



**DOI:** <https://doi.org/10.52714/dthu.15.3.2026.1782>

## **ENHANCING ENGLISH VOCABULARY THROUGH QUIZIZZ FOR PRIMARY SCHOOL PUPILS IN THE MEKONG DELTA**

**Le Thi Truc Le<sup>1\*</sup> and Le Hong Phuong Thao<sup>2</sup>**

<sup>1</sup>*Postgraduate, Dong Thap University, Cao Lanh 870000, Vietnam*

<sup>2</sup>*Foreign Languages Faculty, Dong Thap University, Cao Lanh 870000, Vietnam*

*\*Corresponding author, Email: lethitrucl08051996@gmail.com*

### **Article history**

*Received: 04/8/2025; Received in revised form: 10/10/2025; Accepted: 20/11/2025*

### **Abstract**

*This quasi-experimental study examines the effectiveness of Quizizz in supporting primary school pupils' English vocabulary learning in the Mekong Delta. A total of 64 fifth-graders participated in a 14-week intervention using Quizizz to practice and consolidate target vocabulary. Data were collected through pre- and post-tests, survey questionnaires, and a teacher interview. Quantitative analysis revealed statistically significant gains in students' vocabulary performance, while qualitative findings indicated higher levels of motivation, engagement, and positive attitudes toward the platform. The interviewed teacher also reported improved vocabulary retention and greater student enthusiasm during lessons. The study affirms the pedagogical potential of Quizizz for enhancing vocabulary acquisition in young learners and provides empirical evidence for its integration into English language teaching in under-resourced contexts.*

**Keywords:** *Mekong Delta, primary school students, Quizizz, vocabulary learning.*

---

Cite: Le, T. T. L., & Le, H. P. T. (2026). Enhancing English vocabulary through quizizz for primary school pupils in the Mekong Delta. *Dong Thap University Journal of Science*, 15(3), 17-33. <https://doi.org/10.52714/dthu.15.3.2026.1782>

Copyright © 2026 The author(s). This work is licensed under a CC BY-NC 4.0 License.

## **TĂNG CƯỜNG VỐN TỪ VỰNG TIẾNG ANH THÔNG QUA NỀN TẢNG QUIZIZZ CHO HỌC SINH TIỂU HỌC TẠI ĐỒNG BẰNG SÔNG CỬU LONG**

**Lê Thị Trúc Lệ<sup>1\*</sup> và Lê Hồng Phương Thảo<sup>2</sup>**

<sup>1</sup>*Học viên cao học, Trường Đại học Đồng Tháp, Việt Nam*

<sup>2</sup>*Khoa Ngoại Ngữ, Trường Đại học Đồng Tháp, Việt Nam*

*\*Tác giả liên hệ, Email: lethitrucler08051996@gmail.com*

### **Lịch sử bài báo**

*Ngày nhận: 04/8/2025; Ngày nhận chỉnh sửa: 10/10/2025; Ngày duyệt đăng: 20/11/2025*

### **Tóm tắt**

*Nghiên cứu bán thực nghiệm này xem xét hiệu quả của Quizizz trong việc hỗ trợ học sinh tiểu học học từ vựng tiếng Anh tại Đồng bằng sông Cửu Long. Tổng cộng 64 học sinh lớp năm đã tham gia vào một chương trình can thiệp kéo dài 14 tuần bằng Quizizz để thực hành và củng cố vốn từ vựng mục tiêu. Dữ liệu được thu thập thông qua các bài kiểm tra trước và sau, bảng câu hỏi khảo sát và phỏng vấn giáo viên. Phân tích định lượng cho thấy sự tiến bộ đáng kể về mặt thống kê trong hiệu suất từ vựng của học sinh, trong khi các phát hiện định tính chỉ ra mức độ động lực, sự tham gia và thái độ tích cực cao hơn đối với nền tảng này. Giáo viên cũng báo cáo rằng khả năng ghi nhớ từ vựng được cải thiện và học sinh nhiệt tình hơn trong các bài học. Nghiên cứu khẳng định tiềm năng sự phạm của Quizizz trong việc tăng cường khả năng tiếp thu từ vựng ở những người học trẻ tuổi và cung cấp bằng chứng thực nghiệm cho việc tích hợp Quizizz vào việc giảng dạy tiếng Anh trong các bối cảnh thiếu nguồn lực.*

**Từ khóa:** *Đồng bằng sông Cửu Long, học sinh tiểu học, học từ vựng, Quizizz.*

## **1. Introduction**

In the era of rapid digital technology development, although vocabulary is a core element in foreign language learning, Yip and Kwan (2006) found that many digital generation students perceive vocabulary learning as dry and unmotivating. This raises an urgent need to find vocabulary teaching solutions that are suitable for the modern learning trends among young children.

Faced with this situation, numerous researchers worldwide have conducted studies revolving around the use of online learning tools to support more effective teaching and learning of English vocabulary. Among them, Quizizz, a gamified learning platform, has emerged as superior to other gamified learning platforms, such as Kahoot!, Wordwall, or Quizlet, and has been proven effective in increasing learners' concentration, interest, and learning outcomes (Ibad et al., 2023). Degirmenci (2021) noted that both teachers and students highly appreciated the positive impact of Quizizz on the vocabulary learning process. In Indonesia, Handoko et al. (2021) showed that Quizizz helped students improve their test scores and increase their engagement in class. A study by Anak and Hua (2021) in Malaysia also yielded positive results when using Quizizz to teach vocabulary to primary school students.

In Vietnam, the Ministry of Education and Training (2018) has a policy of encouraging the integration of technology in teaching English through the general education English language curriculum, which has led to numerous studies in this field (Ngoc, 2024; Pham, 2022; Vu et al., 2024). Many Vietnamese studies have shown that integrating technology tools into English language teaching enhances learner engagement, motivation, and language skills (e.g., Nguyen, 2024; Pham, 2019; Thach, 2018), demonstrating that technology-enhanced lessons increase interaction and improve foreign language competence. More recent research has focused on the application of Quizizz, highlighting its effectiveness in enhancing vocabulary learning and increasing learner engagement (e.g., Le, 2024; Nguyen, 2025). However, studies on the effects of Quizizz in teaching and learning English vocabulary for primary school students in the Mekong Delta are insufficient.

