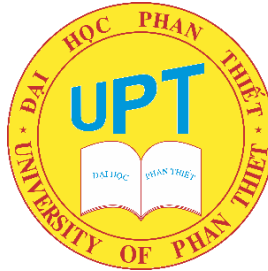


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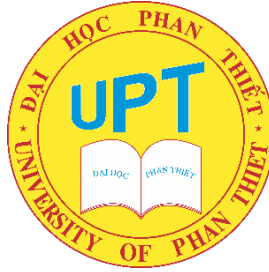
NGUYEN THI NGOC LINH

**ENHANCING VOCABULARY RETENTION THROUGH THE
APPLICATION OF THE WORDWALL PLATFORM
FOR YOUNG LEARNERS**

**MASTER'S GRADUATION PROJECT
MAJORED IN ENGLISH LANGUAGE**

Lam Dong Province, 2026

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TRAINING CODE: 8220201

MASTER'S GRADUATION PROJECT

**INSTRUCTOR: Assoc. Prof. Dr. LE DINH TUONG
Ph.D. LY THI MY HANH**

Lam Dong Province, 2026

STATEMENT OF AUTHORSHIP

I certify that the thesis entitled:

“Enhancing Vocabulary Retention through the Application of the Wordwall Platform For Young Learners” is my original work. I produced this entire thesis with the guidance of my supervising professor. The results, analyses, and arguments presented in this thesis are valid and precisely reflect my research methodology.

I confirm that this thesis has not been submitted for a degree at any other educational institution. All resources, theory, or research produced by others used for this thesis have been carefully and accurately acknowledged.

I am completely responsible for the content and integrity of this thesis.

Lam Dong, March 1st , 2026

NGUYEN THI NGOC LINH

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Last but not least, I would like to express my heartfelt gratitude to my family for their unwavering support and understanding throughout my studies.

Nguyen Thi Ngoc Linh

CERTIFICATE OF ORIGINALITY

I hereby declare that the research paper entitled: **“Enhancing Vocabulary Retention through the Application of the Wordwall Platform For Young Learners”** reflects my personal study and a point of view.

This Declaration is part of my Master's thesis, which I have submitted to satisfy the requirements of the Master’s program in English Language at Phan Thiet University. I confirm that this thesis stands for my original research, conducted under guidance of my instructor.

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Nguyen Thi Ngoc Linh

ABSTRACT

In teaching English, vocabulary is the most important part, but students often face difficulties because they forget what they have learned. This study was conducted at Lê Lợi Secondary & High School in Phan Thiết city, aiming to examine whether using Wordwall helps 6th-grade students remember vocabulary better. Instead of doing experimental tests, this study chose to conduct surveys and collect tangible evidence from the students' learning process with the Global Success 6 textbook. Regarding methodology, the study adopted a quantitative approach, using a questionnaire administered to a sample of 79 students. To clarify the results, the study relied on psychological theories of memory to explain why interactive activities help students remember lessons better than traditional learning methods. Data from the questionnaires was meticulously cross-checked to ensure that the conclusions drawn are accurate and objective.

The results show that, thanks to images, sounds, and the features of Wordwall, students feel less pressured and more interested in the lesson. They can recall vocabulary faster and no longer fear long or difficult words as before. The research confirms that Wordwall is an effective support tool, helping teachers innovate their teaching methods and create a fun learning environment, making students more confident when learning English. Therefore, the study suggests that Wordwall serves as a useful supporting tool in vocabulary teaching and should be combined with alternative teaching methods to optimize learning outcomes.

Keywords: educational psychology, secondary school students, vocabulary retention, wordwall platform

TABLE OF CONTENTS

STATEMENT OF AUTHORSHIP	i
ACKNOWLEDGEMENT	ii
CERTIFICATE OF ORIGINALITY	iii
ABSTRACT	iv
LIST OF TABLES.....	v
LIST OF FIGURES.....	vi
LIST OF ABBREVIATIONS	vii
CHAPTER 1. INTRODUCTION	1
1.1. Background of study	1
1.2. The statement of problem	4
1.3 Research Objectives	7
1.4. Research Questions	7
1.5. Significance of the Study.....	8
CHAPTER 2. LITERATURE REVIEW.....	10
2.1. Wordwall platform	10
2.1.1 What is wordwall platform?	10
2.1.2 Functions of Wordwall Platform.....	11
2.2 Characteristics of Grade 6 Students and the Suitability of Wordwall ...	15
2.3. Comparative Analysis of Wordwall and Other Online Learning Tools	16
2.4. Overview of vocabulary retention in learning language.....	18
2.5. Previous Studies and research gap.....	19
2.6. Theoretical Framework	20
2.6.1. Definition of Vocabulary	20

