

Comparing Quizizz-Based and Traditional Vocabulary Instruction: A Quasi-Experimental Study With Non-English Majors in Vietnam

Tran Thanh Du*

Department of Foreign Languages, Thu Dau Mot University, Ho Chi Minh City, Vietnam

Nguyen Huu The

Faculty of Foreign Languages, Ba Ria - Vung Tau College of Education, Ho Chi Minh City, Vietnam

Dang Thi Bao Dung

Faculty of Foreign Languages, Can Tho University of Technology, Can Tho City, Vietnam

Nguyen Thi Kieu Huong

Department of Foreign Languages, Thu Dau Mot University, Ho Chi Minh City, Vietnam

Nguyen Thanh Xuan

Department of Foreign Languages, Thu Dau Mot University, Ho Chi Minh City, Vietnam

Abstract—Quizizz is a widely used game-based learning platform, particularly popular among university students in Vietnam. This quasi-experimental study investigates the impact of Quizizz-based vocabulary instruction compared to traditional teaching methods on vocabulary retention among non-English major students at a Vietnamese university. A total of 80 participants were divided equally into an experimental group, which used Quizizz for vocabulary learning, and a control group, which received traditional instruction. Data were collected through pre- and post-tests, questionnaires, and semi-structured interviews with both students and lecturers. Quantitative data were analyzed using descriptive and inferential statistics, while qualitative responses were thematically analyzed. Results revealed that the experimental group outperformed the control group in both immediate and delayed vocabulary retention tests, indicating that Quizizz-based instruction can effectively enhance vocabulary learning. Furthermore, students and lecturers expressed generally positive attitudes toward the use of Quizizz as a supplemental vocabulary learning tool, although some concerns about content quality and learning depth were noted. These findings provide practical implications for integrating game-based platforms like Quizizz into English vocabulary teaching and suggest directions for future research on technology-enhanced language learning.

Index Terms—Quizizz-based vocabulary instruction, traditional vocabulary teaching, English as a Foreign Language (EFL), non-English majors, mixed-methods research

I. INTRODUCTION

Vocabulary is considered one of the most important language competencies and is regarded as essential for successful foreign or second language learning and vocabulary learning is not merely about “learning form-meaning connections” but also requires repeated exposure and active use in order to achieve long-term retention (Schmitt, 2000). This highlights the indispensable role of vocabulary in communication and English learning. In this context, teachers need to adopt appropriate teaching methods to help learners retain vocabulary effectively. Wilkins (1972) stated that without grammar, very little can be conveyed; without vocabulary, nothing can be conveyed. This highlights that vocabulary serves as the foundation of all communicative activities. According to Mayer’s (2001) Cognitive Theory of Multimedia Learning, learning becomes more effective when both visual and auditory channels are combined rather than relying on a single channel. This theoretical perspective explains why technology-supported learning environments may enhance vocabulary retention.

However, despite the growing interest in gamified platforms, empirical evidence on their effects among Vietnamese non-English majors remains limited. Few studies have explored how game-based tools like Quizizz can enhance vocabulary retention in this specific learner group. Recent educational research (2022–2024), however, has demonstrated that technology-mediated approaches can significantly improve vocabulary retention. For instance, mobile-assisted vocabulary learning tools employing spaced repetition promote longer-term retention than traditional methods (Teymouri, 2024). Furthermore, digital reading environments have been shown to have a strong positive effect on L2 vocabulary acquisition, particularly when learners interact with multimedia-enhanced texts (Zhu et al., 2023). Additionally,

augmented reality systems that embed vocabulary in contextual visuals offer memory benefits across both immediate and delayed recall (Weerasinghe et al., 2022). While digital tools generally support vocabulary memory and learner engagement, their impact depends heavily on how they are integrated pedagogically (Babazade, 2024).

With the increasing popularity of digital technology, especially platforms like Quizizz in learners' daily lives, it is urgent and necessary to explore how to effectively exploit technological strategies to support sustainable vocabulary learning. Therefore, this study seeks to address this research need by exploring the impact of digital tools, including Quizizz, on L2 vocabulary development, thereby contributing to both theoretical understanding and pedagogical practice. This study employs Quizizz to teach vocabulary to non-English major students because the platform is highly suitable for vocabulary learning, easy to use, requires minimal technological skills, and its games and quizzes engage students during class while supporting long-term vocabulary retention. Compared to other platforms such as Kahoot, Quizlet, TikTok or Wordwall, Quizizz offers greater flexibility in activity design, allows both synchronous and asynchronous use, and provides detailed reports that help lecturers monitor students' learning progress easily and effectively.

Building on the increasing integration of digital technologies in language learning, this study aims to compare the impacts of Quizizz-based vocabulary instruction with traditional vocabulary teaching methods in enhancing vocabulary retention among non-English major students at a university in Vietnam. Additionally, it explores students' and lecturers' attitudes toward the use of Quizizz as a tool for vocabulary learning and the development of other English language skills.

