while girls showed the opposite attitude. The majority of secondary students believed that online games benefit the language-learning process; however, the perspective among students quite varies. In the study of Mifsud *et al.* (2013), they found that a positive attitude was seen by students of digital games in the classroom setting as they could learn a variety of new words through such games. Another relevant study showed that students found it beneficial when utilizing online game-based activities in their classes as those games offer amusing value, stimulating them to learn more (Erkkilä, 2017). According to Wiklund and Gilbert (2005), the results show all the subjects are involved in digital games frequently, and the students also stated that they easily acquire information if using games in the classroom without teaching efforts. Therefore, they believed applying online game-based activities in the language-learning process will increase their knowledge in school subjects.

2.3 The effects of online educational games on vocabulary learning

Ashraf *et al.* (2014) stated that during computer game activities, the students may gain new lexis as they aspire to become a winner, creating an amusing environment through competition and collaboration with each other. In addition, online games require the subjects to profoundly understand the given vocabulary definitions in certain contexts to survive in the game, resulting in developing more interest in playing games and acquiring more words to win. Learners may feel a sense of accomplishment when they complete a game level or task, which can boost their confidence and encourage them to continue learning (Blue, 2022).

Nataliia (2017) believed that online learning games can enhance students' intrinsic motivation and get them involved in educational activities. The usage of online games for learning English as a second language demonstrates the connection between motivation and a high energy level of enjoyable competition. Moreover, Wu *et al.* (2011) also stated that the impacts of online engagement on ability, motivation, and confidence, enjoyment is a crucial aspect in advancing these learning variables. The greatest advantage of

such digital games does not only encourage students to take part in exercises but rather increase their confidence and promote their abilities.

Kılıçkaya and Krajka (2010) compared the efficiency of digital game-based teaching with traditional approaches typically deploy in upper-intermediate English classes. Both groups would practice similar vocabulary in ten reading passages, with the experimental group using Word Camp while the control group's students used vocabulary notebooks and cards. An additional post-test three months later revealed that the online learners had enhanced word retention and the experimental group had outperformed the control group. Employing digital games enhanced students' likelihood of acquiring new lexis compared to studying the same set of words in a conventional manner (Yip & Kwan, 2006).

In the study of Aghlara and Tamjid (2011), the participants were 40 six to seven-year-old girls divided into two groups: experimental and control. In the first group, they utilized the SHAIEx digital games, while another was taught through traditional approaches. The outcome showed that employing digital games to teach new words to kids while fostering a fun and entertaining environment has a favorable impact. In addition, according to Shahriarpour and Kafi's (2014) study, playing digital games increases students' willingness to learn, which shifts the focus from rote memorization to meaningful learning. One of the things that engage and motivate learners is the use of digital games.

A study by Barani *et al.* (2010) examined the impact of picture-in-picture audio-visual aids on the lexical acquisition of 30 young Iranian English as a Foreign Language (EFL) learners who were randomly chosen. The experimental group employed audiovisual tools such as viewing and listening, watching, etc after the first and subsequent sessions. With a substantial difference between the pre-test and post-test, the study discovered that picture audiovisual has a considerable impact on vocabulary learning among young Iranian EFL learners. Mathew and Alidmat (2013) also did a study on the use of audio-visual aids in EFL classes. The results show that integrating audio-visual aids in the learning settings encouraged critical thinking and enhanced the learning environment.

2.4   Research gap

The utilization of digital game-based activities to enrich English learners' lexis and aid them to employ their learned vocabulary in different circumstances has been shown to have several merits, positive influences, and favorable attitudes in prior research. However, only a little amount of research on this topic is still being done in Vietnam, as a result, the researchers attempted to conduct this topic in Vietnam, specifically at HUFI in HCMC. This research discusses HUFI English-majored students' attitudes toward the effects of online game activities on the vocabulary-learning process.

2.5   Research questions

1. What are HUFI's English-majored students' attitudes towards using online vocabulary games for English vocabulary learning?
2. How do HUFI's English-majored students feel about the efficiency of online vocabulary games on English vocabulary learning?

3   Methodology

3.1   Pedagogical Setting Participants

This research paper was conducted at Ho Chi Minh City University of Food Industry, Vietnam. The study was carried out in the second semester of the academic year 2022-2023 with a total of 100 second year to fourth-year English-majored students at the Faculty of Foreign Languages of HUFI. Their age ranges from 19 and 21 years old, including 76 sophomores, 15 juniors, and 9 seniors. The respondents in the research were asked to fill out the questionnaire surveys, and 5 second-year students from the group were randomly

invited to answer interview questions. The respondents' names are not required to provide for protecting their privacy.