2.6.2. Learning and vocabulary	20
2.6.3 Vocabulary Retention	21
2.7. Conceptual framework	21
CHAPTER 3. METHODOLOGY	25
3.1 Research Design.....	25
3.2 Research site and participants.....	26
3.2.1 Research site	26
3.2.2 Participants.....	26
3.3. Research instruments	27
3.4. Data collection procedure	29
3.5 Reliability and Validity of the Instrument.....	30
3.6. Data Analysis.....	30
3.7. Ethical Considerations	31
CHAPTER 4. FINDINGS AND DISCUSSION	32
4.1. Participants' Profile.....	32
4.2. Results of the Questionnaire Survey	32
4.2.1. Descriptive statistics of Gamification element.	33
4.2.2.Descriptive statistics of multimedia element	34
4.2.3. Descriptive statistics of interactivity element	35
4.2.4. Descriptive statistics of retention outcome.....	36
4.3. Discussion of the research question.....	37
4.3.1. Learner characteristics as the theoretical foundation.....	37
4.3.2. Discussion of Research Question 1.....	38
4.3.3 Discussion of Research Question 2.....	39
4.4. Delimitations of the Study	42

4.5. Limitations of the Study	43
CHAPTER 5. CONCLUSION AND RECOMMENDATIONS	44
5.1. Recommendations.....	44
5.1.1 Recommendations for teachers.....	44
5.1.2 Recommendations for students	45
5.1.3. Recommendations for school administrators.....	46
5.1.4. Recommendations for Different Educational Levels.....	47
5.1.5. Suggestions for further research	47
5.2. Conclusion.....	48
REFERENCES	50
APPENDIX A.....	53
APPENDIX B.....	59

LIST OF TABLES

Table 1. Comparison of Wordwall and Other Learning Platforms.....	16
Table 2. Cronbach's Alpha reliability for Gamification, Multimedia, Interactivity and Vocabulary retention outcome.....	30
Table 3. Mean and standard deviation of Gamification element	33
Table 4. Mean and standard deviation of Multimedia element.....	34
Table 5. Mean and standard deviation of Interactivity element	35
Table 6. Mean and standard deviation of Vocabulary retention	36

LIST OF FIGURES

Figure 1: Wordwall platform data overview.....	11
Figure 2. Features of the wordwall platform	12
Figure 3. Conceptual Framework.....	21

LIST OF ABBREVIATIONS

EFL : English as a Foreign Language

M : Mean

SD : Standard Deviation

SPSS : Statistical Package for the Social Sciences

CHAPTER 1. INTRODUCTION

1.1. Background of study

In the context of modern education, despite numerous innovative initiatives, the traditional framework characterized by a teacher-centered approach remains remarkably favored. In this context, educators function as providers of knowledge, presenting material through one-way lectures, while students are relegated to the role of passive receivers (Connell, 2012). They generally spend their time in class listening, taking notes, and doing memory tasks based on the textbook. This method of teaching makes it easier to share information and organize a classroom successfully, but it also limits interaction and personal autonomy, which are both important for learning a language. Because of this, students often feel disappointed, tired and low-energy, and unmotivated to attend a class.

Previous studies have suggested that vocabulary retention may be challenging for many middle school students because vocabulary learning requires repeated exposure and meaningful practice. However, in traditional learning contexts, vocabulary learning is often limited to memorization without sufficient opportunities for practice and interaction. For middle school students, this issue becomes more pronounced, as they frequently struggle to maintain attention and effectively retain vocabulary over time.

Grade 6 students are a suitable group for this study because they are at a transitional stage from primary to lower secondary education. At this level, students are usually around 11 to 12 years old and begin to face a heavier English learning load. Grade 6 students at Le Loi Secondary and High School use the Global Success textbook, which introduces a large amount of vocabulary across different topics. The requirement to learn and retain these words highlights the importance of finding effective approaches to support vocabulary retention. Therefore, technology-supported learning tools may be appropriate for helping Grade 6 students become more engaged in vocabulary learning and more confident in remembering new words.

This research, on the other hand, only looks at 6th-grade kids in lower secondary school, not all young learners. This group, which is about 11 to 12 years old, is moving from elementary to lower secondary school. At this point, children start to learn how to think logically and analyze things, but they still have certain traits of younger pupils, including liking to learn via pictures, games, and hands-on activities. These two traits make sixth-grade students good subjects for studying how to use Wordwall to learn English vocabulary. They can both handle learning tasks that need more critical thinking and like games and multimedia elements.

In the current educational landscape, concentrating study on young learners is crucial, especially 6th graders, as this represents a significant transitional phase in language acquisition. The Ministry of Education and Training says that the English curriculum gets harder and more academic starting in grade 6 (*Thông tư Ban hành Chương trình giáo dục phổ thông*, 2018) . Current tests don't just test how well kids can memorize facts; they also test how well they grasp the context. This means that pupils need to learn a lot of new words to pass the stricter high school tests.