From the above arguments, this study was conducted to investigate the impact of the online learning platform Quizizz on improving the English vocabulary of primary school students in the Mekong Delta. At the same time, the study also aims to explore the perceptions of teachers and students regarding the effectiveness of using Quizizz in the English vocabulary teaching and learning process. From there, the study raises two main questions:

*(1) To what extent does the use of Quizizz enhance primary school pupils' vocabulary development in comparison with traditional classroom instruction?*

*(2) What are the teacher's and pupils' perceptions of the use of Quizizz in teaching and learning English vocabulary?*

## **2. Literature review**

### **2.1. Vocabulary and Teaching Vocabulary to Primary School Pupils**

In applied linguistics, vocabulary is not simply a list of words that a learner knows, but also encompasses comprehensive knowledge related to each word, including its meaning, pronunciation, spelling, and usage in real-world communication contexts. According to Nation (2001), vocabulary is divided into two main groups: receptive vocabulary (encompassing listening and reading) and productive vocabulary (encompassing speaking and writing), with receptive vocabulary often dominating in quantity. A deep understanding of the relationship between these two types of vocabulary enables teachers to design appropriate teaching

activities, supporting learners in transitioning from passive, one-sided knowledge to active use in communication.

For young learners, vocabulary knowledge plays a significant role in enabling them to express basic needs and ideas, follow classroom instructions, and actively participate in communicative activities (Garden, 2022). A rich vocabulary allows children to articulate everyday thoughts more clearly, which supports early expressive fluency (Rowe et al., 2012). Young learners with stronger vocabularies also comprehend teacher directions more accurately, facilitating smoother classroom interaction (Zainuddin et al., 2020). Moreover, having enough vocabulary helps young learners feel more confident, speak with less hesitation, and take a more active role in classroom communication activities, including pair work, group discussions, and simple presentations (Garden, 2022).

Primary school learners acquire vocabulary in ways that reflect their cognitive and psychological development. They learn best through concrete experiences, such as images, sounds, and physical actions, which help them form strong associations between words and meaning (Piaget, 1973; Cameron, 2001). Young learners are naturally curious and highly imitative, which allows them to absorb new words quickly when language is presented in meaningful, playful contexts (Pinter, 2017). Their rich imagination and preference for engaging, interactive tasks make approaches such as storytelling, songs, and language games especially effective for vocabulary learning (Budianto et al., 2022; Trinh, 2022). These characteristics highlight the importance of creating vocabulary lessons that are multisensory, contextualized, and enjoyable for learners at this age.

Vocabulary teaching for young learners should be guided by principles that align with their cognitive and linguistic development. Piaget's (1973) theory indicates that children at the concrete operational stage learn most effectively through hands-on experiences and visual supports. Vygotsky (1978) emphasizes scaffolding and social interaction, highlighting the importance of teaching words in meaningful, collaborative contexts. Krashen's (1982) Input Hypothesis reinforces the need for comprehensible input that slightly exceeds learners' current level to promote natural language acquisition. Similarly, Communicative Language Teaching encourages vocabulary learning through purposeful communication and active participation (Richards & Rodgers, 2014). These principles collectively suggest that vocabulary instruction should be contextualized, interactive, and developmentally appropriate, ensuring that young learners can link words with real-life experiences and use them meaningfully.

## **2.2. Definition and Key Features of Quizizz**

Quizizz is an online learning platform that integrates gamification elements, designed to increase student engagement, interest, and learning effectiveness. Quizizz is a game-based learning platform that enables teachers to design interactive quizzes in multiple formats, including multiple-choice, fill-in-the-blank, image-based, and drag-and-drop questions, and provides learners with instant feedback and gamified features (Sangwan, 2023). The outstanding features of Quizizz are real-time rankings, reward badges, and a lively interface, which help increase student motivation. In particular, teachers can use Quizizz as a regular assessment tool and adjust lesson content based on specific feedback from each student (Handoko et al., 2021).

Quizizz can be implemented in different formats, such as live quizzes, homework, and Paper Mode. Among these, Paper Mode was selected in this study for its suitability in technology-limited classroom settings. In these classrooms, Quizizz's Paper Mode offers an inclusive and practical solution for formative assessment and classroom interaction. Instead of relying on personal electronic devices, students respond using printed QR-coded cards, which

they hold up when answering questions, while teachers scan the cards with a smartphone to record responses instantly (Husnah et al., 2023; Aldevella & Utami, 2025). This approach reduces technological barriers and ensures full-class participation, making gamified learning accessible and equitable for all students regardless of device availability.

### **2.3. Benefits of Using Quizizz for Teaching Vocabulary to Primary School Pupils**

Quizizz plays a pivotal role in enhancing primary school learners' vocabulary acquisition because its design directly addresses children's need for motivation and engagement. At this age, learners are easily distracted due to their naturally shorter attention spans and therefore require playful and stimulating environments to stay focused on learning tasks (Cameron, 2001; Pinter, 2017). Quizizz's gamified features, such as points, leaderboards, and badges, create a competitive yet enjoyable atmosphere that sustains intrinsic motivation and keeps children actively involved in vocabulary practice (Nation, 2001; Degirmenci, 2021; Wang et al., 2024). Since young learners respond best when learning resembles a game, the platform's interactive format effectively matches their developmental characteristics and maximizes participation (Pinter, 2017).

Another significant benefit of Quizizz is its capacity to provide immediate feedback, which aligns with children's cognitive need for timely reinforcement and error correction. Young learners are still forming their lexical knowledge and require instant support to consolidate word meanings and prevent the fossilization of mistakes (Cameron, 2001). The platform's automatic error correction enables learners to adjust their understanding on the spot, while its performance reports help teachers identify words that cause difficulties and design targeted follow-up activities (Pitoyo et al., 2020; Degirmenci, 2021). Such scaffolding is particularly important in primary education, where vocabulary knowledge builds cumulatively and requires frequent reinforcement for lasting retention.