Based on the aims of this study, the following research questions are addressed:

- 1) *How effective is Quizizz-based vocabulary instruction compared to traditional methods in improving English vocabulary retention?*
- 2) *What are students' and lecturers' attitudes toward using Quizizz for English vocabulary learning?*

II. LITERATURE REVIEW

A. Vocabulary Learning in Second Language Acquisition

According to Schmitt (2000), vocabulary learning is not merely about memorizing isolated word-meaning pairs but involves a multifaceted process that includes the development of form, meaning, usage, collocations, and grammatical behavior. This process requires both receptive knowledge (recognizing words in reading and listening) and productive knowledge (using them in speaking and writing), and depends heavily on frequency of exposure and depth of processing. Modern approaches to vocabulary learning emphasize meaningful engagement with words in context. Techniques such as spaced repetition, contextual learning, and integrative use of vocabulary in communication tasks have been proven effective. Teymouri (2024) highlights how mobile-assisted vocabulary tools, especially those using digital flashcards and gamified repetition systems, improve long-term retention and learner motivation. Moreover, Zhu et al. (2023), through a comprehensive meta-analysis, demonstrated that multimedia-enhanced digital reading environments significantly support L2 vocabulary development. However, most of these studies focused on English majors or advanced learners in developed contexts, leaving little evidence about how such vocabulary learning processes function among non-English majors in EFL environments like Vietnam. Moreover, few studies have compared traditional instruction with technology-supported methods to determine which approach better facilitates long-term vocabulary retention. Their findings emphasize that learners benefit most when digital texts integrate visual, textual, and contextual cues, allowing for more effective incidental learning and better retention.

B. Technology-Enhanced Vocabulary Learning

The integration of multimedia and digital technologies into vocabulary instruction has transformed traditional language learning environments. Mayer's (2001) Cognitive Theory of Multimedia Learning, effective learning occurs when both visual and auditory channels are activated simultaneously. This dual-channel processing enhances memory retention by reducing cognitive overload and promoting meaningful encoding of information. Multimedia-enhanced vocabulary learning environments typically combine text, images, sound, video, and animation, enabling learners to establish richer form-meaning connections. For example, learners watching a short video that demonstrates the meaning of a word in context can process it more deeply than when encountering the word in text alone. Zhu et al. (2023) found that multimedia-supported digital reading significantly improves vocabulary acquisition, particularly when learners engage with texts containing interactive visuals and context clues. Similarly, Weerasinghe et al. (2022) investigated the role of augmented reality (AR) in vocabulary learning and found that embedding new words into real-world contexts using visual keywords led to improved recall in both immediate and delayed post-tests. Despite these benefits, the success of multimedia and technological tools depends largely on pedagogical integration. Babazade (2024) argues that technology alone does not guarantee learning outcomes; instead, instructional design, learner autonomy, and interaction with meaningful content are crucial for sustainable vocabulary development. These principles also underpin the pedagogical rationale for gamification, where visual, auditory, and interactive elements are combined to sustain learners' motivation and cognitive engagement in vocabulary learning.

C. Gamification in Language Learning

Gamification is defined as the integration of game elements into non-game contexts to enhance engagement and motivation (Deterding et al., 2011). In language learning contexts, gamified platforms such as Quizizz offer learners

choices in pacing and task completion (autonomy), provide immediate feedback and scores (competence), and enable collaborative or competitive interaction with peers (relatedness), thereby supporting sustained engagement (Sailer & Homner, 2020; Seaborn & Fels, 2021). These elements correspond with Deci and Ryan's (1985) self-determination theory.

Self-Determination Theory, which posits that learning motivation increases when activities satisfy learners' needs for autonomy, competence, and relatedness. Empirical studies have shown that gamified vocabulary learning environments increase learners' flow experiences, which in turn enhances vocabulary retention and overall engagement (Hamari et al., 2019). Studies have confirmed that when students perceive gamified vocabulary tools as useful and user-friendly, they are more likely to engage actively, resulting in improved learning outcomes (Al-Marroof & Al-Emran, 2018; Hew et al., 2023). Building on these principles, Quizizz operationalizes gamification through points, leaderboards, memes, and instant feedback, all of which promote enjoyment and repeated engagement in vocabulary tasks.

D. Quizizz in Vocabulary Instruction

Quizizz integrates key gamification elements, points, leaderboards, immediate feedback, and self-paced quizzes, to enhance student engagement and motivation (Al-Marroof & Al-Emran, 2018; Bury & O'Neill, 2021). Vietnamese university students using Quizizz for vocabulary lessons outperformed peers in traditional instruction on both immediate and delayed post-tests, while also expressing higher engagement and enjoyment (Do, 2023). Quizizz-based instruction facilitated not only recognition of word forms and meanings but also deeper processing through interactive games and quizzes, contributing to long-term retention (Pham & Nguyen, 2024). The gamified features of Quizizz, including instant feedback and competitive elements, have been found to increase learners' motivation and active participation, which are critical for effective vocabulary learning (Al-Marroof & Al-Emran, 2018; Zhao, 2022). However, overreliance on game-based features may lead some learners to focus more on competition and rewards than on linguistic content, potentially limiting deeper processing if not pedagogically guided.