At this point, the most important thing for pupils to do is to build up and solidify their fundamental vocabulary. High school students frequently study advanced material and take practice tests that are more difficult to prepare for the graduation exam. 6th graders , on the other hand, need to create a strong vocabulary base. Students will not have the basic information they need to understand more difficult material at higher levels if their vocabulary is limited at this point. This gap in knowledge makes it hard for kids to keep up with the high school curriculum.

Nevertheless, students of this age frequently encounter more difficulties and diminished concentration when subjected to conventional, less participatory pedagogical approaches (Fredricks et al, 2004). Therefore, applying interactive tools like Wordwall not only supports middle school students' need to explore and be

competitive, but it also helps them overcome test pressure and build up a strong foundation of knowledge for the future.

The contrast between how students easily learn and how teachers usually teach is especially important when related to learning new words. Vocabulary is one of the most essential elements of being effective at a language. But if you don't know enough vocabulary, it can make it much more challenging for you to improve your other language skills. Hermann Ebbinghaus's Forgetting Curve theory suggests that recently acquired information immediately goes away unless reinforced by frequent and timely repetition (Ebbinghaus). In a lot during classrooms, vocabulary learning does not provide sufficient supply of this necessary repetition, which makes the process of memorizing not only boring but also useless for remembering. This mismatch shows that we need better and more interesting ways to teach language.

To successfully tackle these difficulties, it is necessary to make the shift from passive educational frameworks to more active learning environments. The integration of gamification strategies received a public acceptance as an achievable method to strengthen student engagement (Alia et al., 2022). Self-Determination Theory (Ryan & Deci, 2000) explores this issue from a psychological perspective, emphasizing the role of autonomy, competence, and relatedness in fostering a self-motivation.

In this context, digital educational tools have become an important resource in modern teaching, especially with the rapid development of information technology. One notable platform is Wordwall, developed by Visual Education Ltd (UK) in 2016. Wordwall is designed to assist educators in creating interactive learning activities efficiently. Teachers can input vocabulary content, which is then transformed into various game formats such as quizzes, matching tasks, anagrams, and puzzles

(Wordwall, 2026). This flexibility allows the same content to be practiced through multiple formats, increasing exposure and variation in learning.

Previous studies have reported positive effects of Wordwall on students' motivation, engagement, and vocabulary learning. However, many of these studies focused on learning achievement or students' attitudes toward the platform. Research on vocabulary retention remains limited, particularly among Grade 6 students in the Vietnamese context. In addition, there is still a need to better understand how specific features of Wordwall, such as gamification, multimedia, and interactivity, may contribute to vocabulary retention

Some recent studies has also demonstrated that using this platform in the classroom can make students less passive and make the classroom more lively (Lestari & Rohmani, 2024a). These interactive methods have been demonstrated to enhance vocabulary acquisition and increase student engagement in their learning. Additionally, there is a paucity of studies investigating how particular features of Wordwall—such as gamification, multimedia, and interactivity—aid vocabulary acquisition, particularly among middle school students.

For these reasons, this study investigates the role of Wordwall platform in supporting vocabulary retention among Grade 6 students at Le Loi Secondary and High School. It also explores students' perceptions of learning vocabulary through the platform. The findings are expected to provide useful insights for teachers who wish to integrate technology into vocabulary instruction and improve students' vocabulary retention.

1.2. The statement of problem

Vocabulary learning is an essential part of English language education. However, learning new words does not necessarily mean that students can remember and use them effectively over time. In many English classrooms, students are able to recognize or recall vocabulary immediately after a lesson, but they often forget these words when they encounter them again in later lessons, exercises, or tests. This issue has become a common concern for English teachers because vocabulary retention directly affects students' ability to develop other language skills.

At Le Loi Secondary and High School, Grade 6 students are introduced to a considerable amount of new vocabulary through the Global Success textbook. These words cover a variety of topics and are expected to be used repeatedly throughout the learning process. Nevertheless, classroom observations and teaching experiences have shown that many students still experience difficulties in remembering and applying previously learned vocabulary. Some students can complete vocabulary activities successfully during the lesson, but they often struggle to recall the same words after several days or weeks. As a result, teachers frequently need to spend additional time reviewing vocabulary that has already been taught.

To gain a clearer understanding of the situation, a preliminary survey was conducted with 79 Grade 6 students. The survey findings indicated that vocabulary retention remained a challenge for many learners. Students reported that they often forgot vocabulary after a period of time and lacked opportunities to review and practice the words in meaningful ways. These findings suggest that vocabulary retention continues to be an issue that deserves further attention in English language teaching.