Quizizz also promotes equitable participation in vocabulary learning, a factor especially critical for young learners who thrive in collaborative, whole-class experiences. In resource-limited schools, its Paper Mode allows students without personal devices to join activities using printed QR-coded cards, ensuring inclusivity regardless of technological access (Husnah et al., 2023; Aldevella & Utami, 2025). By enabling all children to engage in the same activity simultaneously, the platform supports fairness and reinforces the social dimension of learning, which is central to the developmental needs of primary school students (Cameron, 2001). This design ensures that every learner can benefit from interactive practice and shared classroom experiences.

Finally, Quizizz contributes to durable vocabulary learning outcomes by combining repetition, multimodal input, and low-stress practice. Because children learn most effectively when they encounter words repeatedly across multiple contexts and sensory modalities, the platform's use of visuals, sounds, and gamified repetition strengthens memory traces and facilitates transfer to long-term storage (Cameron, 2001; Wang et al., 2024). The enjoyable and interactive nature of tasks further reduces anxiety, allowing learners to apply vocabulary more accurately in productive skills such as speaking and writing (Degirmenci, 2021). Thus, Quizizz supports the developmental preference of primary school learners for varied, multimodal, and engaging input while fostering a strong lexical foundation.

### **2.4. Challenges in Using Quizizz for Vocabulary Teaching Primary School Pupils**

One major challenge of applying Quizizz in primary school vocabulary instruction lies in the technological infrastructure required for its implementation. Young learners need consistent exposure to interactive activities to consolidate vocabulary effectively, yet many rural schools still face unstable internet connections, limited devices, and uneven technological

readiness among teachers (Intriago-Cobeña et al., 2024). These barriers prevent children from engaging regularly with the platform, which can disrupt the repetition and reinforcement processes essential for vocabulary retention at this developmental stage (Cameron, 2001). Without stable technological access, Quizizz cannot be embedded consistently into daily vocabulary instruction but instead becomes an occasional add-on activity, which undermines its pedagogical value for young learners who require regular, repeated practice to retain new words (Intriago-Cobeña et al., 2024; Cameron, 2001).

Another difficulty is that Quizizz's gamified design, while motivating, may sometimes distract primary learners from the actual learning objective. Children at this age are highly responsive to rewards and competition, often valuing points or leaderboard rankings over language content (Zainuddin et al., 2020). When attention shifts toward winning the game instead of internalizing word meanings, learners may memorize vocabulary superficially without developing the deeper understanding needed for communicative use (Pinter, 2017). When students become overly focused on scores and competition, the play element may overshadow the learning objective, resulting in superficial memorization of vocabulary without deeper semantic processing (Pinter, 2017; Zainuddin et al., 2020).

Although the gamified design of Quizizz increases learners' motivation, the rapid pace of its activities can become a barrier to effective vocabulary learning, since young children often struggle to process new information deeply when pressured to respond too quickly (Zainuddin et al., 2020; Nation, 2001). Research shows that primary school students require repeated and scaffolded exposure to new words, as well as sufficient time for rehearsal, in order to internalize vocabulary (Nation, 2001). However, the quick-response format of Quizizz may encourage children to focus on speed rather than depth, leading to rote memorization instead of meaningful learning (Degirmenci, 2021). When this happens, students may collect correct answers without understanding the semantic relations or communicative functions of the words, which reduces the transfer of knowledge to authentic language use (Zainuddin et al., 2020). This challenge reflects the developmental need of young learners for slower, reinforced, and contextualized input to gradually build a stable and usable mental lexicon (Cameron, 2001).

A further challenge in using Quizizz for vocabulary teaching is that its effectiveness largely depends on teachers' pedagogical ability to design balanced and age-appropriate activities (Zainuddin et al., 2020). Primary learners require structured guidance, varied input, and continuous assessment to benefit fully from gamified tools, as their lexical development depends on gradual scaffolding and repeated practice (Cameron, 2001). However, if teachers rely solely on Quizizz scores as indicators of success, they may neglect essential aspects of vocabulary learning such as pronunciation, collocation, and contextual usage, which are critical for long-term language development (Pitoyo et al., 2020). This creates a significant pedagogical demand on teachers, who must integrate Quizizz thoughtfully with complementary methods to ensure that the platform supports rather than replaces comprehensive vocabulary instruction (Zainuddin et al., 2020).

### **3. Methodology**

#### **3.1. Participants**

The study was conducted at a primary school in the Mekong Delta region. The total number of participants was 64 fifth-grade students, divided into two identical classes with equal numbers of students (32 students in each class). The selection of participants was carried out using the purposive sampling method to ensure uniformity in teaching and learning conditions.

The experimental and control classes were both taught by the same English teacher at the primary school, who served as the official teacher of these two classes. This teacher was selected to ensure that any differences in student outcomes would reflect the effects of the intervention rather than variations in teaching style or teacher expertise. Both groups were instructed with the same textbook and curriculum, during the same study period, and in the same learning environment at the school, which further minimized external variables and enhanced the validity of the comparison. One class was selected as the experimental group in the study, which applied Quizizz in paper mode during the learning and reviewing of vocabulary. The other class was the control group, learning using the traditional method without using Quizizz. Keeping factors such as teachers, learning content, and teaching time unchanged between the two groups ensures a fair and objective comparison when evaluating the impact of Quizizz on primary school students' English vocabulary learning.

### **3.2. Instrument**

#### *3.2.1. Questionnaire*

To collect quantitative data from the students, a questionnaire was designed and distributed to 32 fifth-graders in the experimental group. The main objective of the questionnaire is to investigate students' perceptions of the benefits and challenges associated with learning English vocabulary through Quizizz. The instrument was specifically adapted for primary school pupils and written entirely in Vietnamese to ensure clarity and comprehension. To make the process engaging and reduce anxiety, the questionnaire incorporated emotion icons (smiley faces) to represent levels of agreement, helping young learners express their feelings more naturally. During the administration, the teacher read each item aloud and provided short explanations in simple language to ensure that all students fully understood the questions before responding.