E. Learners' and Teachers' Attitudes Toward Quizizz and Digital Tools

Attitudes toward technology play a crucial role in determining its successful adoption and integration in language learning (Venkatesh & Bala, 2008). Learners' perceptions of usefulness, ease of use, and engagement significantly influence their willingness to participate in technology-mediated activities. Gamified platforms like Quizizz have been shown to elicit positive attitudes from students, who often report higher motivation, enjoyment, and active participation compared to traditional learning methods (Al-Marroof & Al-Emran, 2018; Do, 2023; Hew et al., 2023). Teachers' attitudes are equally important, as their acceptance and pedagogical beliefs determine how effectively such tools are integrated into classroom instruction (Chou & Feng, 2019; Pham & Nguyen, 2024). Educators generally view Quizizz as a valuable supplementary tool for vocabulary teaching because of its interactive nature and ability to provide immediate feedback (Bury & O'Neill, 2021). Yet, teachers' digital competence and pedagogical beliefs determine whether such tools are integrated as core teaching aids or remain peripheral supplements, as emphasized by Redecker et al. (2021) in the DigCompEdu framework. The alignment between teachers' instructional strategies and learners' expectations strongly affects the success of digital tools in language classrooms (Al-Marroof & Al-Emran, 2018).

F. Review of Previous Studies

Internationally, several studies have reported positive effects of Quizizz-based instruction on vocabulary acquisition. Bury and O'Neill (2021) indicated that EFL students in Ireland who used Quizizz for vocabulary practice showed significant improvement in both immediate and delayed post-tests compared to those using traditional methods. Tsai (2020) conducted a systematic review of digital game-based vocabulary learning and highlighted that platforms integrating gamification features such as points, leaderboards, and instant feedback enhanced learners' motivation, engagement, and retention. Sailer and Homner (2020) found that gamified learning environments satisfy learners' psychological needs for autonomy, competence, and relatedness, creating optimal conditions for language acquisition. According to Hew et al. (2023), learners are more likely to adopt gamified tools when they perceive them as useful and easy to use.

In Vietnam, Do (2023) confirmed that Vietnamese university students using Quizizz for vocabulary lessons outperformed their peers in traditional instruction on both immediate and delayed post-tests, while also reporting higher levels of engagement and enjoyment. Pham and Nguyen (2024) revealed that Quizizz-based instruction not only helped learners recognize word forms and meanings but also promoted deeper processing, which contributed to long-term retention. Le et al. (2021) highlighted that Vietnamese non-English majors often face challenges in vocabulary acquisition due to limited exposure to English outside the classroom; gamified platforms like Quizizz help address this gap by providing repeated practice and interactive learning opportunities. These studies consistently demonstrate the pedagogical value of Quizizz in enhancing vocabulary retention and engagement. Nevertheless, most of them employed short interventions or small samples, focusing mainly on English majors. The extent to which Quizizz supports vocabulary retention among non-English majors in sustained instructional settings remains underexplored.

G. Research Gap in Quizizz-Based Vocabulary Learning

Overall, both international and Vietnamese studies have indicated the positive effects of using Quizizz in vocabulary instruction. However, previous research has mainly focused on the isolated impact of Quizizz, with few studies addressing

students' and teachers' attitudes toward Quizizz and digital tools, as well as its integration with effective instructional strategies. Moreover, there is a lack of research focusing on non-English majors in Vietnam, a group that typically struggles more with vocabulary learning because of their limited opportunities to use English beyond the classroom. This study aims to fill this gap by examining both vocabulary retention and students' and teachers' attitudes toward Quizizz-based vocabulary instruction in the Vietnamese context.

III. METHODOLOGY

A. Research Design

This study adopted a quasi-experimental design with a mixed-methods approach to investigate the effectiveness of Quizizz-based vocabulary instruction compared to traditional teaching methods in enhancing English vocabulary retention among non-English major university students in Vietnam. A total of 80 students were divided equally into two groups: an experimental group ($n = 40$), which received vocabulary instruction through Quizizz activities, and a control group ($n = 40$), which received conventional vocabulary teaching. The intervention lasted for 10 weeks. Data were collected both quantitatively and qualitatively through a mixed-method study, using pre-tests, post-tests for both groups, and questionnaires for students and interviews with both students and lecturers.

B. Participants

The study was conducted with 80 non-English major students from a Vietnamese university during the 2024–2025 academic year. The participants ($N = 80$) were randomly assigned to two groups: an experimental group ($n = 40$), which received vocabulary instruction through Quizizz-based activities, and a control group ($n = 40$), which received traditional vocabulary instruction. All participants had an equivalent level of English proficiency prior to participating in the study. Participation was voluntary and all students gave their informed consent after being clearly explained the objectives and procedures of the study.

C. Instruments

The researchers utilized both a pre-test and a post-test to measure changes in students' vocabulary knowledge before and after the intervention. The post-test was administered at the end of the 10-week period to evaluate the effectiveness of Quizizz-based vocabulary instruction compared to traditional methods. The assessment aimed to determine the impact of the intervention on students' vocabulary retention. To collect data on students' attitudes toward the use of Quizizz in improving vocabulary retention, a structured questionnaire was designed and administered. The questionnaire consisted of 10 items, each rated on a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The items examined various aspects of students' perceptions, including the perceived educational value of Quizizz, its effectiveness in supporting vocabulary learning, and students' engagement and motivation during the learning process. Semi-structured interviews were conducted with a sample of 10 students and 5 lecturers to gain deeper insights into their experiences and perspectives regarding the use of Quizizz for vocabulary learning. The interviews aimed to explore the perceived benefits, challenges, and overall effectiveness of Quizizz-based instruction compared to traditional methods. Responses were audio-recorded and analyzed thematically to complement the quantitative data.