The challenge of vocabulary retention is particularly important for Grade 6 students because they are at the beginning of lower secondary education. At this stage, students are expected to learn a larger amount of vocabulary and become more independent learners. However, many students still prefer visual materials, interactive activities, and game-based learning experiences. Therefore, relying solely on traditional vocabulary learning activities may not always meet their learning needs or support long-term retention effectively.

In recent years, educational technology has been increasingly integrated into English language teaching. Various digital tools have been introduced to make learning more interactive and engaging. Among them, Wordwall has gained popularity because it allows teachers to create game-based vocabulary activities that combine text, images, sounds, competition, and immediate feedback. Previous studies have generally reported positive effects of Wordwall on students' motivation, engagement, and vocabulary learning outcomes.

Despite these promising findings, there is still limited evidence regarding the role of Wordwall in supporting vocabulary retention, particularly among Grade 6 students in the Vietnamese educational context. In addition, few studies have examined how specific features of Wordwall, such as gamification, multimedia, and interactivity, may contribute to students' ability to retain vocabulary over time. This gap in the literature highlights the need for further investigation.

For these reasons, the present study was conducted to investigate the role of Wordwall in supporting vocabulary retention among Grade 6 students at Le Loi Secondary and High School. The study also seeks to explore students' perceptions of learning vocabulary through Wordwall and to provide practical insights for English teachers who wish to integrate technology into vocabulary instruction.

1.3 Research Objectives

The use of information technology in schools is no longer an option but has become an essential factor in developing innovative teaching methods. Instead of traditional vocabulary learning activities, teachers increasingly use interactive platforms like Wordwall to enhance students' learning experiences. This approach makes learning more engaging and interactive. The main objective of this study is to evaluate the effectiveness of Wordwall in a practical educational context by examining four main aspects: gamification, multimedia, interactivity, and engagement. The research intends to accomplish the following particular objectives based on these elements:

The main objective of this study is to investigate the role of the Wordwall platform in supporting vocabulary retention among Grade 6 students at Le Loi Secondary and High School. Specifically, the study seeks to examine students' perceptions of learning vocabulary through Wordwall and explore how the platform's key features, including gamification, multimedia, and interactivity, contribute to vocabulary retention. In addition, the study aims to provide practical insights into the use of Wordwall as a supplementary tool for vocabulary instruction and to contribute to the growing body of research on technology-enhanced language learning in the Vietnamese educational context.

1.4. Research Questions

To fulfill the objectives of this study, the research seeks to answer the following questions:

Question 1. In what way does the Wordwall platform support English vocabulary retention for young learners?

Question 2. What are Grade 6 students' perceptions of learning vocabulary through Wordwall?

To achieve the objectives of this study, these research questions were developed to explore the role of the Wordwall platform in supporting English vocabulary retention among young learners, particularly Grade 6 students. The first question aims to examine the overall contribution of Wordwall to vocabulary

retention in the English learning process. The second question focuses on students' perceptions of the platform's key features, including gamification, multimedia, and interactivity, which are considered important elements in creating an engaging learning environment. By addressing these questions, the study seeks to provide a better understanding of how Wordwall can support vocabulary learning and retention from the students' perspective. In addition, the findings are expected to offer useful insights for teachers who wish to integrate digital tools into vocabulary instruction more effectively.

1.5. Significance of the Study

This study is expected to contribute to both theory and practice in the field of English language teaching. From a theoretical perspective, it extends the existing literature on vocabulary retention and technology-enhanced language learning by examining the use of Wordwall among Grade 6 students in the Vietnamese EFL context. The study also provides further insights into how gamification, multimedia, and interactivity may support vocabulary learning and retention.

For Students, The study may benefit students by providing a more engaging and supportive environment for vocabulary learning. Through interactive and game-based activities, students may have more opportunities to review, practice, and retain vocabulary in meaningful ways. As a result, they may improve their vocabulary knowledge, increase participation in classroom activities, and develop greater confidence in using English. A more enjoyable learning experience may also foster positive attitudes toward English language learning.

For Teachers, The findings may provide teachers with practical insights into the integration of Wordwall into vocabulary instruction. By understanding students' perceptions and the potential benefits of gamification, multimedia, and interactivity, teachers may be able to design more engaging lessons and create additional opportunities for vocabulary review and reinforcement. The study may also encourage teachers to make more effective use of educational technology to support student learning.

For schools and educational administrators, for schools and educational

administrators, the findings may provide evidence supporting the use of technology-enhanced learning in English language education. The study may contribute to efforts to modernize teaching practices and promote the effective integration of digital learning tools into the classroom. Furthermore, the findings may assist schools in making informed decisions regarding the adoption of technology-supported learning platforms.

