

# Effects of Using Quizizz on Vocabulary Acquisition of Vietnamese EFL Young Learners

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**Abstract**—Numerous studies substantiate the positive impact of digital platforms in English language learning, particularly vocabulary acquisition. Digital technology like Quizizz within language learning contexts has indicated that integrating emerging technology into English vocabulary acquisition effectively scaffolds language mastery. This study investigated the effects of using Quizizz on young learners' vocabulary acquisition of Vietnamese English as a Foreign Language (EFL). In particular, the study attempted to find out the effects of Quizizz on the vocabulary acquisition of young EFL learners and identify their perceptions of using Quizizz on their vocabulary acquisition. The study's data were collected through vocabulary pre-test and post-test for the first variable and a 25-item questionnaire for the second variable. The study participants were 34 learners at the Key English Test (KET) 4 level in a foreign language center in the Mekong Delta of Vietnam. The research encompassed 17 students in the experimental group (EG) and 17 in the control group (CG). After the intervention, although students in both groups improved their vocabulary acquisition, the participants in the experimental group achieved significantly higher scores than those in the control group. Moreover, the questionnaire findings showed that young Vietnamese EFL learners in the experimental group had more positive perceptions of teachers using the digital platform for their vocabulary review. Based on the results gathered, the study recommends that teachers use technology to design activities to teach vocabulary to young learners. Finally, some implications and recommendations are also included.

**Index Terms**—Quizizz, digital tool, Vietnamese EFL young learners, vocabulary acquisition, perceptions

## I. INTRODUCTION

The importance of English in today's globalization trend cannot be ignored because it is widely used in all parts of the world. According to Patel and Jain (2008), English is the world's most widely spoken language. The concept of English as a 'global communication style' refers to its role as a common medium of communication among people from different linguistic backgrounds, facilitating global interactions and understanding. This style is manifested in several dialects and the movement towards an international standard for the language. In addition to practicing listening, speaking, reading, writing skills, and using correct grammar, vocabulary is an important element in learning English. The famous linguist Wilkins (1972) said that very little can be expressed without grammar, and nothing can be conveyed without vocabulary. Indeed, vocabulary is regarded as the starting point for all foreign language acquisition and influences student success. Ellis (1997) confirmed that before fluently using a foreign language, a student might learn thousands of words, and it has been suggested that other components of language competency, such as comprehending grammar in a foreign language, depend on the development of the foreign language lexicon.

In the current study context, vocabulary acquisition of young Vietnamese EFL learners – level A2 is an issue that needs attention. Vocabulary plays an important role in young Vietnamese EFL learners because they need vocabulary to achieve the A2 level examination, according to the Common European Framework of References for Language (CEFR). According to Lelawati et al. (2019), it is vital for all language learners to comprehend and expand their vocabulary since the more words learners know, the easier learners study language. Besides that, teachers have an important influence on the development of children's vocabulary. The teachers should be conversant with teaching features such as techniques, tactics, processes, and resources to transmit the materials using students' unique characteristics successfully. Evans and Lang (2006) stated that a good technique may not benefit a teacher who does not know how to apply it, and a competent teacher can be more effective with more prominent methods. Furthermore, in the technological era, besides using traditional methods, teachers also use many tools and applications to support teaching. Therefore, the current research was conducted to determine the effectiveness of a digital tool in teaching vocabulary to young Vietnamese EFL learners and to find out students' perceptions of that tool.

Many studies have extensively acknowledged the importance of vocabulary in language acquisition. According to Lewis (1993), the core or heart of language is its vocabulary. Moreover, acquiring vocabulary is seen as a problematic component of learning foreign languages for learners. Meara (1980) stated that language cannot be adequately employed without vocabulary, and no language can exist without words. This is similar to previous studies that acknowledge students would not master the four skills without good vocabulary knowledge. First, Pham et al. (2022) claimed that most learners who lacked vocabulary could not produce compelling speaking performances. Secondly, due to their small vocabulary, young learners face problems grasping the texts when reading (Pringprom, 2012). Thirdly, Karakoç and Köse (2017) reported that vocabulary knowledge affects writing; students cannot complete their writing if they have a limited vocabulary. Finally, the most significant barrier to listening comprehension is a lack of vocabulary (Farrokhi & Modarres, 2012). As a result, vocabulary is essential in learning a foreign language, and the active methods for teaching and acquiring vocabulary should be appropriately used (Sivagnanam & Yunus, 2020).

## II. LITERATURE REVIEW

### A. *Receptive Vocabulary and Productive Vocabulary*

When reading and listening, readers and listeners may face the language called receptive vocabulary, the words being used to understand the messages. Stuart (2008) and Susanto (2017) found that receptive and productive vocabulary are the words children identify during the process of reading. In a wider perspective, Laufer and Goldstein (2004) proposed that receptive vocabulary was linked to both listening and reading. On the other hand, productive vocabulary alludes the word collection used to create messages. Speaking and writing are two fundamental abilities that naturally use productive vocabularies. Another essential aspect of the vocabulary category is their contribution to developing receptive and productive abilities. According to Jamalipour and Farahani (2012), language knowledge predicted reading comprehension favorably. This indicates that it predicts reading comprehension competency, providing evidence for receptive talent.

### B. *Roles of Vocabulary in English Language Learning*

In any language learning process, vocabulary is the most prevalent. It is considered an important aspect of English in every setting since it is considered the beginning of any foreign language acquisition and determines student success. Afzal (2019) said that learning a foreign language may be complex and dynamic. The communication process is dependent on the individuals' lexical knowledge. Once learners recognize the value of studying vocabulary, they can interpret many skillful expressions. In order to optimize students' performance in the classroom, it is also vital to search for various possibilities to help them in their learning process.