The first part focuses on participants' personal information, including: age at which they started learning English, gender, perceived difficulty of learning vocabulary, time spent studying at home, as well as experience using technology or Quizizz. These data help to identify each student's learning context and characteristics. The second part explores students' experiences and attitudes towards learning vocabulary using Quizizz, including seven statements measuring their interest, motivation, confidence, and desire to continue using the platform. The questionnaire uses a 5-point Likert scale, combined with emoticons to illustrate levels of agreement from "Strongly disagree" to "Strongly agree", making the survey more friendly and attractive to primary school children. The final section focuses on the difficulties students encounter while using Quizizz by asking them to select one or more options that represent real-life challenges during their learning.

#### *3.2.2. Pre-test*

Before the intervention, a pre-test was administered to both groups to establish their baseline vocabulary proficiency. The test, developed and distributed by the *I-Learn Smart Start* publisher as the official end-of-semester trial examination for Grade 5, Semester 2, consisted of 30 items with a total score of 30. It included three main sections: Listening, Reading, and Writing (10 points each), with tasks such as lexical gap-filling, word-meaning matching, listening comprehension with vocabulary targets, and spelling or sentence construction using given words. In this way, the instrument assessed both receptive knowledge (through listening and reading) and productive knowledge (through writing).

The use of a publisher-designed assessment ensured content validity, since the vocabulary tested directly corresponded to the lexical items in the Grade 5 curriculum. Regarding construct validity, the tasks measured vocabulary comprehension and use in

meaningful contexts, rather than focusing narrowly on grammar or isolated drills. For reliability, most items were objectively scored, while the short written responses were independently double-checked by two raters to ensure scoring consistency. The test was conducted under standardized conditions (40 minutes, no supporting materials), providing a dependable baseline measure of students' vocabulary knowledge before the intervention.

### *3.2.3. Post-test*

After completing the five-month experimental program, both groups (experimental and control) took a post-test to assess their progress in English vocabulary memorization and use. The results of this test were compared with the input test to analyze the effectiveness of integrating Quizizz into teaching. This comparison provided empirical evidence of the extent to which the intervention contributed to participants' vocabulary development.

The post-test was identical to the pre-test, with the same set of items and format administered on both occasions. This procedure guaranteed full equivalence in measurement and eliminated potential bias associated with using different assessment instruments. While the reuse of an identical test may raise concerns regarding test familiarity, the five-month interval between administrations, combined with the developmental characteristics of primary school learners and their limited capacity to recall exact items, substantially reduced this threat.

### *3.2.4. Semi-structured interview*

In addition to the questionnaire, a semi-structured interview was conducted with the English teacher who implemented the intervention. This qualitative tool aimed to capture perspectives that could not be fully elicited through survey data. The interview consisted of twelve open-ended questions grouped into five main parts. In part 1, the teacher was asked about teaching experience (e.g., How long have you been teaching English?). Part 2 focused on how and when Quizizz was applied (e.g., Have you ever used Quizizz in your teaching? In which part of your lesson do you usually use it—introduction, practice, or review?). Part 3 examined students' learning outcomes and reactions (e.g., How do your students usually react when learning vocabulary with Quizizz? Have you noticed any improvement in their vocabulary retention or motivation?). Part 4 explored perceived benefits and obstacles (e.g., What advantages does Quizizz offer compared with traditional methods? What challenges have you faced when using it?). Part 5 invited recommendations (e.g., Have you applied any strategies to increase the effectiveness of Quizizz? Do you plan to continue using it in the future? Why or why not?). With the teacher's consent, the interview was audio-recorded, coded, and translated into English for analysis.

## **3.3. Data collection procedure**

Data collection was conducted over five months, from January to May 2025, in three main phases: pre-intervention, during intervention, and post-intervention.

### *3.3.1. Pre-intervention*

In December 2024, two classes of 5th graders ( $N = 64$ ) at a primary school in the Mekong Delta were selected to participate in the study. In early January 2025, a pre-test was administered to assess initial vocabulary. The participants were then divided into two groups based on their classrooms: experimental and control. The necessary materials, including vocabulary, QR cards, and lesson plans, were fully prepared using Quizizz Paper Mode.

### 3.3.2. During intervention

From January to May 2025, the experimental group reviewed vocabulary using Quizizz Paper Mode, which was integrated into regular English lessons (four lessons/week). Teachers were trained in techniques and methods for using this tool to ensure effective implementation.

#### *Intervention procedure*

The study employed a quasi-experimental design to compare the effects of two different instructional settings on vocabulary review. The intervention consisted of 58 lessons, conducted over a period of fourteen weeks (from the 13th to the 26th week of the school year), with four sessions per week, each lasting 40 minutes. To ensure consistency, both classes followed the same English program, were taught by the same teacher, and studied at the same time.

In the control group, vocabulary review was carried out using non-Quizizz methods that reflected typical classroom practices. Students learned and practiced vocabulary through exercises in the textbook, note-taking, and memorization. Flashcards and simple vocabulary games, such as matching or word race, were occasionally used to support review activities, but no Quizizz was involved.

In the experimental group, vocabulary review activities were supplemented with Quizizz Paper Mode. For each lesson, the teacher prepared approximately 10–15 multiple-choice questions targeting the vocabulary items taught in class. Students were given QR-coded answer cards representing the options A, B, C, and D, and they indicated their responses by holding up the corresponding card. The teacher scanned the cards using a mobile device, and the results were immediately projected, providing instant feedback on correct and incorrect answers. This method maintained normal classroom conditions without requiring personal electronic devices, while simultaneously promoting interaction, engagement, and timely feedback.

### 3.3.3. Post-intervention

At the end of the quasi-experiment, students from both the control and experimental groups took the same test that had been administered as the pre-test, ensuring full equivalence in content and difficulty. The experimental group completed an additional survey to assess their level of interest and learning effectiveness using Quizizz. A semi-structured interview was also conducted with teachers to record their professional assessment and perceptions of the tool's applicability in teaching practice.

## 4. Results and discussion

### 4.1. Test results

Table 1 presents the mean scores, standard deviations, and standard errors between the pre-test and post-test vocabulary tests of the two groups, the experimental group and the control group. The control group ( $M = 8.80$ ) had lower pre-test scores than the experimental group ( $M = 11.96$ ), and the post-test scores of the control group ( $M = 15.32$ ) were also lower than the experimental group ( $M = 19.24$ ). Overall, both groups showed an increase in mean scores after the intervention, with the control group increasing from  $M = 8.80$  to  $M = 15.32$ , and the experimental group increasing from  $M = 11.96$  to  $M = 19.24$ .