D. Data Collection and Analysis

To investigate the impact of the intervention, test scores from both the pre-test and post-test were analyzed using SPSS software. Descriptive statistics such as mean, mode, and standard deviation were calculated, and inferential statistics were employed to determine statistical significance. This analysis provided insights into the effect of Quizizz-based instruction on vocabulary retention among non-English majors. Quantitative data from the survey were analyzed using descriptive statistics, such as percentages, mean scores, and standard deviations. After data collection, the responses from the Google Forms survey were automatically compiled into a spreadsheet. The researcher then analyzed the data by calculating the percentage of each selected answer. The results were further examined to identify the most and least chosen answers, as well as to identify overall trends in participants' opinions. Finally, the researcher summarized the responses for each question and used the data to draw conclusions based on the survey results.

E. Ethical Considerations

When using questionnaires, tests, and interviews with teachers and students, all participants were clearly informed of the purpose of the study and voluntarily agreed to take part before data collection. Permission from the school administration was also secured. The research tools and tests strictly adhered to ethical principles, ensuring confidentiality and using the results solely to evaluate learners' progress.

IV. RESULTS AND DISCUSSION

A. Results

- *Results of Pre-test*

Before conducting the study to examine the impact of Quizizz-based vocabulary instruction compared to traditional teaching methods on vocabulary retention among non-English major students at a university in Vietnam, a pre-test was

administered to both the control group and the experimental group, with N = 40 in each group. The results are presented as follows:

TABLE 1
THE STATISTICS OF PRE-TEST TOTAL

N	Valid Missing	Control group	Experimental group
		40 0	40 0
	Mean	5.33	5.28
	Median	5.5	5.5
	Mode	5	5
	Std. Deviation	1.05	0.91
	Minimum	4	5
	Maximum	8	7

Table 1 shows that the initial vocabulary proficiency of both the control and experimental groups was relatively comparable before the intervention. Both groups had the same median score of 5.5 and the same mode of 5.0, indicating a similar central tendency. The mean scores were also close, with 5.33 for the control group and 5.28 for the experimental group, showing minimal difference. Additionally, the standard deviations (SD) were similar (1.05 for the control group and 0.91 for the experimental group), suggesting a comparable level of score variability within each group. The minimum and maximum scores were 4 and 8 for the control group, and 5 and 7 for the experimental group, respectively. These findings indicate that both groups started at a similar level in terms of vocabulary knowledge, providing a valid baseline for comparing the effects of the Quizizz-based teaching intervention in the post-test phase.

- *Results of Post-test*

After the experimental implementation of Quizizz-based vocabulary instruction, a post-test was conducted for both the control group and the experimental group in order to compare the results before and after the intervention using a paired t-test. The findings are summarized as follows:

TABLE 2
THE STATISTICS OF POST-TEST TOTAL

N	Valid Missing	Control group	Experimental group
		40 0	40 0
	Mean	5.48	6.31
	Median	5.5	6
	Mode	5	6
	Std. Deviation	0.93	0.77
	Minimum	4	5
	Maximum	8	8

Table 2 presents the post-test results for both the control and experimental groups following the implementation of Quizizz-based vocabulary instruction. The experimental group demonstrated a notable improvement, with the mean score increasing from 5.28 (pre-test) to 6.31 (post-test), and a reduction in standard deviation from 0.91 to 0.77, indicating more consistent performance and stable progress among participants. In contrast, the control group showed only a slight increase in the mean score, from 5.33 to 5.48, with the standard deviation decreasing marginally from 1.05 to 0.93. Interestingly, the median, mode, minimum, and maximum scores for the control group remained unchanged from the pre-test, suggesting minimal overall progress. Meanwhile, the experimental group exhibited positive shifts in all key statistical indicators: Mode increased from 5 to 6; Median rose from 5.5 to 6; Minimum score improved from 4 to 5; Maximum score increased from 7 to 8. These changes indicate not only an improvement in average performance but also in the overall distribution of scores within the experimental group. The decrease in standard deviation further suggests that students' performances became more consistent after the intervention. These results provide strong evidence that the Quizizz-based vocabulary instruction had a positive impact on learners' vocabulary retention compared to traditional teaching methods.

- *Questionnaire on Students' Attitudes Toward Quizizz-Based Vocabulary Learning*

After 10 weeks of implementing the Quizizz-based vocabulary instruction and administering the post-test, a 10-item questionnaire was distributed to the 40 students in the experimental group. The purpose of this questionnaire was to explore students' attitudes toward learning English vocabulary through Quizizz. The items covered various aspects, including educational value, engagement, enjoyment, motivation, and perceived effectiveness of Quizizz as a vocabulary learning tool. Each item was rated on a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The collected data were analyzed using descriptive statistics to determine the frequency and percentage of responses for each item. The results are summarized in Table 3 below.