Ghalebi et al. (2021) stated that vocabulary growth is critical while attempting to learn a foreign language. As a result, vocabulary learning demands much attention to gain linguistic competency. Because vocabulary is such an important component of learning the English language, having difficulty with it can cause problems with reading comprehension and conversational abilities. Due to the disparities in language skills, this difficulty may be exacerbated for non-native English speakers. Additionally, Yawiloeng (2020) emphasized that vocabulary learning is essential to studying the target language since the vocabulary learned and gained by pupils will improve other aspects of language such as lexical, listening, writing, speaking, and reading abilities. Therefore, teachers must know how to teach vocabulary so that students can be encouraged to participate in the learning process.

### C. *Vocabulary Acquisition*

Vocabulary acquisition refers to learning and obtaining new words and their meanings (Ellis, 1995; McKeown & Curtis, 2014). Specifically, Ellis (1995) presented that it involves expanding one's lexicon through various means such as reading, listening and active engagement with language. Moreover, McKeown and Curtin (2014) supported the idea that vocabulary acquisition is not just about memorizing words but also understanding their nuances, usage and context. Gass (1988) confirmed that it is a dynamic process that involves continuous exposure to diverse vocabulary, which aids in developing a rich and robust language repertoire.

As Gass (1988) and Ellis (1995) put it, vocabulary acquisition involves several stages, with learners playing a central role. First, learners must be exposed to new words and their meanings through explicit instruction or incidental exposure. Next, learners must engage with these words in some way, such as by trying to understand their meanings, using them in context, or memorizing them through repetition. Milton (2009) claimed that as learners encounter these words in different contexts and situations, they develop a deeper understanding of their meanings and how they are used. Over time, learners integrate these new words into their mental lexicon, where they become part of their long-term memory.

### D. *Definitions of Quizizz*

Some concepts of Quizizz have been mentioned in recent studies. MacNamara and Murphy (2017) emphasized that quizzes may be an alternative to arranging classroom activities and offering students an assessment. According to Cadieux Bolden et al. (2017), when Quizizz is used, the feedback on monitoring and assessing students demonstrates high student participation. Besides that, Quizizz is an online app that provides a variety of resources for both teachers and students. The software may be used to create, distribute, and consume various materials offered by the community. Quispe et al. (2019) added that Quizizz includes many features that intrigue students, stimulating the learning process. The teacher

may gather a lot of information about the student's grades so he can offer individualized feedback to the students based on their grades.

#### E. Quizizz and Learners' Memorization

Students can get new information from repeating questions in Quizizz. Ja'afar et al. (2021) stated that repeating the questions in Quizizz all the time develops students' vocabulary and strengthens their memory. For instance, the students who heard the same questions three times were much better at remembering grammar and new words. Zhao (2019) confirmed that Quizizz help use images and videos in quizzes. This feature allows teachers to enrich learning with engaging visual content, promoting active recall and retrieval, essential for long-term memory retention. With its complete and easy-to-use features, Quizizz is a valuable tool for teachers and students to enhance interactive and practical learning experiences.

#### F. Quizizz Is a Happy Learning Environment

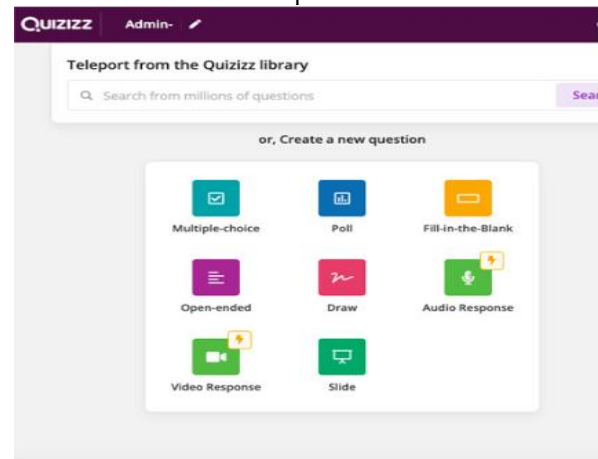
Muji et al. (2021) confirmed that Quizizz has many features that make it unique and attractive for students and teachers. These features include creating quizzes easily and quickly, providing real-time feedback, and customizing quizzes according to learning needs. Moreover, Zhao (2019) indicated that quizzes motivate students to compete with each other, which is helpful for the learning process. This game-based educational app helps teachers determine their students' levels or mistakes to give them feedback. Interestingly, Quizizz, which was initially oriented toward assessment, could be leveraged to teach vocabulary.