**Table 1. Descriptive Statistics of Pre-test and Post-test Scores**

Group	Test Phase	Mean	SD	SE
Control	Pre-test	8.80	4.743	0.949

Group	Test Phase	Mean	SD	SE
Experimental	Post-test	15.32	4.451	0.890
	Pre-test	11.96	5.287	1.057
	Post-test	19.24	5.214	1.043

Table 2 shows the correlation between the pre-test and post-test scores of each group. The experimental group exhibited a moderate and statistically significant correlation coefficient ( $r = 0.508$ ;  $p < 0.05$ ), whereas the control group did not show a significant correlation ( $r = 0.108$ ;  $p > 0.05$ ).

**Table 2. Paired Samples Correlations between Pre-test and Post-test**

Group	Correlation	One-sided p	Two-sided p
Control	0.11	0.30	0.61
Experimental	0.51	0.01	0.01

Table 3 presents the results of paired t-tests to compare the statistically significant changes in pre-test and post-test scores. Both groups showed statistically significant differences ( $p < 0.05$ ).

**Table 3. Paired Samples T-Test Results**

Group	t	df	One-sided p	Two-sided p	Mean Difference	SD	SE	95%CI Lower	95%CI Upper
Control	-5.30	24	.001	.001	-6.52	6.14	1.23	-9.06	-3.98
Experimental	-6.99	24	.001	.001	-7.28	5.21	1.04	-9.43	-5.13

Table 4 shows the effect size calculated using Cohen's d and Hedges' correction. The results show that the impact of Quizizz intervention in the experimental group was very large ( $d > 1.20$ ), while the control group had a medium effect size ( $d > 0.8$ ).

**Table 4. Effect Size of Pre-test vs. Post-test**

Group	Standardizer	Effect Size (Cohen's d)	95% CI Lower	95% CI Upper
Control	Cohen's d	-1.06	-1.55	-0.56
	Hedges' g	-1.03	-1.50	-0.54
Experimental	Cohen's d	-1.40	-1.95	-0.83
	Hedges' g	-1.35	-1.88	-0.81

## 4.2. Questionnaire results

### 4.2.1. Students' Perceptions of Using Quizizz for English Vocabulary Learning

Before being administered to the experimental group, the questionnaire was piloted with a small group of Grade 10 students from the same school to ensure clarity and comprehensibility of the items. Feedback from the pilot helped refine wording and format before the final distribution. After that, the survey was conducted with 32 students in the experimental group to collect data on their experience of learning English vocabulary through Quizizz. The table below presents the mean score, standard deviation, and ranking of each criterion surveyed. The reliability of the survey was assessed using Cronbach's alpha

coefficient of 0.782, indicating that the survey instrument possesses an acceptable level of reliability in educational research.

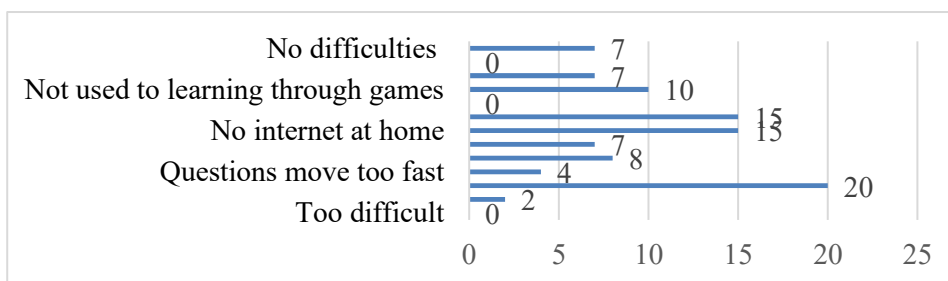
**Table 5. Students' Perceptions of Using Quizizz for English Vocabulary Learning (N=32)**

<b>Cronbach Alpha = 0.782</b>			
<b>Survey Items</b>	<b>Mean</b>	<b>SD</b>	<b>Rank</b>
Confidence in learning vocabulary	4.84	0.84	1
Enjoyment of learning vocabulary with Quizizz	4.06	0.91	2
Long-term retention of vocabulary through Quizizz	4.00	1.21	3
Ability to recall vocabulary in tests or while speaking	4.00	1.07	3
Quizizz is more interesting than traditional methods	3.93	1.13	5
Perceived learning speed with Quizizz	3.93	0.94	5
Willingness to continue using Quizizz	3.87	1.33	7
<b>Overall Mean</b>	<b>4.09</b>	<b>1.06</b>	

Based on the survey results, the highest rated criterion is “*Confident when learning vocabulary*” ( $M = 4.84$ ;  $SD = 0.84$ ), followed by “*Enjoy learning vocabulary with Quizizz*” ( $M = 4.06$ ;  $SD = 0.91$ ) and “*Remember vocabulary longer when learning with Quizizz*” ( $M = 4.00$ ;  $SD = 1.21$ ). The overall average of the entire scale is 4.09, indicating a positive level of agreement among students after experiencing vocabulary learning with Quizizz.

#### 4.2.2. Students' Reported Difficulties When Using Quizizz

To collect information about the difficulties students encountered while learning vocabulary with Quizizz, a questionnaire included a multiple-response question (Item 14, Appendix A). Students were asked to identify all the difficulties they experienced during their participation in the learning activity using Quizizz. The results are presented in Figure 1.



**Figure 1. Students' Reported Difficulties When Using Quizizz (N =32)**

According to the 32 students who participated in the survey, the most frequently selected difficulty was “*Don't remember some vocabulary*”, with 20 students choosing this option. This was followed by the lack of equipment or an Internet connection at home, chosen by 15 students. Seven students reported feeling bored while studying alone, and found it easy to press the wrong answer (7 students). Other difficulties were noted, although at a lower frequency, including selecting the wrong answer (3 students), not having enough time to complete the question (2 students), unfamiliarity with the gameplay (1 student), and never having used Quizizz before (1 student). Notably, seven students reported no difficulty using Quizizz. None of the students said that Quizizz was too challenging to use or that they did not enjoy learning with technology.