For curriculum designers and material developers, the findings may be useful for curriculum designers and material developers who aim to create more effective vocabulary learning programs and materials. The results may help them better understand the role of gamification, multimedia, and interactivity in supporting vocabulary retention. Based on these findings, they may consider incorporating more technology-supported activities into English courses and developing learning materials that encourage repeated exposure, active participation, and long-term vocabulary retention.

For broader educational applications, although this study focuses on grade 6 students, its implications may extend beyond this particular group. The features of wordwall can potentially be adapted for learners at different educational levels, including primary school students, secondary school students, high school students, university students, and adult learners. Therefore, the study may provide useful guidance for educators who wish to apply technology-supported vocabulary learning activities in a variety of educational settings.

For future researchers, this study may serve as a useful reference for future research on vocabulary retention, gamification, and technology-assisted language learning. The findings may provide a foundation for further investigations involving larger sample sizes, different educational levels, or other learning contexts. Future researchers may also compare the effectiveness of Wordwall with other digital learning platforms, examine its long-term impact on vocabulary retention, or employ experimental and mixed-method research designs to gain a deeper understanding of technology-enhanced vocabulary learning.

CHAPTER 2. LITERATURE REVIEW

This chapter offers an in-depth examination of the literature pertinent to the study. It highlights the important theories tied to vocabulary learning and memory preservation, the amazing effects of tech on language acquisition, and the engaging integration of gamification in educational contexts. Additionally, the chapter explores previous studies related to Wordwall and similar digital tools. In conclusion, a set of concepts is introduced to guide the research.

2.1. Wordwall platform

2.1.1 What is wordwall platform?

Wordwall is an online educational platform system, specifically designed to support teachers in creating exercises and interactive learning games quickly and effectively. The platform serves as a modern teaching aid, helping to transform purely academic content into engaging digital formats.

Regarding its origin and development, Wordwall was founded in 2006 in London, England, by two teachers, Josh Smith and Ben Watson (Wordwall homepage). Some research documents also record the strong development of this platform by the company Visual Education Ltd in 2016. Since its inception, Wordwall has quickly become a global phenomenon in the field of educational technology (EdTech).

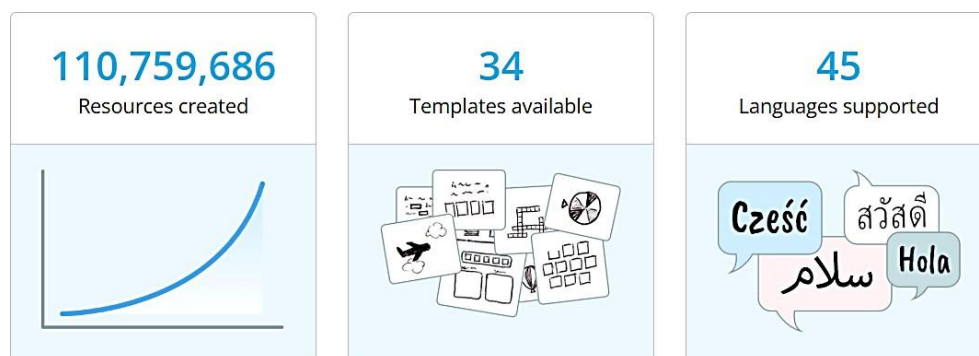


Figure 1: Wordwall platform data overview

The data shown in Figure 2 indicates that Wordwall is currently used by millions of educators and learners all over the world (across more than 96 countries). The platform includes a total of 34 interactive activity templates along with 21 that can be printed and supplies interfaces and content in 40 languages all over the world (<https://wordwall.net/community>).

In terms of application, Wordwall is particularly effective in teaching English, especially in vocabulary development. This platform allows users to access it easily through various devices such as mobile phones, laptops, or tablets, serving well for both in-class activities and self-study exercises at home. Rather than being just an entertainment game, Wordwall is considered a truly interactive support system, helping students actively engage with knowledge instead of passively receiving it through traditional methods.

In summary, Wordwall is not only a game creation tool but also an integrated educational solution that helps reduce the burden of lesson planning for teachers while optimizing the learning experience for students through vivid visual and audio elements.

2.1.2 Functions of Wordwall Platform

2.1.2.1 Various Activity Formats and Flexibility

There are a number of various types of learning activities on Wordwall, such quizzes, matching games, crosswords, interactive games, and words that are all mixed

up. This diversity gives teachers the freedom to organize activities that are in line with the class's goals and the students' ability levels. It also gives the freedom to find new ways to teach the same words. One of the best things about Wordwall is that you can easily switch between different types of exercises while still learning the same things. This lets students view vocabulary terms in new ways and more than once, which helps students remember words by repeating in different ways. Nation (2001) believes that experiencing language in diverse circumstances and forms over and over again is a critical aspect of learning new words.