TABLE 3
STUDENT ATTITUDES TOWARD QUIZIZZ-BASED VOCABULARY LEARNING (N=40)

Statement	Strongly Disagree (n/%)	Disagree (n/%)	Neutral (n/%)	Agree (n/%)	Strongly Agree(n/%)
1. I believe Quizizz has educational value when used for vocabulary learning.	2/ 5%	3/ 7.5%	7/ 17.5%	20/ 50%	8/ 20%
2. Quizizz-based activities help me remember new English vocabulary more effectively.	3/ 7.5%	3/ 7.5%	6/ 15%	19/ 47.5%	9/ 22.5%
3. I feel more engaged when learning vocabulary through Quizizz than through traditional methods	2/ 5%	3/ 7.5%	5/ 12.5%	18/ 45%	12/ 30%
4. I consider Quizizz a useful supplementary tool for improving my English vocabulary.	2/ 5%	3/ 7.5%	4/ 10%	17/ 42.5%	14/ 35%
5. I think vocabulary learning through Quizizz is more enjoyable than using textbooks.	0/ 0%	0/ 0%	3/ 7.5%	24/ 60%	13/ 32.5%
6. I can understand and remember vocabulary better when it is presented through Quizizz-based activities.	1/ 2.5%	3/ 7.5%	3/ 7.5%	18/ 45%	15/ 37.5%
7. The short and visual nature of Quizizz makes it easier for me to learn vocabulary.	2/ 5%	2/ 5%	6/ 15%	17/ 42.5%	13/ 32.5%
8. Quizizz motivates me to study English vocabulary regularly.	3/ 7.5%	2/ 5%	3/ 7.5%	22/ 55%	10/ 25%
9. Using Quizizz for vocabulary learning encourages me to use new words in real communication.	1/ 2.5%	2/ 5%	4/ 10%	17/ 42.5%	16/ 40%
10. I am more likely to learn vocabulary when it is related to my interests shown on Quizizz.	2/ 5%	2/ 5%	3/ 7.5%	18/ 45%	15/ 37.5%

According to Table 3, in general, most students showed a positive attitude toward using Quizizz to enhance their English vocabulary retention. Specifically, 78.75% of the students selected Agree (47.5%) and Strongly Agree (31.25%), indicating a high level of agreement on the effectiveness of Quizizz in vocabulary learning. Meanwhile, only 10.25% of students expressed disagreement, including 4.5% who strongly disagreed and 5.75% who disagreed. The proportion of students with a neutral opinion was 12%. These results suggest that Quizizz is perceived as a useful tool for English vocabulary learning and has a positive impact on students' learning attitudes.

Students in the experimental group demonstrated a positive perception of Quizizz's effectiveness in vocabulary learning, as reflected in items 1, 2, 4, 6, and 9. Specifically, 70% of students believed that Quizizz-based activities have educational value when used for vocabulary learning and that Quizizz helps them remember new English vocabulary more effectively (Items 1 and 2). 77.5% considered Quizizz a useful supplementary tool for improving their English vocabulary (Item 4). Notably, 82.5% of students stated that learning vocabulary through Quizizz helps them understand and retain new words better, and also encourages them to use new vocabulary in real-life communication (Items 6 and 9). In addition, a high percentage of students believe that Quizizz makes learning more interesting and engaging, while also encouraging them to participate actively in English learning activities in class, as reflected in items 3, 5, and 7. Specifically, in item 3, 75% of students highly appreciate learning vocabulary through Quizizz compared to traditional methods they have previously experienced. Similarly, in item 7, 75% of students believe that the short and visual nature of Quizizz helps them learn vocabulary more easily. Notably, item 5 received the highest agreement rate, with 92.5% of students agreeing that learning vocabulary through Quizizz is more enjoyable than using textbooks. Finally, Quizizz also contributes to motivating students to learn vocabulary, as reflected in items 8 and 10. Specifically, 80% of students reported that Quizizz encourages them to study English vocabulary more regularly (item 8), and 82.5% of students expressed that they feel more interested in learning vocabulary when it relates to their personal interests displayed on Quizizz (Item 10).

- *Interview Questions for Lecturers*

In the next stage, five English lecturers were interviewed using the above four questions to explore their attitudes towards the use of Quizizz in vocabulary teaching and to identify the challenges they perceived in integrating Quizizz into their instruction. The interviews were recorded, and the lecturers' responses were synthesized as follows:

1. *What is your opinion about learning English vocabulary through Quizizz-based activities?*

The lecturers stated that Quizizz is a useful tool for supporting English learning in general, and vocabulary learning in particular. With its short, engaging, and entertaining videos, Quizizz can stimulate learners' interest. In addition, the videos are often visual and context-based, which helps learners remember vocabulary more easily. However, the lecturers also pointed out some challenges in using Quizizz. The accuracy and reliability of the content are not always guaranteed or properly regulated; therefore, teachers need to carefully select appropriate materials. Moreover, assessing learning outcomes through Quizizz is difficult to conduct systematically compared to traditional teaching resources. Based on these perspectives, the lecturers recommended viewing Quizizz as a supplementary tool that should be integrated with traditional teaching methods. With proper guidance and careful selection of content, Quizizz has the potential to motivate learners and make vocabulary learning more engaging and effective.

2. *Have you observed any changes in students' vocabulary acquisition or engagement when they use Quizizz as a supplementary tool?*

According to the lecturers' observations, students appeared more interested in learning vocabulary when supported by Quizizz and often taking the initiative to share quizzes or new words they had learned in class. Thanks to the visual and

auditory elements, students found it easier to remember vocabulary. However, some students were only able to recall words within the quiz context and struggled to apply them flexibly in new situations. In addition, a small number of students did not use Quizizz for learning purposes and were easily distracted by entertaining content. The lecturers noted that Quizizz can enhance interaction and foster learning motivation. Nevertheless, to achieve effectiveness in teaching, Quizizz should be regarded as a supplementary tool that needs to be combined with traditional teaching methods.