**Table 6. Descriptive Statistics of Students' Self-Reported Difficulties When Using Quizizz (N =32)**

Survey Items	Mean	SD	Rank
Don't remember some vocabulary	0.63	0.50	1
No device to use at home	0.47	0.51	2
No internet at home	0.47	0.51	3
Not used to learning through games	0.31	0.47	4
Not enough time	0.25	0.44	5
Pressed the wrong answer	0.22	0.42	6
Learning alone is not fun	0.22	0.42	6
No difficulties	0.22	0.42	6
Questions move too fast	0.13	0.34	9
Don't understand how to play	0.06	0.25	10
Too difficult	0.00	0.00	11
Don't like studying on devices	0.00	0.00	11
Other	0.00	0.00	11

The descriptive statistics presented in Table 6 indicate that the most common challenge students encountered when using Quizizz for vocabulary learning was the limited retention of newly learned words ( $M = 0.63$ ,  $SD = 0.50$ ). This was followed by difficulties related to technological access, as some students lacked either an appropriate device or a stable internet connection at home ( $M = 0.47$ ,  $SD = 0.51$  for both). Moderate mean scores were recorded for challenges such as unfamiliarity with game-based learning environments and insufficient time to complete activities ( $M = 0.31$  and  $M = 0.25$ , respectively). In contrast, issues related to gameplay mechanics or motivation were reported at very low levels, and no students viewed the platform as overly difficult or unappealing.

#### 4.3. Semi-structured interview results

During the intervention, the participant teacher who taught both groups reported noticeable differences in student engagement when Quizizz was employed for vocabulary review. Compared with non-Quizizz lessons, learners appeared more active and interested. As the participant teacher explained, "*students were excited and participated more actively in review activities at the end of the lessons, whereas in non-Quizizz classes they often felt pressured or anxious.*" The participant teacher further mentioned that "*even the quieter students seemed more confident when using Quizizz because they didn't have to speak in front of the whole class.*" The teacher observed that the visual and interactive nature of the platform reduced students' fear of making mistakes, creating a more relaxed and inclusive learning atmosphere.

Beyond classroom participation, the teacher also highlighted the motivational effects of Quizizz. According to the participant teacher, "*Quizizz clearly increased students' interest and motivation. Many learners even anticipated whether they would get to use Quizizz in that day's lesson.*" The participant teacher added that the Quizizz format "*made students feel excited and eager to compete with their classmates,*" which helped sustain their attention throughout the activities. The teacher further noted that "*students really liked seeing their scores and ranks right after each question,*" explaining that the immediate feedback and points system

encouraged them to perform better and turned vocabulary practice into an enjoyable experience.

With respect to learning outcomes, participating teachers recognized students' vocabulary improvements through Quizizz. The participant teacher noted that "*students remembered words better*", compared to non-Quizizz classes, they "*don't have the habit of studying vocabulary at home*". In addition, participating teachers also rated the high possibility of vocabulary improvement as being due to "*activities that included pictures, sounds, and repeated sentences*" that made vocabulary more memorable.

The teacher also recognized several pedagogical advantages of Quizizz, such as ease of lesson preparation and the ability to conduct quick assessments. As the participant teacher stated, "*teachers can prepare vocabulary activities quickly.*" The participating teacher said that "*at first, when the students didn't know how to play, organizing the activities took a while*", but after many practice sessions, the teacher confidently said that "*each session, just give the QR card to the class monitor, and I will automatically distribute it to the rest of the students. When it's time to review, I will turn on the computer and practice right away*". The participant teacher further commented that "*it saves time and keeps students focused because everyone can answer at the same time.*" The teacher added that the instant display of class results allowed her to identify which words students struggled with, making the review process more efficient.

Although the participating teachers mentioned the benefits of using Quizizz in teaching vocabulary, the participant teacher also mentioned some challenges during the implementation in the classroom. The teacher shared: "*Sometimes I encounter technical problems, such as a weak internet connection or incompatible devices*", which take a lot of time to fix. In addition, the teacher also mentioned some other technical errors when students participate in the game, such as "*sometimes the game code does not work*" or "*sometimes students' QR codes cannot be scanned*". In addition, the teacher added that during the observation, when weak students do not know the answer, or are confused in choosing, they often ask other students and choose according to the crowd trend, "*what good students choose, other students choose that*". Then the participant teacher introduced the rule "*whoever discusses gets points deducted*", the situation improved, and students were more proactive in giving answers.

#### **4.4. Discussion**

The first finding confirmed the results for the first research question, indicating that Quizizz had a positive impact on the vocabulary learning outcomes of primary school students. Both the experimental and control groups achieved improvements in pre-test and post-test scores, but the experimental group had a larger improvement, which contributed to the effectiveness of Quizizz in teaching and learning vocabulary of primary school students. This improvement was further supported by the observation of participating teachers that the students in the experimental group "*remembered words better,*" and teachers supposed the reason was that students were interested in "*games that integrate images and sounds, which make learning more effective than rote memorization*". This part of the result is consistent with previous studies that asserted that Quizizz and game-like features can improve vocabulary scores (Degirmenci, 2021; Pitoyo et al., 2020; Wang et al., 2024). The significant improvement in vocabulary performance can be explained based on Cameron (2001) and Pinter (2017), Quizizz's game design can maintain attention and motivation by embedding learning into interactive, fun learning activities, but still aiming at specific learning outcomes. This process helped learners not only participate in learning activities in a formal, forced way but also increased engagement, attention, and initiative in the learning process, thereby promoting deeper participation in the lesson content, reducing learners' anxiety, and enhancing

their ability to absorb input information, allowing young learners to process new language with greater concentration. Another explanation for this result is that Quizizz's instant feedback feature contributed to supporting the knowledge formation process by correcting vocabulary errors promptly, before they become habits (Nation, 2001; Pitoyo et al., 2020). Nation (2001) emphasized that timely feedback is key to reinforcing accuracy and increasing vocabulary learners' confidence. Another explanation is that the platform's integration of visual and auditory stimuli provides multimodal exposure, along with repeated vocabulary repetition, which enhances vocabulary retention, consistent with Wang et al.'s (2024) and Nation's (2001) view that when learners absorb knowledge through multiple senses (seeing, hearing, speaking, doing) and are given frequent opportunities to self-recall, memory is consolidated more deeply and permanently.