#### G. Steps to Apply Quizizz in a Classroom

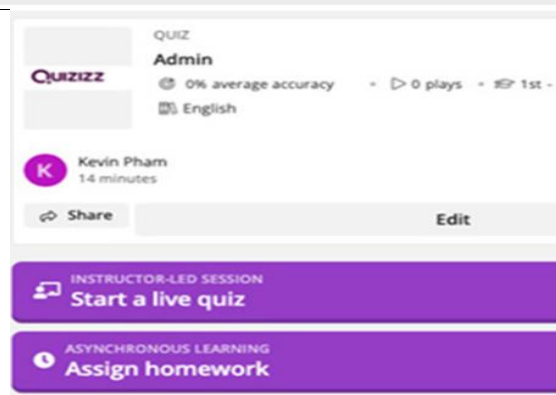
According to Pham (2022), Quizizz is accessible across various devices and can be implemented in either live sessions or as assigned homework, depending on the instructional goals. Users can join activities via a shareable access code. After each game, immediate feedback is provided, and participants have the option to share or export their performance data for further review. The steps for applying Quizizz are outlined below:

Step 1: Choose question types

users can share and export results for reviews



Step 2: Choose exercise modes



Step 3: Follow Quizizz live dashboard



Step 4: Check result dashboard



#### H. Related Studies of the Effects of Quizizz on Vocabulary Acquisition

Firstly, Samet (2018) conducted a study *Using Quizizz.com to enhance pre-intermediate students' vocabulary knowledge*. This study investigates the relationship between mobile-assisted language Learning (MALL) and vocabulary learning. In this study, 60 students from a Turkish university were separated into two groups and watched for four weeks. An accomplishment exam was delivered to both groups. During these four weeks, the experimental group utilized an app called Quizizz, whereas the control group continued to study vocabulary using traditional paper-based activities. According to the findings of this study, the experimental group marginally outperformed the control group. In other words, the experimental group demonstrated superior performance compared to the control group by using a mobile application for vocabulary improvement and target language. However, the mean scores of the groups indicated that the difference between their performance is not significant. One explanation is that students know their exam dates and portions of the book that will be assessed; as a result, they focus their preparation on these precise sections, only studying them the day before the exam. This study contributes to the area by indicating that mobile-assisted language learning can be beneficial for vocabulary acquisition and teaching, even if its effects are not immediately apparent in the short term (Bal, 2018).

Secondly, Huei et al. (2021) completed a research *Strategy to improve English vocabulary achievement during the COVID-19 epidemic. Does Quizizz help?* The researchers stated that the COVID-19 epidemic has drastically impacted language learning. As a result, e-learning was required to teach English. This study used a mixed method, with 13 pupils from a rural school participating. The researchers concluded that Quizizz had a 6-positive effect on vocabulary acquisition because students were driven by Quizizz's leaderboard. This encouraged them to practice more to be at the top of the scoreboard, which benefited their learning style.

Then, Ngo and Tran (2022) conducted the study *The application of Quizizz games on vocabulary retention of non-English major's students: A case study at Thai Nguyen University of Education*. This study aimed to examine the impact of Quizizz games on non-English major students' vocabulary memory and their opinions regarding the use of Quizizz. With 82 students divided into control and experimental groups, the study followed the quasi-experimental research methodology. Data were gathered using two instruments, a pretest and a posttest, and questionnaires delivered following the research period. The data analysis revealed that using Quizizz games benefited pupils. It improved the effectiveness of vocabulary acquisition, boosted vocabulary retention, and made learning more appealing to pupils. As a result, the study strongly recommends the integration of Quizizz games into EFL classrooms, as it offers a valuable tool for educators to enhance students' learning experience.

Finally, Kazu and Kuvvetli (2023) researched *a triangulation method on the effectiveness of digital game-based language learning for vocabulary acquisition*. This research aimed to investigate 8th-grade students' perspectives on digital game-based English language learning as a foreign language (EFL). The research included 69 kids aged 12 to 14 years old. The language acquisition skills of students were assessed using Quizizz. The study used a triangulation approach to gather the findings of a quasi-experiment and the learners' metaphorical views. A pre-test, post-test, and control group design were employed in the study. Before the study began, the experimental and control groups underwent a pre-test. The experimental group then used Quizizz to learn vocabulary, whereas the control group memorized vocabulary in their mother tongue. The post-test findings revealed substantial differences between the experimental and

control groups. Students had a positive view of digital game-based EFL, describing it as highly effective. They felt that in-game power-ups, competing with other students, and receiving immediate feedback enhanced their motivation.

### *I. Related Studies of Learners' Perceptions of Using Quizizz on Their Vocabulary Acquisition*

First, Degirmenci (2021) completed the article *The Use of Quizizz in Language Learning and Teaching from the Teachers' and Students' Perspectives: A Literature Review*. This comprehensive literature review aims to explore current research on the effectiveness of Quizizz as a helpful learning tool in second language education or foreign language classrooms, as well as to define students' and teachers' perspectives on the use of Quizizz. This study is a comprehensive review of studies published between 2018 and 2021. The researcher's information gained while researching the literature will bring the impacts of Quizizz to light. The current study's findings suggest that Quizizz is an effective and influential tool in English language teaching and learning, demonstrating beneficial impacts on educational outcomes, with both teachers and students expressing favorable attitudes towards its use.

Secondly, Do and Vo (2021) investigated the benefits of Quizizz on student vocabulary acquisition. The authors used mixed methodology, using a vocabulary test and an interview. According to the data, there was a considerable shift in learners' vocabulary acquisition over time. Students said they felt less stressed and more eager to learn new words. Furthermore, they proposed that Quizizz be used in future lectures to assist them in building confidence and comfort in EFL classrooms.