3.2 Design of the Study

The researchers use a mix of quantitative and qualitative methods to achieve the purpose of the studies. Regarding Spratt *et al.* (2004), the ideal strategy to take advantage of both of these analysis methodologies' strengths and weaknesses so that they can complement one another is to combine them. The researchers asked the respondents to give their personal information such as name and age before carrying out the questionnaire surveys and interviews.

3.3 Data collection and analysis

The researchers used online questionnaires from Google Forms to collect information. The survey was designed with multiple-choice questions on the five-point Likert scale from "strongly disagree" to "strongly agree" (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree) for quantitative data. While item 3 of Table 1, and items 2,3, and 4 of Table 2 were adapted from Do and Vo's study (2020), others were based on prior research findings to investigate similar issues. The questionnaire was distributed to 100 second-year to fourth-year English-majored students at the Faculty of Foreign Languages of Ho Chi Minh City University of Food Industry.

There are two main sections designed in the questionnaire to answer the research questions:

- Students' attitudes toward online educational games:
  + You used to play online English vocabulary-learning games.
  + Studying English vocabulary by playing online games is more engaging than the traditional way.
  + In the English sessions, you expect to play English online games.
  + Online educational games create an enjoyable and amusing environment.

- Students' perception of the effects of online educational games on vocabulary learning:
  + You learn vocabulary better through colorful pictures and amazing sound effects in online games.
  + You have increased your English vocabulary after playing games.
  + Games contribute to making the class more active and eager to study.
  + Online games help you remember new words longer.

With the qualitative approach, 5 second-year English-majored students were randomly invited to take part in the interview. The interview questions are chosen to determine the challenges of vocabulary learning, the method of tackling vocabulary-learning problems, and how students feel about online educational games. There are 3 questions designed for the interview:

- List 3 difficulties when you learn vocabulary in the traditional way.
- How do you overcome the difficulties of learning vocabulary?
- Which one is better for vocabulary learning, the traditional memorization method or online game activities? Why?

4 Findings and Discussion

4.1 Quantitative analysis

Table 1 presents the findings of a survey regarding vocabulary learning through cyber games in English class as a useful way from the sense of students. The results indicate that all the students have played online vocabulary games previously. A significant proportion of respondents (63.9%) agreed that studying English vocabulary via online games is more attractive than traditional approaches. The survey also found that a

majority of participants expected to use them in English sessions (77.4%). Finally, a large majority of respondents acknowledge that online educational games can create an enjoyable and amusing learning environment (93.1%).

Table 1: *How do students feel about online vocabulary learning games in the classroom?*

Item	1	2	3	4	5
1. You used to play online English vocabulary-learning games.	0%	0%	0%	23.8%	76.2%
2. Studying English vocabulary by playing online vocabulary games is more engaging than the traditional way.	0%	3.9%	32.4%	42.2%	21.8%
3. In the English sessions you expect to play online vocabulary games.	0%	4,9%	17.6%	49%	28.4%
4. Online vocabulary games create an enjoyable and amusing environment.	0%	1%	5.9%	64.7%	28.4%

Regarding Table 2, the majority of subjects point out that game-based activities have positive effects on their vocabulary acquisition. Nearly all of the students can advance their vocabulary when using online educational games serving eye-catching graphics and dynamic sound effects. Accordingly, ranging from approximately 80% to 90% of participants believe digital games may motivate them to absorb extra words and memorize these new words over a lengthy time. Online games, according to nearly two-thirds of the respondents, are more likely to design an interesting and pleasant environment during vocabulary lessons in the classroom.

Table 2: *How do students feel about the effects of online vocabulary games on vocabulary acquisition?*

Item	1	2	3	4	5
You learn vocabulary better through colorful pictures and amazing sound effects in online vocabulary games.	0%	1%	7,8%	48%	43,1%
You have increased your English vocabulary after playing online vocabulary games.	1%	1%	18,6%	55,9%	23,5%
Online vocabulary games contribute to making the class more active and eager to study.	0%	0%	9.7%	47.1%	43.1%
Online vocabulary games help you remember new words longer.	0%	5.8%	25.2%	42.7%	26.2%

4.2 Qualitative analysis

Table 3:*The difficulties of learning vocabulary*

Students	Interview question number 1:
	List 3 difficulties when you learn vocabulary in the traditional way.
Student No.1	"Well, I don't know where to start learning vocabulary, or how to learn, and I usually forget the new words because I have to learn many new words."
Student No.2	"Personally, I struggle to memorize vocabulary, understand the real meanings of the word, and how to use it in the real life."
Student No.3	"I find vocabulary extremely difficult to remember, so I forget its meanings all the time. I also don't know how to apply it in practical situations and usually mispronounce these words."
Student No.4	"When I learn vocabulary, I usually have to learn a lot of new words at the same time, so I can't remember all these words. Furthermore, I don't have the environment to use them, so I can't use them when needed."
Student No.5	"The most difficult thing is that I only remember vocabulary in a short time. Additionally, I have to spend lots of time learning new words."