Also, the flexibility in activity design fits with the ideas behind learner-centered teaching approaches, which say that teachers should change the content and style of exercises based on what their students require and how well they comprehend (Richards & Rodgers, 2014). Changing the structure of activities keeps students' attention and makes them less bored as they study, which makes them more interested in the classroom.

In addition, being able to move between different sorts of activities helps reinforce what you've learned without stopping the lesson. Teachers can utilize different types of exercises to test and practice instead of doing the same ones over and over. This makes the learning process more varied and useful.

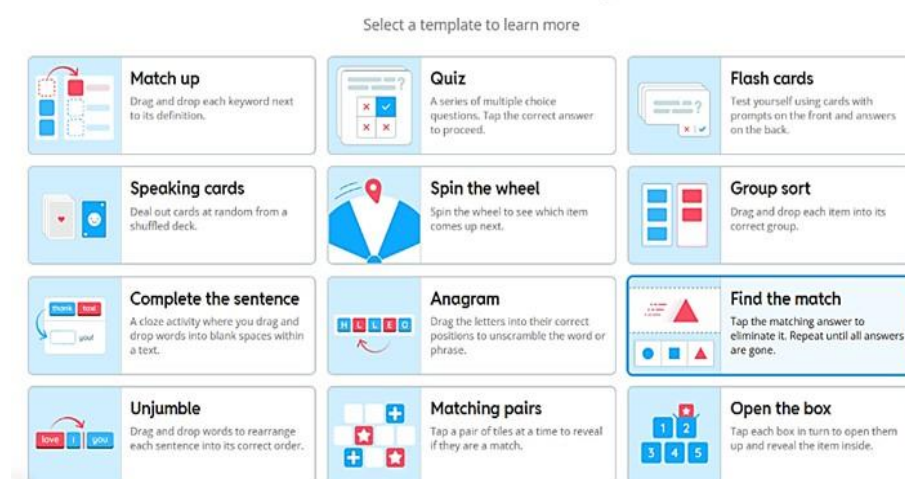


Figure 2. Features of the wordwall platform

Figure 2 shows that the Wordwall platform offers Various activity formats such as quizzes, flashcards, crosswords, arcade games, matching, unjumble, etc. The

option to switch between templates, customize the interface, assign tasks to pupils, and evaluate their performance (<https://wordwall.net/>).

2.1.2.2. Multimedia Integration

Wordwall is considered a multimedia learning environment because it combines text, pictures, sound, and interactive aspects into one experience. This combination lets students acquire terminology in more than one way, which makes learning more effective and meaningful.

Using pictures in quizzes, flashcards, and matching games is one of the best things about Wordwall. Paivio's Dual Coding Theory (Clark & Paivio, 1991) posits that information is processed by two systems: a verbal system and a visual system. When language is given alongside pictures, students build two mental pictures, which helps them remember and recall better. For instance, linking the term to a picture helps pupils get the idea right away instead of just translating it. This makes it easier for the brain to remember terminology.

Wordwall helps students learn by hearing as well as seeing by letting them say words and make sounds. This has to do with Baddeley's idea of working memory (2000, 2003), especially the phonological loop, which keeps and processes spoken information for a short time. Children's working memory is busy with the sound of words as they are doing things, which helps them learn and remember information better. This approach of exposing words to people doesn't make them rusty too rapidly.

Mayer's Cognitive Theory of Multimedia Learning posits that multimodal learning experiences arise from the integration of visual and aural stimuli (Mayer, 2002). Students frequently do better when they learn through both visual and verbal channels because it helps the brain make sense of different kinds of information. (Nation, 2021)

Wordwall helps learners learn language by mixing pictures, sound, and interactive aspects. This helps students remember words since they are more likely to remember not just the definition of the word but also how to use it.

2.1.2.3. Direct Interactivity

Wordwall makes learning vocabulary more dynamic by letting students do things like word matching, drag-and-drop, and multiple-choice questions. Students must actively engage with the class content to meet the challenge instead of just listening to lectures. According to Bonwell and Eison (Bonwell & Eison, 1991) and Prince (PRINCE, 2004) agree with this, they say that students remember information best and do their best work when they are actively involved in the process of processing information. This contact helps middle school pupils stay focused and learn things organically.

2.1.2.4. Gamification features

Wordwall also offers entertaining things to do in lessons, including points, challenges, and other games. These things make lessons more fun and fascinating for pupils. Deterding et al. (Deterding et al., 2011) believe that making courses more like games can make pupils more interested in learning. This is especially crucial for young learners since they like to do things that are exciting and keep them busy. But how well these activities function depends on how teachers organize and carry them out in the classroom. Wordwall can help you learn new words, but how you use it will determine how well it works.