3. *How do you compare Quizizz-based vocabulary instruction with traditional methods in terms of effectiveness and student engagement?*

Most lecturers stated that teaching vocabulary through Quizizz activities was more engaging than traditional methods. With its visual, interactive, and dynamic features, Quizizz attracted students' attention, encouraged active participation in class activities, created a lively classroom atmosphere, and supported more effective vocabulary retention. In contrast, when using traditional methods, students tended to participate less, and the classroom was often quiet and less engaging. However, the lecturers also acknowledged that the strength of traditional methods lies in helping students systematically consolidate and reinforce their knowledge. Therefore, they agreed that a flexible combination of Quizizz and traditional methods in vocabulary instruction would yield the most optimal results.

4. *Do you see any challenges in integrating Quizizz into vocabulary teaching?*

According to the lecturers, the content on Quizizz is very diverse and abundant; however, it is not always accurate or aligned with teaching objectives. Therefore, teachers need to carefully screen and select materials before using them in class. In addition, it is difficult to design a systematic lesson if relying solely on Quizizz. Another challenge is that students can sometimes focus more on the game-like elements of Quizizz, such as points and leaderboards, rather than on the learning objectives, and some still perceive it primarily as a fun activity rather than a serious learning tool. For these reasons, Quizizz should be considered a supplementary tool, integrated at a moderate level, and used with clear guidance from teachers in order to achieve effectiveness in vocabulary instruction.

- *Interview Questions for Students*

Ten students from the experimental group were randomly selected for interviews with three questions. The interviews aimed to explore their attitudes towards learning English vocabulary through Quizizz-based activities, to gather their opinions on learning vocabulary via Quizizz compared with traditional methods, and to examine whether they would like to continue using Quizizz for vocabulary learning. The students' responses were recorded and are presented below:

1. *How do you feel about learning English vocabulary through Quizizz?*

Most students reported that learning vocabulary through Quizizz is very interesting because the game-based format is lively, interactive, and easy to follow. The use of images and sound helps them remember vocabulary for a longer time, and it also makes the class more engaging and less boring. Quizizz is considered useful for introducing new words and creating motivation, but for deeper learning and long-term retention, students still need to rely on textbooks or traditional methods. On the other hand, some videos are too short and do not fully explain word usage, and sometimes students get distracted by entertaining content, which reduces their focus on learning.

2. *Do you think Quizizz is more effective than traditional vocabulary learning methods? Why or why not?*

Students think Quizizz is more effective because the game-based quizzes and instant feedback make it easier to remember and apply vocabulary in communication. The competitive elements and humorous answer choices help them memorize words much faster than studying from books. Although Quizizz is not as systematic as traditional methods, it helps me stay motivated to learn every day. Just spending a few minutes completing quizzes regularly allows them to pick up new words, which feels easier to maintain than rote memorization. Quizizz is effective in sparking interest and learning vocabulary in real-life contexts. However, to retain words longer and use them accurately, I still need to combine it with textbooks and exercises. Some students also think Quizizz is only partially effective, since sometimes the questions or answer options are oversimplified and do not fully explain word usage, which may cause confusion if they only rely on the platform.

3. *Would you like to continue using Quizizz for vocabulary learning in the future? Why?*

Most students would like to continue using Quizizz for vocabulary learning because it makes learning more engaging, enjoyable, and less stressful. The Quizizz-based activities, with images, sound effects, and immediate feedback, help them absorb and remember vocabulary more easily, and they can practice anytime and anywhere. Students believe Quizizz is suitable for learning new words and maintaining a daily learning habit. However, they emphasized that Quizizz should only be used as a supplementary tool. For deeper learning, long-term retention, and accurate usage, they still need to combine it with textbooks, exercises, or traditional methods. Some students also noted that Quizizz should be used in moderation, as the entertaining elements and competitive features can become distracting if not well controlled.

B. Discussion

The results obtained from the T-tests, questionnaires, and interviews provide comprehensive insights into the learners' vocabulary development, their learning experiences, and the underlying factors influencing their retention. This section discusses the findings in relation to the two research questions. Specifically, it highlights the similarities and differences between the experimental and control groups, interprets these outcomes in the light of previous studies, and considers their implications for English language teaching and learning.

Research Question 1: How effective is Quizizz-based vocabulary instruction compared to traditional methods in improving English vocabulary retention?

The research results indicate that Quizizz-based vocabulary learning is more effective than traditional instructional methods in improving vocabulary retention among non-English-major learners. The experimental group, which used Quizizz to learn vocabulary, showed a clear improvement, with the average test score rising from 5.28 (pre-test) to 6.31 (post-test). In addition, both the median (5.5 to 6) and mode (5 to 7) increased, indicating a general upward shift in learners' performance. The minimum score improved from 4 to 5, while the maximum score rose from 7 to 8, showing that even weaker students benefited from the intervention and that stronger learners achieved higher mastery. This group also achieved more consistent outcomes, as reflected in the reduced standard deviation. In contrast, the control group, which was taught through traditional methods, only showed a slight increase in average scores, from 5.33 (pre-test) to 5.48 (post-test). The median, mode, minimum, and maximum scores for the control group remained unchanged, showing no meaningful improvement.