Table 3 shows the students' vocabulary acquisition obstacles. The main challenge, according to the answers given above, is that students routinely forget their acquired vocabulary within a short period of time as lessons necessitate them grasping a wide range of new words without thoroughly understanding those words, and how to apply them in various contexts. Another problem is students' inability to utilize vocabulary in dissimilar circumstances. They solely know the precise meanings of the vocabulary's initial context, as a result, this learning method simply calls for memorization of the terms rather than truly gaining insight into them.

Table 4: *The method of improving vocabulary-learning problems*

Students	Interview question number 2:
	How do you overcome the difficulties of learning vocabulary?
Student No.1	"To improve my memory, I usually learn vocabulary in certain themes and their examples. On top of that, I usually revise these words in online games to remember them longer."
Student No.2	"I usually practice vocabulary through many games such as Kahoot, quizizz, etc. And when I learn new words, I will give them examples to understand them fully."
Student No.3	"I use pictures or videos to learn new words because I easily learn them when it has animation. And I will make a sentence with these words."
Student No.4	"Well, I use the website Study4 to learn new vocabulary as it has a flashcard to learn and revise the words easily. And I usually make an example with the new word to understand it in a variety of situations."
Student No.5	"To solve this problem, I will learn vocabulary by topic and make a sentence for each word to remember longer."

According to Table 4, when it comes to the method of boosting students' vocabulary achievement, they frequently consider online educational games as an ideal means because such games serve eye-catching

animation. Moreover, English learners believe that online game activities urge their vocabulary-learning process due to the excellent revision method. Second, most students make specific examples and sentences with their new vocabulary in order to better grasp these words and understand their functions in different contexts.

Table 5: *The student's attitude toward online vocabulary games*

Students	Interview question number 3: *Which one is better for vocabulary learning, the traditional memorization method or online game activities? Why?*
Student No.1	"I prefer online games because it is easier for me to remember. Attaching vocabulary to context and specific examples gives me the feeling of wanting to learn more."
Student No.2	"I think game activities will help me learn vocabulary better because they have specific pictures, spelling, and examples."
Student No.3	"Well, I will choose online games because I can remember vocabulary better through their fun activities. And I will easily forget those words in a short time if I just learn in the traditional way."
Student No.4	"I choose online educational games, definitely. That is because leisure activities will encourage me to remember and have more motivation rather than "rote learning" in the traditional way."
Student No.5	"Honestly, I prefer the traditional method when learning new words. If I wrote it down while speaking it out loud, I would be able to remember it for a longer period of time, which games could only do by distracting me. As a result, I could only memorize it temporarily when using games, not permanently as with the traditional method."

As shown in Table 5, most of the subjects acknowledge the productive influence of online educational games. They believe those games will alter them in a beneficial way as they offer an entertaining and enjoyable ambiance, resulting in driving their motivation and capacity. Furthermore, these games equip vivid pictures and specific examples to help learners acquire vocabulary briskly. Even though a minor portion of students still prefer the traditional memorized method since they have become accustomed to their old study habits over the last few decades. On the other hand, a large number of students show negative attitudes toward the traditional memorization method, especially "rote learning", because students commonly forget many of their learned new words after a short amount of time.

4.3 Discussion

Through quantitative and qualitative results, the answers to the research are investigated. The results of the first table indicate a wide utilization of online vocabulary games. The integration of online games into English vocabulary learning has proven to be an effective method, stimulating student interest and facilitating the learning process. The respondents, when queried about their inclination towards incorporating online games into English lessons, overwhelmingly indicated agreement or strong agreement. This highlights the importance of incorporating new technological advances into educational practices. Such innovative methods are more supported by learners than traditional practices that adhere to antiquated pedagogies, which share the same findings of Kılıçkaya and Krajka (2010)'s study.

Despite the hugely positive response towards the integration of online games into English lessons for vocabulary acquisition, a minority of survey respondents, namely 5%, indicated their reluctance towards

this approach. Some students may not find online games to be challenging enough or may not see the value in using games for language learning purposes, as identified by Lee and Kim (2016). In light of these research findings, it is important for educators to carefully consider the potential benefits and drawbacks of using online games for English vocabulary learning. While these games can be effective in engaging and motivating students, they should be used in moderation and in conjunction with other teaching methods to ensure that students receive a well-rounded and effective language-learning experience.