2.1.2.5. Immediate Feedback

Wordwall's best feature is that it can provide you feedback right away. When students do the activity, the system will let them know right away if their answer is right or wrong by using symbols or sounds. This helps them see where they went wrong and change their minds right now, instead of waiting for the teacher to collect and grade the papers. Students can tell how well they grasped the lesson right away if they know the answer. Hattie and Timperley (2007) say that feedback is very important because it helps students figure out if they are on the right track or if they need to make changes. When students get feedback while they work, they may rapidly fix mistakes and keep playing without losing their line of thought.

Also, these constant feedback signals assist pupils stay focused during the whole lesson. Instead than just getting information in one way, children learn more about the terminology by trying things out and correcting themselves. Of course, the teacher's ability to plan activities and include games in the class is still the most important thing that determines how well this works.

2.1.2.6 Management and Printable Features

Wordwall is more than just a way to make exercises; it also helps teachers keep track of and manage their students' learning. Teachers may provide assignments directly through the system and see how each student did, including how many questions they got right, how long it took them to finish, and how much they participated. Because of this, teachers can immediately see which kids get the lesson and which ones are still having trouble, so they may change how they teach to help them.

Wordwall also has printable activities that you may do on paper. This is a rather significant feature for real-life teaching scenarios, especially in classes that don't have enough equipment or have internet connections that keep dropping out. Teachers may utilize the same lesson material in both print and online formats, making sure that all students can take part.

Wordwall gives teachers the freedom to organize their lessons since it can handle results and print them out. Teachers may simply change the style of activities based on how things are going in the classroom, and they can still clearly and quickly keep track of how well their students are learning.

2.2 Characteristics of Grade 6 Students and the Suitability of Wordwall

Grade 6 Students is a very important time for pupils' mental and emotional growth. Piaget (1952) says that kids start to reason logically, but they still require help from pictures and real-life experiences to understand things. Also, kids this age often have short attention spans and lose interest quickly if the activities are not active (Fredricks et al., 2004). They also tend to like activities that are fun, participatory, and difficult (Deterding et al., 2011).

Wordwall is certainly helpful for this group of students in a lot of ways because of these things. Using sights and sounds in activities helps kids understand things better as they become older, which is helpful for their cognitive growth stage (Mayer, 2002). Second, interactive tasks like drag-and-drop, word matching, and multiple-choice questions keep students interested in the course and help them pay attention to the lesson (Bonwell & Eison, 1991). Third, game elements like points, challenges, and other activities make learning more exciting and fascinating. This is especially helpful for teens (Deterding et al., 2011).

2.3. Comparative Analysis of Wordwall and Other Online Learning Tools

A lot of recent research shows that digital learning platforms like Kahoot, Quizlet, Quizizz, and Blooket can help students learn new words and get interested in learning. But each tool also has its own problems because of how it was made and how it affects the student's ability to think.

Table 1. Comparison of Wordwall and Other Learning Platforms

Platform	Key Features	Positive aspects	Limitations
Kahoot	Time-based quiz, leaderboard, competition	Increases motivation and engagement; promotes active participation	Time pressure may increase anxiety; focuses on speed rather than understanding
Quizizz	Self-paced quiz, gamified feedback, memes	Reduces anxiety; supports self-paced learning and autonomy	Still quiz-based; may become repetitive over time
Quizlet	Flashcards, repetition, matching	Supports memorization; reduces cognitive load	Limited interaction; passive learning experience

Blooket	Game-based learning, individual devices	High engagement and motivation	Focus on gameplay more than learning content; less teacher interaction
Wordwall	Multi-format activities, visual/audio support, printable worksheets	Increases engagement; supports varied learning; printable worksheets help check recall.	Depends on teacher design

As seen in the comparative table above, Kahoot can make students more interested and involved, but the pressure of time and competitiveness can make them focus on speed instead of understanding the material (Wang & Tahir, 2020). Quizlet helps people remember language by making them repeat it, although this way of learning is rather passive and doesn't involve any engagement (Dizon, 2016; Settle, 2011). Quizizz also mostly employs multiple-choice questions, therefore it doesn't have a lot of different ways to learn. Blooket, on the other hand, is very interesting because it has a game element, but each student usually uses a different device, which can make it harder for teachers and students to interact directly in the classroom and make students more likely to focus on the game than on the learning material (Hamari et al., 2014; Chen et al., 2022). Most of the time, these tools just focus on one thing, such memory, quick assessment, or fun, which makes the learning process unbalanced.

Wordwall, on the other hand, has a lot of different games that mix pictures, sounds, and interaction. This makes learning more interesting for children (Mayer, 2002). Also, Wordwall lets teachers print out assignments to see if students comprehend and remember what they've learned, which is something that many other platforms don't accomplish well.