This outcome aligns with Bury and O'Neill (2021) and Tsai (2020), who confirmed that game-based vocabulary learning environments integrating gamification features such as points, leaderboards, and instant feedback significantly improve learners' vocabulary retention compared to traditional methods. Do (2023) and Pham and Nguyen (2024) proved that students at Vietnamese university taught with Quizizz not only attained higher test scores but also engaged in deeper vocabulary processing, leading to long-term retention. The present results strengthen the existing literature while adding new insights into the effectiveness of Quizizz for non-English majors in Vietnam, a group often facing greater challenges in vocabulary acquisition because of limited revelation to English outside the classroom.

Research Question 2: What are students' and lecturers' attitudes toward using Quizizz for English vocabulary learning?

The results from the 10-item questionnaires and interviews indicate that both students and lecturers generally hold positive attitudes toward the use of Quizizz for vocabulary learning. Most students reported that Quizizz-based activities were enjoyable, engaging, motivating, and less stressful than traditional approaches. Specifically, 92.5% of students agreed that learning vocabulary through Quizizz was more enjoyable than using textbooks, while 82.5% expressed greater interest when vocabulary content was relevant to their personal interests. A majority of students (77.5%) perceived Quizizz as a useful supplementary tool for improving vocabulary, and 70–82.5% reported that it helped them understand, retain, and actively use new words in real-life communication. Students particularly valued the interactive, game-based quizzes with visuals and immediate feedback, which made vocabulary practice more convenient, stimulating, and effective.

Lecturers also expressed cautious optimism about integrating Quizizz into vocabulary instruction alongside traditional methods. While they acknowledged the platform's potential to capture students' attention and foster active engagement, they voiced concerns regarding possible distractions, inconsistent content quality, and the necessity of aligning materials with curriculum objectives. Overall, the findings suggest that both students and lecturers perceive Quizizz as a practical and effective tool for enhancing vocabulary acquisition, motivation, and classroom participation.

The findings correspond with previous research highlighting that Quizizz-based activities support learners' autonomy, competence, and relatedness (Sailer & Homner, 2020; Seaborn & Fels, 2021). The platform also facilitates recognition of word forms and meanings, deeper cognitive processing, and long-term vocabulary retention (Pham & Nguyen, 2024; Do, 2023). Moreover, Quizizz provides interactive quizzes, visuals, and immediate feedback, which enhance both retention and active participation in learning activities (Al-Marroof & Al-Emran, 2018; Zhao, 2022). In addition, factors such as perceived usefulness, personal interest, and learner motivation play an important role in promoting engagement and sustained vocabulary learning (Do, 2023; Hew et al., 2023).

V. CONCLUSION

Findings

The findings of this study indicate that Quizizz-based vocabulary instruction was more effective than traditional teaching methods in enhancing vocabulary retention among non-English-major students. The experimental group demonstrated significant improvements across all key statistical measures, including mean, median, mode, minimum, and maximum scores, as well as reduced variability, suggesting both overall progress and more consistent performance. Both students and lecturers reported generally positive perceptions of Quizizz as a supplementary tool for vocabulary learning. Students particularly appreciated the platform's interactive, game-based quizzes with visuals and immediate feedback, which increased engagement, motivation, and enjoyment.

Implications

The study suggests that Quizizz can serve as an effective supplementary tool for vocabulary learning when appropriately integrated with traditional teaching methods. Its interactive, game-based quizzes with visuals and immediate feedback enhance students' engagement, motivation, and autonomous learning. Therefore, teachers should carefully select and design Quizizz activities that align with instructional goals to support vocabulary retention and expansion among non-English-major students.

Limitations and Recommendations for Future Research

This study was conducted with 80 non-English-major students at a university over 10 weeks, which may limit the generalizability and long-term implications of the findings. Future research should include a larger and more diverse sample and could explore the use of Quizizz's interactive, game-based activities in teaching listening and speaking skills.

In addition, investigating effective strategies for integrating Quizizz into instruction would help maximize the platform's potential in foreign language education.