Similarly, the study *Exploring a Gamified Learning Tool in the ESL Classroom: The Case of Quizizz* by Anak Yunus and Hua (2021) was conducted to investigate the influence and effectiveness of Quizizz in facilitating the acquisition of irregular English verbs among young Malaysian ESL learners. This quasi-experimental research involved a sample of 30 primary school pupils and employed a pre-test and post-test design. The resulting data were subjected to descriptive analysis, with paired sample t-tests utilized to measure the improvement in students' performance on the post-test, thereby indicating the potential of Quizizz as a tool for enhancing language learning. The research findings suggested that Quizizz is highly effective in improving the teaching and learning of English irregular past verbs among young ESL learners. Additionally, it is a valuable tool for generating interest and passion for acquiring the English language. The use of game-based learning, exemplified by Quizizz, is seen as an exciting, creative, and impactful departure from traditional teaching methods, particularly appealing to millennials. The study supports the notion that incorporating Quizizz into language teaching is beneficial, as it successfully enhances students' interest and facilitates their acquisition of English irregular past verbs. Moreover, gamification equips both teachers and students to address the challenges and opportunities of globalization in education. Through the incorporation of online interactive games, educators enhance the quality of language teaching and promote digital literacy among the younger generation, aligning with the requirements of the fourth industrial revolution.

Pham (2022) studied *university students' attitudes towards using quizzes for learning English as a foreign language*. The study specifically looked at the students' perceptions of Quizizz, a platform designed for English language acquisition. The research used a mixed-methods approach, incorporating both quantitative and qualitative techniques to investigate students' attitudes and levels of satisfaction, as well as to explore the relationship between these variables. A questionnaire and semi-structured interviews were used, involving 116 university students. The findings revealed that Quizizz outperformed other technological platforms and applications due to its unique features and efficiency. The students' enthusiasm for using Quizizz in their English language studies was particularly noteworthy. This examination of the students' perspectives on Quizizz was significant, as it highlighted the various benefits they derived from it, including ease, motivation, engagement, and memory development.

Furthermore, their level of pleasure was high since their behaviors and sentiments when playing Quizizz games were significantly associated with their opinions regarding this instrument. As a result, it is inferred that Quizizz was an exceptional technological instrument for English language acquisition. Language instructors might use this tool in their courses to improve student learning outcomes and make technology-enhanced learning more sustainable. Quizizz developers were also urged to improve their capabilities to assist academic customers and people in need.

## III. METHODOLOGY

### *A. Research Questions and Design*

Quantitative research was used in this study. Questionnaires and two tests were employed to answer the two research questions in the study. The intervention time for the study is six weeks (12 meetings) from May to June 2024. The study was conducted at an informatics and foreign language center in the Mekong Delta of Vietnam, which is fully equipped with learning facilities. This study was guided by the following research questions:

1. To what extent does the use of Quizizz affect vocabulary acquisition of Vietnamese EFL young learners?
2. What are the EFL young learners' perceptions of using Quizizz on their vocabulary acquisition?

TABLE 1  
RESEARCH DESIGN

Group	Pre-test	Treatment	Post-test
Experimental group	X1	Quizizz	X2
Control group		Coursebook-based	

X1: Pre-Test of Experimental Group and Control Group

X2: Post-Test of Experimental Group and Control Group

### B. Participants

This study's participants are 34 young Vietnamese EFL learners selected using purposive sampling and divided into an experimental group of 17 students and a control group of 17 students. All Vietnamese EFL young learners must follow all units, including the vocabulary lessons, in the KET 4 course, and they must take a final test at the end of the course to check their English ability and vocabulary acquisition.

According to the Vietnam education program, all participants have learned English for five years from grade 3. In addition, they have extra time to learn English in the same environment – a Foreign Language Center in Tra Vinh City. Before they studied at the center, they had to take the placement test. This test aims to determine the individual's proficiency level and place them in an appropriate class that matches their abilities. They take 4 hours per week to study at the center. It is convenient for the researchers to implement the survey. The participants are between 14 and 15 years of age. They completed the KET 3 level or passed the final test to learn the KET 4 course. Therefore, they can take the research tests and participate in the survey to express their perceptions about teachers' strategies in the teaching process. Those are the reasons why they were chosen as participants. All of the students who were included in the study were kept anonymous. They are not required to specify their names, gender, or ethnicity as those have no relevance to the outcome of this survey.

### C. Instruments

According to Fraenkel et al. (2012), a quantitative study is one of the investigator's attempts to clarify phenomena via collecting and analyzing adequately prepared and controlled data. Therefore, the questionnaire was employed to investigate the learners' perceptions of teachers using Quizizz. A questionnaire is a standard instrument with questions or statements designed to collect data from respondents' replies (Fraenkel et al., 2012). In addition, pre-tests and post-tests were designed to examine changes in the student's vocabulary due to applying Quizizz as a digital tool. Ary et al. (2010) asserted that experimental research involves investigating the effect of systematic variation in one variable on another. This study assessed the treatment using Quizizz with the experimental group.

#### *Questionnaire*

The study employed a questionnaire to identify young Vietnamese learners' perceptions of using Quizizz as a digital tool for vocabulary learning. The questionnaire items were designed based on students' perceptions of using Quizizz, as proposed by P. H. Nguyen (2021), T.T. Nguyen (2021), Pham (2022), and Pham et al. (2023). The researchers chose to adopt and adapt the questionnaire from these sources due to the alignment of key points, such as students' interest in vocabulary learning, their preference for vocabulary lessons, and their vocabulary achievement. This alignment with previous research reassures the study's validity. The questionnaire (Table 2) encompassed 25 items and used a 5-point Likert scale ranging from 1 to 5, which was interpreted from strongly disagree to strongly agree.