The second finding that primary school students felt more motivated to learn vocabulary with Quizizz is consistent with previous studies on students' motivation in learning vocabulary using Quizizz (Degirmenci, 2021; Zainuddin et al., 2020). The survey data further supported this finding as learners reported that they felt very confident ( $M = 4.84$ ,  $SD = 0.84$ ) and enjoyed practicing vocabulary with Quizizz ( $M = 4.06$ ,  $SD = 0.91$ ), along with a strong interest in continuing to learn new words with Quizizz ( $M = 3.87$ ,  $SD = 1.33$ ). This finding was also consistent with teachers' observations that students often asked, "*Are we playing Quizizz today?*", demonstrating that they were very interested in Quizizz. Part of the motivation, suggested by participating teachers, is that Quizizz features such as scores and rankings "*make students feel excited and eager to compete with their classmates,*" thereby fostering students' motivation to learn vocabulary. Another reason is related to the instant feedback feature on scores and errors that helps learners see their own progress and be recognized, thereby increasing motivation, perseverance, and daring to try without fear of failure (Pitoyo et al., 2020; Nation, 2001).

The third finding illustrated that the most common difficulty was not being able to remember some vocabulary ( $M = 0.63$ ,  $SD = 0.50$ ). This indicates that although Quizizz provides repetition and immediate feedback to reinforce word learning (Pitoyo et al., 2020; Wang et al., 2024), for primary school students, these repetitions may not be sufficiently deep or contextualized to form lasting memory. As Nation (2001) and Cameron (2001) emphasize, vocabulary retention in young learners requires frequent reinforcement across varied and meaningful contexts rather than rapid recall within a single game session. Quizizz emphasizes speed and competition, many pupils tend to focus on responding as fast as possible rather than reflecting on word meaning, so this pattern limits opportunities for deeper cognitive engagement and the elaborative rehearsal necessary for long-term vocabulary retention (Nation, 2001). As Nation (2001) explained, effective word learning requires deliberate attention to meaning, use, and form; when activities prioritize quick responses, learners may encode words only superficially. Thus, while the game format increased excitement, it also risked reinforcing shallow processing, a concern similarly noted by Zainuddin et al. (2020) and Degirmenci (2021).

Overall, the evidence indicates that Quizizz effectively enhances primary pupils' vocabulary learning by fostering motivation and providing immediate feedback. The results confirm clear improvements in vocabulary performance and student engagement, showing that gamified learning can make word practice more enjoyable and confidence-building. However, limited contextual reinforcement and irregular review across lessons reduce students' ability to retain vocabulary in the long term, suggesting that sustained learning requires repeated and meaningful exposure beyond the immediate game setting.

## **5. Conclusion and implications**

The experimental process shows that using Quizizz, especially in a form that does not require electronic devices, can bring about significant changes in the vocabulary learning of primary school students. The positive results are not only reflected in the post-intervention scores, but also in the initiative, enthusiasm, and positive learning spirit that students show throughout the process. This suggests that a simple technology integration method, not completely dependent on technology, can still create a significant educational impact when designed in accordance with the psychology and receptive characteristics of children. From an educator's perspective, Quizizz is not only a quick-testing tool but also a means for teachers to organize more interactive vocabulary learning activities. Especially for schools lacking equipment, the use of paper mode has proven that innovation does not necessarily mean large investments in technology.

This study has two main limitations. First, it was conducted in a single school with a modest number of participants over 14 weeks. While this duration was sufficient to capture short-term improvements in vocabulary learning, it does not allow strong claims about long-term retention or transferability to other schools and contexts. Larger and more diverse samples, together with extended interventions, are needed to determine whether the observed benefits can be sustained and generalized across different learning environments. Second, the findings suggest that Quizizz alone is not enough to ensure lasting learning. Its effectiveness depends on how teachers design and integrate the tool into broader pedagogical activities that match the cognitive pace and developmental needs of young learners. If used merely as a game focused on points and rankings, the benefits may remain short-term and superficial. However, when embedded within structured instruction and meaningful practice, Quizizz can generate more durable and transformative impacts on vocabulary development.

Future research should broaden the scope in terms of participants and duration to determine whether the observed improvements can be sustained and generalized. In addition, further studies need to focus on how pedagogical design shapes the effectiveness of Quizizz. The present findings suggest that the tool alone is insufficient; its impact depends on how teachers integrate it into structured, meaningful activities that match the cognitive pace and developmental needs of young learners. Exploring different ways of embedding Quizizz within instructional frameworks would therefore provide a deeper understanding of the conditions under which its benefits can move from being short-term and superficial to durable and transformative.

## **References**

- Aldevella, K., & Utami, R. D. (2025). Application of Quizizz paper mode in learning evaluation increases students' learning enthusiasm. *Jurnal EDUCATIO: Jurnal Pendidikan Indonesia*, 11(1), 128–134. <https://doi.org/10.29210/1202525575>
- Anak, Y. C. C., & Hua, T. K. (2021). Exploring a gamified learning tool in the ESL classroom: The case of Quizizz. *Journal of Education and e-Learning Research*, 8(1), 103-108. <https://doi.org/10.20448/journal.509.2021.81.103.108>
- Budianto, S., Sayidah, N., Sucipto, & Mustofa, A. (2022). Young learners' preferences on using games and songs for learning English in EFL context. *Education Quarterly Reviews*, 5(4), 90–95. <https://doi.org/10.31014/aior.1993.05.04.574>
- Cameron, L. (2001). *Teaching languages to young learners*. Cambridge University Press.