Regarding the effects of online educational games on vocabulary development, the majority of participants reported a productive impact on their lexical development. Specifically, almost all of the students showed improvement in their outcomes when utilizing online game-based activities featuring captivating illustrations and dynamic sound effects. Regarding the study of Barani *et al.* (2010) and Mathew and Alidmat (2013), their findings also support the audio-visual aids as those are able to aid students' vocabulary advancement. HUFI's English-majored students hold a belief that digital games provide learners with more engaging and interactive opportunities to practice new vocabulary words, making the learning process more enjoyable and memorable. According to Aghlara and Tamjid (2011), they also concluded that digital games would offer students an engaging and fascinating environment to study English lexis. Not only do online games motivate them to promote vocabulary acquisition and retention for a longer period but also increase motivation and active engagement during English vocabulary lessons.

As can be seen in the first research interview question, all of the respondents acknowledge that recalling lexis after the learning process is problematic. Consequently, they regularly forget the meaning of their learned words. In addition, when learning by heart a large number of English words, students are unable to understand these words on a deep level, leading to being confused when applying them to unfamiliar contexts.

According to most students participating in the research, to cope with vocabulary-learning problems, online educational games are viewed as an efficient technique to further their outcomes thanks to a wide range of vibrant designs and compelling activities. They believe digital games may have a good influence on their motivation and learning ability, which shares similar findings in the research of Wu *et al.* (2011). They are more likely to lose interest if simply gaining new English words in their textbooks or notes, but rather willing to concentrate on their lessons serving delightful activities or visually appealing animation. Additionally, those games also offer numerous handy features to let students construct and customize their flashcards, making it easier for them to remember the lexical words. Besides, all the students point out that giving examples and making sentences may aid in improving their English vocabulary growth and memorization. If students simply passively memorize these new words, they merely know exactly their original definitions and quickly forget them. As a result, when using fascinating activities and effective learning techniques, English learners are likely to retain new words better than when using standard learning techniques.

Concerning the final interview question, which explores whether or not English-majored students are disposed to partake in online game-based activities compared to traditional methods. A majority of the participants acknowledge the importance of digital games in supporting them to better their capacities. Their perspectives on online educational games are highly positive as they could inspire them to gain more English words through an entertaining environment. They conceive that game-like formats will most likely aid in their comprehension of new words and their peculiar meanings in various circumstances by giving specific examples and sentences. Online educational games offer students competitive or cooperative activities in the classroom, which solves the problem of traditional learning approaches making them forget numerous vocabulary since they want something more lively. As a result, even if English language learners are accustomed to conventional vocabulary-learning methods, they are eager to take part in modern learning

activities because games like these can demonstrate their capacities for greater vocabulary acquisition. Also, these games may help them overcome their language acquisition challenges, which is useful for incorporating contemporary practices into academic activity.

5   Conclusions

In today's fast-paced world, learning has become more dynamic and interactive than ever before. As a result, educators are constantly looking for new methods and effective learning tools to make the learning process more engaging and effective. The use of digital vocabulary games as a method to improve vocabulary development in students has shown promise.

This study has discussed how HUFI's English-majored students feel about the efficiency of online vocabulary games on their lexical growth. By utilizing vocabulary games in their lesson plans, educators can create a more inclusive and interactive learning environment that engages students of all ages and backgrounds. Not only do these games provide an enjoyable break from traditional learning methods, but they also help students develop their vocabulary in a fun and engaging way. The following reasons are also proved that vocabulary games could become increasingly common in modern learning environments.

The findings of this study suggest that integrating modern techniques into language learning programs at HUFI has positive attitudes among the subjects. The results indicate that students who participated in the online game activities believed that they have a significant improvement in lexical learning compared to those who are not exposed as such games offer specific entertaining value and potential for vocabulary gain. Additionally, students reported positive perspectives on the utilization of game-like formats for vocabulary learning since their attention and motivation are more likely to be driven in engaging and enjoyable settings. These findings have important implications for language educators and curriculum designers who are interested in optimizing language learning outcomes.

6   Declarations

6.1   Study Limitations

Some limitations are inevitable including the limited research location in only one university, as well as the use of simple methods for data collection and analysis. It is important to note that the effectiveness of online educational games may be influenced by factors such as game design, student motivation, and learning context. Therefore, further research is necessary to identify the most effective strategies for integrating online educational games into language learning programs and to investigate the underlying factors that influence their effectiveness. Overall, this study contributes to the growing body of research on the use of technology in language learning and provides insights into English-majored students' perspectives on integrating online educational games into language learning programs at HUFI and beyond.

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