TABLE 2  
QUESTIONNAIRE

No.	Statements	1	2	3	4	5
1	I think that it is easy to learn English vocabulary.					
2	I think I understand the meaning of the words deeper.					
3	I remember the words longer.					
4	I think I can follow the activities of the teacher when learning vocabulary.					
5	I think learning vocabulary with the teacher's activities helps me combine words into sentences better.					
6	I feel enjoyable with learning vocabulary.					
7	I think the teacher's activities makes me confused to understand the words.					
8	I get fed up with the teacher's activities.					
9	I think learning vocabulary through the teacher's activities are ineffective.					
10	I cannot remember the words longer.					
11	I think the teacher's activities are only suitable for beginners.					
12	I think the teacher's activities require a lot of time in class.					
13	I think I can understand words' form in sentences or real activities.					
14	I feel confident when using vocabulary.					
15	I think I can remember how to write words for a long period of time.					
16	I think I can remember how to speak words for a long period of time.					
17	I know how to distinguish groups of words and the purpose of using them.					
18	I know how to use a word in the context.					
19	My use of words has been increased.					
20	I gain more new words from the teacher's activities.					
21	I think I can use words in real-life communicative activities.					
22	My motivation to learn vocabulary increases substantially.					
23	I become a much more independent learner.					
24	I feel motivated when doing vocabulary tasks.					
25	I expect to have such vocabulary tasks repeated in subsequent courses.					

This questionnaire was collected twice at the beginning and end of the experiment. To ensure the quality of the questionnaire results, students in two groups were given a quiet environment to respond to the questionnaire items. First, the researchers showed students a 25-item questionnaire and instructed them on how to complete it. The participants then completed the questionnaire in 30 minutes. The 25-item questionnaire is critical for the researchers to determine whether students had positive or negative thoughts about their vocabulary acquisition and preferred activity and content input for a vocabulary lesson.

#### Vocabulary Tests

The researchers designed vocabulary tests for both groups. These vocabulary tests were delivered twice at pre-test and post-test moments. Moreover, the participants of this study are studying with the program based on the Common European Framework of References (CEFR); therefore, the researchers examined parts 2, 5, and 6 in Cambridge English A2 Key Test to design parts 1, 2 and 3 for the tests and part 4 is self-designed. The vocabulary test has four main parts, each including 10 questions. In part 1, students read the sentences and choose the best word for each space. This multiple-choice vocabulary test distinguishes learners effectively according to their level of vocabulary knowledge. Then, students read ten descriptions and write the word for each description. In part 2, the researchers checked the students' vocabulary spelling. In part 3, the researchers checked students' vocabulary use in a specific context, so students were required to read two texts and choose the correct word to fill five gaps in the two texts. In the last part, students were required to make 10 sentences from given words. Students had a chance to create different sentences by combining words. This part presented students' ability to use words. There were 80 vocabulary words in the list of 140 words from the Achievers A2 student's book used in the pre-test and post-test. The researchers used 40 receptive and productive vocabularies for the pre-test, including:

- (i) feelings and moods: *nervous, tired, funny, bored, calm, upset, annoyed, frightened, angry, sad, friendly*
- (ii) people in crime: *vandal, robber, pickpocket, joyrider*
- (iii) skills and interests: *keen on, hate, enjoy*
- (iv) appearance (describing people): *blonde, clever, thin*
- (v) jobs: *shop assistant, lawyer, farmer, accountant, pilot, detective, manager, doctor*
- (vi) household chores: *costume, rubbish*
- (vii) places: *theatre, hotel, shopping center*
- (viii) digital entertainment and electronic device: *speaker, printer, widescreen, mouse, digital camera, microphone*

Similarly, 40 receptive and productive vocabulary words were used in the post-test, as shown below, and the vocabulary acquisition performance rate at the post-test was similar to the pre-test.

- (i) feelings and moods: *hungry, excited, terrible, quite, embarrassed, like, cheerful, happy, sick*
- (ii) people in crime: *burglar, mugger*
- (iii) skills and interest: *fond of, fireworks, admire, interesting, good at*
- (iv) appearance (describing people): *serious, wavy, bald, tall, shy, slim*
- (v) jobs: *firefighter, builder, professor, teacher, vet, nurse*

- (vi) household chores: *plant, dish washer, take a dog for a walk*  
 (vii) places: *bank, town hall, library, coffee shop, sandwich bar, sport center, pharmacy, internet café*  
 (viii) digital entertainment and electronic device: *computer*

TABLE 3  
RANGE OF STUDENTS' VOCABULARY ACQUISITION PERFORMANCE AT THE PRE-TEST AND POST-TEST

Students' vocabulary score	Level of students' performance
0 - ≤ 10	Very poor
10 - ≤ 15	Below average
15 - ≤ 20	Average
20 - ≤ 30	Above average
>30	Excellent

Note: Min score is 0; Max score is 40.

#### D. Data Collection Procedure

The tests in the experimental group and control group are of the same level of KET 4, with the same format and the same length. The data collected were submitted to SPSS (version 25) for analysis.

TABLE 4  
RESEARCH PROCEDURE FOR THE INTERVENTION

Time	Research activities	
	Control group	Experimental group
Meeting 1	The teacher informed the course's aim and explain that data from the course would be used for research and treated confidentially.	
Meeting 2	The pre-test and pre-questionnaire were delivered to both groups. The forms of the test are: - Multiple choice - Read descriptions and write the words - Filling gaps - Make sentences with given words	
Meeting 3-11	- Students would take unit 6, 7, 8, 9 - Vocabulary would be reviewed by word-meaning activity	- Students would take unit 6, 7, 8, 9 - Vocabulary would be reviewed by Quizizz
Meeting 12	The post-test and the post-questionnaire was delivered to both groups.	