REFERENCES

- [1] Al-Marouf, R. S., & Al-Emran, M. (2018). Students' acceptance of Google Classroom: An exploratory study using PLS-SEM approach. *Education and Information Technologies*, 23(1), 605–623.
- [2] Babazade, Y. (2024). The impact of digital tools on vocabulary development in second language learning. *Journal of Azerbaijan Language and Education Studies*, 1(1), 35–41. <https://doi.org/10.69760/jales.2024.00103>
- [3] Bury, S., & O'Neill, A. (2021). The effectiveness of Quizizz in EFL vocabulary instruction. *Journal of Language Teaching Research*, 12(3), 45–58.
- [4] Chou, P.-N., & Feng, S.-Y. (2019). Using a tablet computer application to improve EFL college students' English vocabulary learning. *Computer Assisted Language Learning*, 32(5–6), 485–507.
- [5] Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness: Defining “gamification”. In *Proceedings of the 15th International Academic MindTrek Conference* (pp. 9–15).
- [6] Do, T. H. (2023). Using Quizizz to enhance vocabulary learning for Vietnamese EFL students. *VNU Journal of Foreign Studies*, 39(2), 21–35.
- [7] Hamari, J., Koivisto, J., & Sarsa, H. (2019). Does gamification work? A literature review of empirical studies on gamification. *Computers in Human Behavior*, 69, 12–25.
- [8] Hew, K. F., Huang, B., Chu, K. W. S., & Chiu, D. K. (2023). Engaging students in gamified learning: A systematic review of gamification research from 2011 to 2021. *Educational Technology Research and Development*, 71, 1–28.
- [9] Le, P. Q., Hoang, N. T., & Pham, T. K. (2021). Challenges in vocabulary acquisition among Vietnamese non-English majors and digital learning solutions. *Asian EFL Journal*, 23(5), 78–94.
- [10] Mayer, R. E. (2001). *Multimedia learning*. Cambridge University Press.
- [11] Pham, L. T., & Nguyen, Q. H. (2024). Gamification and vocabulary retention: A study of Quizizz in tertiary EFL classrooms. *Asian EFL Journal*, 26(1), 102–121.
- [12] Sailer, M., & Homner, L. (2020). The gamification of learning: A meta-analysis. *Educational Psychology Review*, 32, 77–112.
- [13] Schmitt, N. (2000). *Vocabulary in language teaching*. Cambridge University Press.
- [14] Seaborn, K., & Fels, D. I. (2021). Gamification in theory and action: A survey. *International Journal of Human-Computer Studies*, 149, 102597.
- [15] Tsai, Y.-L. (2020). Digital game-based second language vocabulary learning: A systematic review. *Computer Assisted Language Learning*, 33(1–2), 1–28.
- [16] Teymouri, R. (2024). Recent developments in mobile-assisted vocabulary learning: A mini review of published studies focusing on digital flashcards. *Frontiers in Education*, 9, 1496578. <https://doi.org/10.3389/educ.2024.1496578>
- [17] Venkatesh, V., & Bala, H. (2008). Technology acceptance model 3 and a research agenda on interventions. *Decision Sciences*, 39(2), 273–315.
- [18] Weerasinghe, P., Smith, J., & Kumar, R. (2022). *Learning vocabulary in AR supported by keyword visualisations*. arXiv. <https://doi.org/10.48550/arXiv.2207.00896>
- [19] Wilkins, D. A. (1972). *Linguistics in language teaching*. Edward Arnold.
- [20] Zhao, Y. (2022). Gamified learning and the depth of vocabulary knowledge: Opportunities and challenges. *Computer Assisted Language Learning*, 35(7), 987–1004.
- [21] Zhu, T., Zhang, Y., & Irwin, D. (2023). Second and foreign language vocabulary learning through digital reading: A meta-analysis. *Education and Information Technologies*, 29, 4531–4563. <https://doi.org/10.1007/s10639-023-11969-1>



Tran Thanh Du is majoring both in TESOL methodologies and in Contrastive Linguistics. He is currently a lecturer and also the head of the Institute of Foreign Language Training at Thu Dau Mot University in Vietnam. He takes his interests in studies of linguistics, sociolinguistics, pragmatics, learner motivation and English language teaching methodologies. All of his published works are related to both linguistic studies and TESOL-related issues. He endeavours to improve language use in general as well as English language teaching and learning in global contexts. Email: dutt@tdmu.edu.vn; ORCID iD: <https://orcid.org/0009-0002-7802-9949>



Nguyen Huu The is a Doctor of Contrastive Linguistics. He is currently a lecturer at Faculty of the Foreign Languages, Ba Ria - Vung Tau College of Education, Vietnam. His major areas of expertise are TESOL and Contrastive linguistics. His research interests are linguistics, semantics, stylistics, pragmatics and English language teaching methodologies. All of his published works are related to both linguistic studies and TESOL-related issues. Email: huuthecdsp@gmail.com; ORCID iD: <https://orcid.org/0009-0004-2075-6793>



Dang Thi Bao Dung is currently a lecturer at Can Tho University of Technology, Vietnam. She holds a Master's degree in TESOL from Victoria University, Australia, and a Ph.D. in Contrastive Linguistics from the University of Social Sciences and Humanities, Vietnam. Her research interests include language skills, teaching methodologies, test-preparation instruction, and the interplay between language and culture. Her published research encompasses both language teaching and linguistics. Email: dtbdung@ctuet.edu.vn; ORCID iD: <https://orcid.org/0009-0004-8194-8975>



Nguyen Thi Kieu Huong is an MA of English Language Teaching and she has been working as a lecturer of English at Thu Dau Mot University, Binh Duong for nearly 15 years. Her research interests include English language teaching methodologies, linguistics, language study and culture. Email: huongntk@tdmu.edu.vn; ORCID iD: <https://orcid.org/0009-0004-2458-5565>



Nguyen Thanh Xuan is majoring in TESOL methodologies and is also a participant in the Doctoral Program of Linguistic Arts in Bangkok, Thailand. Currently, she works as a lecturer at the Institute of Foreign Language Training at Thu Dau Mot University in Vietnam. Her research interests include linguistics, sociolinguistics, pragmatics, learner motivation, and English language teaching methodologies. She has recently begun conducting research and aspires to publish articles related to linguistic studies and TESOL-related issues. She is dedicated to improving language use in general as well as enhancing English language teaching and learning within global contexts. Email: xuannt@tdmu.edu.vn; ORCID iD: <https://orcid.org/0009-0000-2688-5247>