- Degirmenci, R. (2021). The use of Quizizz in language learning and teaching from the teachers' and students' perspectives: A literature review. *Language Education and Technology*, 1(1), 1-11.
- Garden, P. D. (2022). Vocabulary instruction in the early grades. *TALAE: Texas Association for Literacy Education Yearbook*, 9, 75–82. <https://files.eric.ed.gov/fulltext/EJ1367392.pdf>
- Handoko, W., Mizkat, E., Nasution, A., & Eska, J. (2021). Gamification in learning using Quizizz application as assessment tools. In *Journal of Physics: Conference Series* (Vol. 1783, pp. 012111). IOP Publishing. <https://doi.org/10.1088/1742-6596/1783/1/012111>
- Husnah, L. A., Heriyawati, D. F., & Elfiyanto, S. (2023). Quizizz paper mode is new: Students' perception of using e-tool of language assessment in EFL class. *Celtic: A Journal of Culture, English Language Teaching, Literature and Linguistics*, 10(2), 121–137. <https://doi.org/10.22219/celtic.v10i2.28528>
- Ibad, W., Sabat, Y., Musyarofah, L., & Sulistyaningsih, L. (2023). Comparing Kahoot, Quizizz, and Wordwall in EFL reading class. *Eduvest: Journal of Universal Studies*, 3(11), 1984–1995. <https://doi.org/10.59188/eduvest.v3i11.954>
- Intriago-Cobeña, M. C., Carreño-Arias, R. D., Ponce-Vera, D. M., & Arcentales-Vera, M. E. (2024). Gamification in the acquisition of vocabulary in the English language in upper secondary education students of a rural school. *International Journal of Linguistics, Literature and Culture*, 10(5), 89–99. <https://doi.org/10.21744/ijllc.v10n5.2459>
- Krashen, S. D. (1982). *Principles and practice in second language acquisition*. Pergamon. [https://www.sdkrashen.com/content/books/principles\\_and\\_practice.pdf](https://www.sdkrashen.com/content/books/principles_and_practice.pdf)
- Le, T. N. H. (2024). The effectiveness of using Quizizz in teaching English as a foreign language at a tertiary level. *Journal of Knowledge Learning and Science Technology*, 3(1), 222–230. <https://doi.org/10.60087/jklst.vol3.n1.p222>
- Ministry of Education and Training of Vietnam. (2018). *General Education English Language Curriculum (Issued with the Circular No. 32/2018/TT-BGDĐT dated 26 December 2018)*.
- Nation, I. S. P. (2001). *Learning vocabulary in another language* (Vol. 10). Cambridge University Press Cambridge. <https://doi.org/10.1017/9781009093873>
- Ngoc, H. L. T. (2024). The effectiveness of using Quizizz in teaching English as a foreign language at a tertiary level. *Journal of Knowledge Learning and Science Technology*, 3(1), 207-222. <https://doi.org/10.60087/jklst.vol3.n1.p222>
- Nguyen, H. H. (2024). Investigating Vietnamese tertiary EFL teachers' levels of information and communication technology integration through the lens of the SAMR model. *VNU Journal of Foreign Studies*, 40(1), 57–75. <https://doi.org/10.63023/2525-2445/jfs.ulis.5225>
- Nguyen, T. T., Le, S. T., & Nguyen, P. N. T. (2025). Effects of using Quizizz on vocabulary acquisition of Vietnamese EFL young learners. *Theory and Practice in Language Studies*, 15(7), 2150–2162. <https://doi.org/10.17507/tpls.1507.07>
- Pham, D. T. A. (2019). An investigation into students' evaluation of and attitudes towards synchronous computer-mediated communication on language skills development in Vietnamese institutional context. *VNU Journal of Foreign Studies*, 35(3), 41–56. <https://doi.org/10.25073/2525-2445/vnufs.4367>

- Pham, T. A. (2022). University students' attitudes towards the application of Quizizz in learning English as a foreign language. *International Journal of Emerging Technologies in Learning (iJET)*, 17(19), 278-290
- Piaget, J. (1973). *To understand is to invent: The future of education*. Grossman.
- Pinter, A. (2017). *Teaching young language learners* (2nd ed.). Oxford University Press.
- Pitoyo, M. D., Sumardi, & Asib, A. (2020). Gamification-based assessment: the washback effect of Quizizz on students' learning in higher education. *International Journal of Language Education*, 4(1), 1-10. <https://doi.org/10.26858/ijole.v4i2.8188>
- Richards, J. C., & Rodgers, T. S. (2014). *Approaches and methods in language teaching* (3rd ed.). Cambridge University Press.
- Rowe, M. L., Raudenbush, S. W., & Goldin-Meadow, S. (2012). The pace of vocabulary growth helps predict later vocabulary skill. *Child Development*, 83(2), 508-525. <https://doi.org/10.1111/j.1467-8624.2011.01710.x>
- Sangwan, P. (2023). Create interactive quiz on "Quizizz." *International Journal of Novel Research and Development*, 8(6), 1372-1376. <https://www.ijnrd.org/papers/IJNRD2306430.pdf>
- Thach, P. N. (2018). Learner-content interaction in an online English learning course at a Vietnamese university. *VNU Journal of Foreign Studies*, 34(5), 1-11. <https://doi.org/10.25073/2525-2445/vnufs.4307>
- Trinh, Q. L., Nguyen, M. T., & Le, T. T. (2022). Using storytelling: From EFL teachers' perceptions to young learners' reading performance. *Reflections*, 29(2), 301-324. <https://doi.org/10.61508/refl.v29i2.259402>
- Vu, N. N., Nhi, K. T., Ha, T. N., & Tien, B. D. (2024). Assessing the effectiveness of Quizizz mobile app in improving grammar competence among EFL students. *Rupkatha Journal*, 16(2), 2. <https://doi.org/10.21659/rupkatha.v16n2.01g>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Wang, L.-C. C., Lam, E. T., & Jiang, S. (2024). A preliminary investigation of the effectiveness of Quizizz on vocabulary acquisition between individual and group practices in Chinese as a foreign language high school classes in the USA. *International Journal of Chinese Language Teaching*, 5(3).
- Yip, F. W., & Kwan, A. C. (2006). Online vocabulary games as a tool for teaching and learning English vocabulary. *Educational Media International*, 43(3), 233-249. <https://doi.org/10.1080/09523980600641445>
- Zainuddin, Z., Shujahat, M., Haruna, H., & Chu, S. K. W. (2020). The role of gamified e-quizzes on student learning and engagement: An interactive gamification solution for a formative assessment system. *Computers & Education*, 145, 103729.