## IV. RESULTS AND DISCUSSION

### A. Effects of Using Quizizz on Vocabulary Acquisition of Vietnamese EFL Young Learners

#### Students' Vocabulary Acquisition at the Pre-Test in Two Groups

TABLE 5  
INDEPENDENT SAMPLES T-TEST OF THE EXPERIMENTAL AND CONTROL GROUPS AT THE PRE-TEST

Groups	Test	Mean	SE	SD	Sig. (2-tailed)	<i>t</i>	<i>df</i>
EG (n=17)	Pre-test	21.47	2.10	8.66	.963	-0.046	32
CG (n=17)		21.59	1.43	5.91			

Table 5 demonstrates the scores of two groups regarding vocabulary size at the pre-test performance of students. At the pre-test, the Independent Samples T-test revealed no statistical difference between the experimental and control groups ( $t(34) = -0.046, p = .963$ ). The conclusion is that the students' vocabulary levels in the two groups were comparable.

#### Students' Vocabulary Acquisition at the Post-test in Two Groups

TABLE 6  
INDEPENDENT SAMPLES T-TEST OF THE EXPERIMENTAL AND CONTROL GROUPS AT THE POST-TEST

Groups	Test	Mean	SE	SD	Sig. (2-tailed)	<i>t</i>	<i>df</i>
EG (n=17)	Post-test	29.63	1.09	4.35	0.00	2.92	26
CG (n=17)		25.33	0.88	3.06			

The results presented in Table 6 show a difference between the two groups following the intervention ( $t(26) = 2.92, p = .000$ ). At the post-test of vocabulary acquisition, the results of the Independent Samples T-test revealed a statistical difference in students' vocabulary acquisition between the experimental and control groups. There was a significant change in the post-test after the six-week intervention.

#### Comparison of the Mean Scores from Pretest to Post-test of the Experimental Group

TABLE 7  
PAIRED SAMPLES T-TEST OF THE PRE-TEST AND POST-TEST SCORES OF THE EXPERIMENTAL GROUP

Group	Test	Mean	SE	SD	Sig(2-tailed)	<i>t</i>	<i>df</i>
EG (n=17)	Pre-test	20.56	2.01	8.06	0.000	-6.415	15
EG (n=17)	Post-test	29.63	1.01	4.35			

The statistical difference between the mean scores before and after the intervention of teachers using Quizizz in the experimental group is evident from Table 7 above. In the experimental group, the mean score before the intervention was 20.56 and 29.63 after, a significant increase. The value of Sig. (2-tailed) was .000, confirming that the mean score of the post-test was significantly higher than the mean score of the pre-test. The mean value of the post-test score in the experimental group was 29.63, which was rated as "Above average" (see Table 3), a clear sign of the intervention's effectiveness. The mean value of the pre-test score in the experimental group was also 20.56. As a result, it is possible to infer that students in the experimental group improved better in terms of vocabulary acquisition following the six-week intervention using Quizizz.

#### Comparison of the Mean Scores from Pretest to Post-test of the Control Group

TABLE 8  
PAIRED SAMPLES T-TEST OF THE PRE-TEST AND POST-TEST SCORES OF THE CONTROL GROUP

Group	Test	Mean	SE	SD	Sig (2-tailed)	<i>t</i>	<i>df</i>
CG (n=17)	Pre-test	22.75	1.61	5.56	.072	-1.988	11
CG (n=17)	Post-test	25.33	0.88	3.06			

The control group's mean pre-test score was 22.75, but it reached 25.33 in the post-test. The value of Sig (2-tailed) was .072. After six weeks, the mean scores for vocabulary acquisition in the control group showed only a slight change between the pre-test and post-test. Overall, the students in the control group somewhat improved from the pre-test to the post-test.

#### Overview of Findings

Generally, from the pre-test to the post-test, there was a significant difference in the experimental condition's vocabulary size ( $t(33) = -6.415, p = .000$ ). At the same time, there was only a slight change in the control group ( $t(29) = -1.988, p = .072$ ). Furthermore, there was a statistical difference between the pre-test and post-test scores of students in the experimental group.

In conclusion, there was no significant difference in the two groups' vocabulary size prior to the six-week intervention of using Quizizz and textbook-based activities. As a result of the post-test, students in the experimental group acquired a larger vocabulary after the six-week course, in line with the impacts of teachers' use of Quizizz.

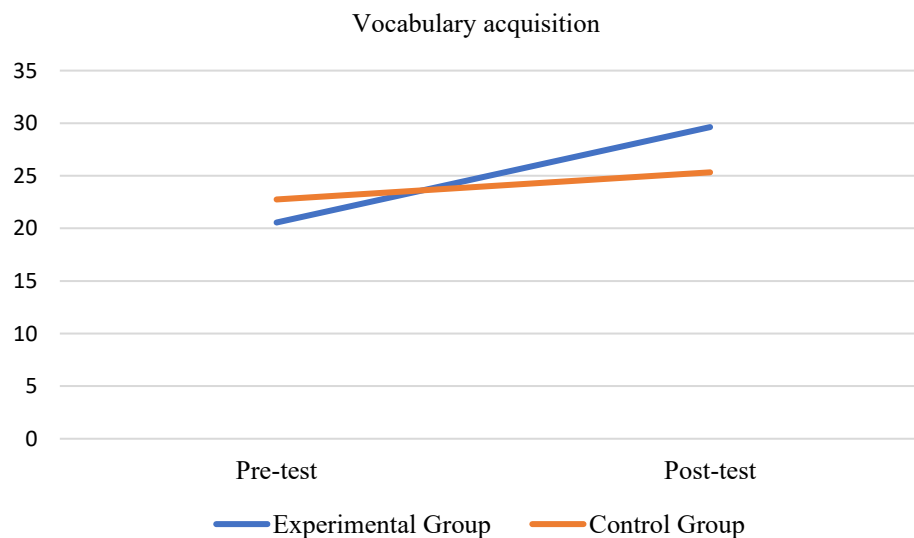


Figure 1. Students' Vocabulary Acquisition With the Mean Scores of the Pre-Test and Post-Test in the Experimental and Control Groups

#### B. Perceptions of Vietnamese EFL Young Learners Towards Vocabulary Acquisition Through Teachers' Using Quizizz

##### Independent Samples T-test on the Questionnaire of Two Groups at Pre-test and Post-test

To address the second research question, the descriptive statistical test was used to compute the mean score of students' perceptions of teachers using Quizizz. The two groups' pre- and post-questionnaire mean scores were used to determine whether students had positive perceptions of their vocabulary acquisition.

TABLE 9  
INDEPENDENT SAMPLES T-TEST ON THE QUESTIONNAIRE OF TWO GROUPS AT THE PRE-TEST AND POST-TEST

Stage	Group	Mean	df	Sig. (2-tailed)
Pre-test	Experimental Group (n = 17)	6.62	16	.310
	Control Group (n = 17)	6.05	16	
Post-test	Experimental Group (n = 17)	8.02	16	.000
	Control Group (n = 17)	7.36	16	

The Independent Samples T-test was used to compare learners' perceptions of the two groups from the pre-test to the post-test. According to Table 9, the total mean scores of the pre-test questionnaire in the experimental and control groups were 6.62 and 6.05. Statistical analysis revealed no significant difference in the mean scores between the two groups prior to the intervention. At the pre-test, the value of Sig. (2-tailed) was .310, which was more than  $p = .05$ . Thus, the participants' perceptions toward vocabulary acquisition prior to the six-week intervention were similar in both groups.

Additionally, the Independent Samples T-test was performed to determine whether a statistically significant difference existed between the two groups' mean scores regarding students' perceptions of vocabulary acquisition after the treatment. The experimental group had a mean score of 8.02 on the post-test of the questionnaire, while the control group had a score of 7.36. A statistically significant difference was found, as the Sig. (2-tailed) value of .000 was lower than the threshold of  $p = .05$ , indicating that the experimental group outperformed the control group. As a result, the participants in the experimental group had a greater level of positive perceptions about their vocabulary acquisition than those in the control group.

#### *Paired Sample T-test on the questionnaire of two groups at pre-test and post-test*

As can be seen in Table 10, the Paired Sample T-test was used to compare the difference of perceptions of vocabulary acquisition between learners in two groups.

TABLE 10  
PAIRED SAMPLE T-TEST ON THE PRE-TEST AND POST-TEST QUESTIONNAIRE OF EACH GROUP

Group	Stage	Mean	df	Sig. (2-tailed)
Experimental group (n=17)	Pre-test	6.62	24	.000
	Post-test	8.02	24	
Control group (n=12)	Pre-test	6.05	24	.002
	Post-test	7.36	24	

The experimental group's mean scores in judgments of their vocabulary acquisition dramatically improved from 6.62 to 8.02, and the value of Sig. (2-tailed) was .000. The mean scores of the control group participants improved from 6.05 to 7.36, and the value of Sig. (2-tailed) was .002. It was obvious that the participants of the two groups had considerable differences in perceptions of vocabulary acquisition after the intervention. However, the participants in the experimental group had more positive perceptions of vocabulary acquisition and enthusiasm for vocabulary gain.

Finally, the questionnaire findings indicated a substantial difference in the mean scores between the two groups. Before the intervention, the participants in both groups had lower perceptions of vocabulary acquisition than after the intervention. Following the study's intervention, the post-questionnaire results revealed a substantial difference in the two groups' perceptions of vocabulary acquisition. Individuals in both groups had a more favorable perception of their learning regarding their vocabulary acquisition. On the other hand, students in the experimental group had more precise and positive thoughts about vocabulary acquisition than students in the control group.

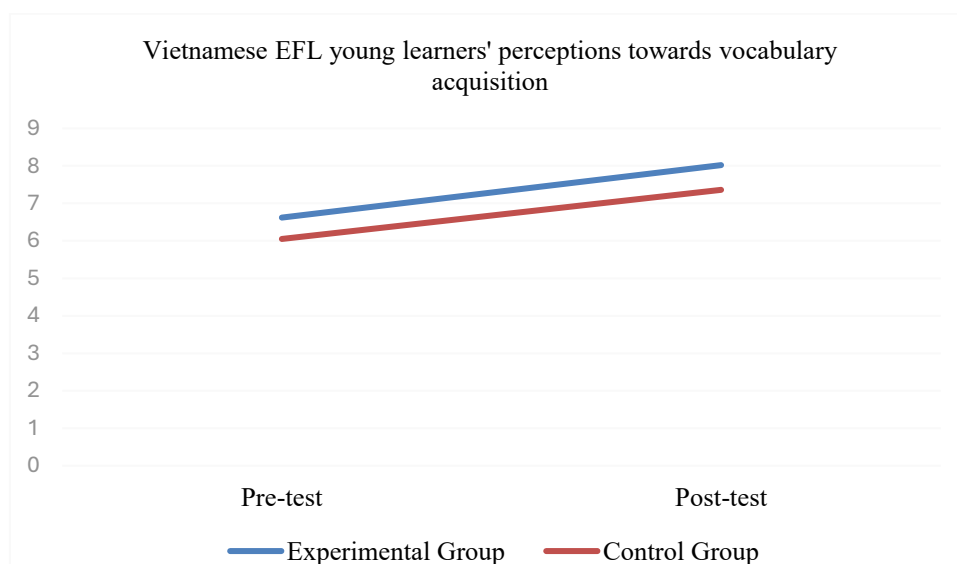


Figure 2. The Difference Between the Mean Scores of Two Groups at the Pre-Test and Post-Test of the Questionnaire

### C. Discussion

#### *Effects of Teachers' using Quizizz on Vietnamese EFL Young Learners' Vocabulary Acquisition*

After six weeks, the learners in both groups showed a change in their vocabulary acquisition. However, the improvement in vocabulary acquisition in the control group was lower than in the experimental group. The most notable finding was that most of the young learners in the experimental group performed better on their vocabulary test.

In addition, the findings suggest that utilizing Quizizz to acquire vocabulary in the setting of young Vietnamese EFL learners may have a more significant impact than using traditional resources in students' vocabulary acquisition. First, this study's findings are compatible with the findings of Ngo and Tran (2022), who suggested that Quizizz games positively influenced first-year students' vocabulary acquisition and their opinions regarding applying the digital platform in vocabulary learning. Second, aligning with the study of Samet (2018), utilizing Quizizz for vocabulary learning provided more significant advantages, including improving students' vocabulary acquisition and increasing their interest in studying vocabulary. The current study's findings show that the experimental group outperformed the control group by applying Quizizz to improve their vocabulary knowledge and acquire the target language.

Expanding the understanding of the effects of digital platforms. In this case, Quizizz is one of the digital platforms that positively affects vocabulary acquisition and perceptions of young learners. It is noted that the current study focuses on young learners at the A2 level in EFL classrooms of a foreign language center in the Mekong Delta of Vietnam. In contrast, previous studies usually concentrate on adult learners in a formal setting such as high school or university. Moreover, the study is designed explicitly with two group conditions rather than just testing Quizizz on one group. The vocabulary tests also examine vocabulary acquisition from three domains: form, meaning, and function in usage. Additionally, vocabulary topics in the test are found and taken from the syllabus. These differences in the findings and unique variables in this study make it different from those previously conducted.

#### *Perceptions of Vietnamese EFL Young Learners Towards Vocabulary Acquisition Through Teachers' Using Quizizz*

The findings indicated that EFL young learners had positive attitudes towards applying Quizizz in their English language learning, which was consistent with the results from Pham (2022) since Quizizz increased their motivation in class. Young learners' perceptions strongly influence their vocabulary learning, which affects their English vocabulary acquisition and, in turn, will improve their learning. Moreover, the study revealed that young EFL learners were satisfied with Quizizz at a higher range. This finding was in line with several studies by Fadillah and Maryanti (2021), in which students' interest was enhanced in their English classes using Quizizz. Students might feel more excited when they play Quizizz games to review their lessons, especially unwind after nerve-racking class time.

## V. CONCLUSIONS

### *A. Findings*

This study sheds light on the effects of Quizizz on the vocabulary acquisition of young Vietnamese EFL learners, which revealed that students in the experimental group performed better on the vocabulary test than those in the control group. As a result, Quizizz has a good impact on young learners' vocabulary acquisition. Furthermore, while the findings of the vocabulary learning activities of this study uncovered that students in both groups exhibit increased appreciation for their vocabulary acquisition, those who use Quizizz in their classes showed a more positive change in their perceptions of vocabulary acquisition.

According to the findings, the average pre-test scores in the two groups were not substantially different. The vocabulary size of the two groups was similar before the intervention. In the post-test, both groups gained higher vocabulary scores. However, after learning with Quizizz, students in the experimental group improved their vocabulary acquisition more than those in the control group. Therefore, quizzes are claimed to be an efficient tool for improving students' vocabulary skills.

The study's second research question explores the perceptions of young Vietnamese EFL learners regarding vocabulary acquisition. The results revealed that both groups positively changed their perceptions of vocabulary acquisition after the intervention. However, a difference was observed in the post-questionnaire scores between the two groups, with the experimental group achieving a higher mean score than the control group. This might imply that students in the experimental group had more positive perceptions of their vocabulary acquisition than participants in the control group.

### *B. Implications*

To scaffold students in learning vocabulary with Quizizz effectively, this study draws several implications. Because incorporating quizzes is primarily beneficial and may assist students in becoming effective learners, teachers are encouraged to master them and educate their students using this strategy as an online platform that is in keeping with the present period. The teachers make sure that their students have a solid connection on their mobile phones so that it does not interfere with the learning process. Furthermore, they should provide learners with simple and familiar activities that aim to give them quick access to existing knowledge and develop their fluency in language skills. Additionally, teachers not only encourage students, provide them with advice and self-study methods, but also create schedules to check for completed vocabulary exercises and assess learners' vocabulary comprehension.

### *C. Limitations and Recommendations for Future Research*

One limitation is its relatively small sample size of 34 students, all from a single foreign language center in southern Vietnam. This sample of participants is lower than expected because it depends on the number of students registered for the course at the language center. Another limitation is that the pre-test and post-test formats are similar. Therefore, the students might be familiar with the test format, which might help them take the post-test better. In future studies, the post-test may be designed differently.

## ACKNOWLEDGEMENTS

We acknowledge the support of time and facilities from Tra Vinh University (TVU) for this study.

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