So, Wordwall is a better tool for building a balanced learning environment that keeps students interested and helps them learn well.

2.4. Overview of vocabulary retention in learning language

The concept of vocabulary retention encompasses the ability to help individuals remember and recall vocabulary after learning it (Alia et al., 2022). It is not just about seeing and recognizing a word; it is about the ability to recall and use it when we need it, such as when we are talking, writing, reading, or listening. Essentially, vocabulary retention serves to determine whether a learner truly remembers the vocabulary after a period of time has passed since it was initially learned . (Salsabila & Santoso, 2024)

Alfie Agazzi indicates that vocabulary is a crucial part of learning a new language! It serves as a building block for learners to truly grasp and use the language. When learners lack sufficient vocabulary, they may struggle to understand content while reading or listening, and they may have difficulty sharing their thoughts when speaking or writing (Agazzi, 2022). As Paul Nation emphasizes, vocabulary is one of the key factors influencing a learner's ability to engage with the language (Al Fraidan & Alharthi, 2025; Nation, 2001). Therefore, delving deep into vocabulary is a vital step in the journey of learning English!

Besides choosing new words, retaining that vocabulary is also extremely important! If learners only learn words without memorizing them over a long period, they may forget them quickly and need to relearn them repeatedly, which can waste time and reduce learning efficiency. On the other hand, when vocabulary is stored in long-term memory, learners can easily recall and use those words in everyday situations. This not only enhances communication skills but also improves proficiency in all four areas: listening, speaking, reading, and writing.(Shabaneh & Farrah, 2019)

In short, vocabulary is truly the foundation of language learning, and vocabulary memorization practice is crucial in empowering learners to use the language effectively and confidently (Al Fraidan & Alharthi, 2025; Salsabila & Santoso, 2024)!

2.5. Previous Studies and research gap

In recent years, a number of researchers have explored the efficacy of online gaming platforms, like Wordwall in promoting vocabulary acquisition. Findings from these studies demonstrate that using Wordwall can greatly enhance students' vocabulary learning skills, while fostering their excitement and engagement in the learning process (Lestari & Rohmani, 2024b; Nova et al., 2024; Pradini & Adnyayanti, 2022; Widyaningsih1 et al., 2023). In particular, numerous studies indicate that students who engage with Wordwall typically achieve superior scores on vocabulary assessments and exhibit a more positive attitude compared to traditional teaching methods. (Pradini & Adnyayanti, 2022).

Furthermore, the studies also emphasize the significance of gamification and interactivity within Wordwall, including features like drag-and-drop tasks, quizzes, or matching exercises, which support learners in better sustaining vocabulary. (Lestari & Rohmani, 2024b). These factors play an essential role in creating a lively educational setting, which, in turn, boosts students' interest and concentration.

Nevertheless, despite numerous favourable findings, earlier research continues to exhibit specific shortcomings. First and foremost, the majority of studies have been limited to immediate learning results and have not properly investigated vocabulary retention. (Pradini & Adnyayanti, 2022). Secondly, the primary subjects of the studies are elementary school students. (Howard et al., 2021; Lestari & Rohmani, 2024b; Pradini & Adnyayanti, 2022; Susilo et al., 2025; Widyaningsih1 et al., 2023) or English learners in most cases (Anjani et al., 2025; Do & Huynh, 2024; Jannah & Syafryadin, 2022; Nenohai et al., 2022; Nova et al., 2024), and few have focused on 6th graders. Even though studies involving young students are rather limited, many researches emphasise only academic results, discounting factors like students' engagement, motivation, and self-confidence in their educational journey.

To address these limitations, this study was assumed to estimate how effective Wordwall is in enhancing vocabulary retention for 6th graders, combined with

analyzing students' engagement, involvement, and perceptions while using this learning platform.

2.6. Theoretical Framework

2.6.1. Definition of Vocabulary

Vocabulary refers to the set of words that learners know and use in a language. According to Nation (2001), knowing a word involves not only understanding its meaning but also recognizing its form, pronunciation, and appropriate use in different contexts.

There are three main pieces to vocabulary knowledge. The first is the word's shape, which encompasses how it looks and sounds. The second part of meaning is the link between a word and the concept it stands for. The third part is correct usage, which includes grammar, word combinations (collocation), and the suitable setting. This shows that words are never thought of on their own, but rather as part of a bigger system that is always connected to the language and the situation in which they are employed. There are also two types of vocabulary: receptive and productive. Learners increase their vocabulary in two parts: receptive vocabulary, which is made up of words they can understand and recognize when they read or listen, and productive vocabulary, which is made up of words they can use when they write or talk. Receptive vocabulary is usually greater than productive vocabulary since using words requires a deeper understanding of what they signify.

Therefore, learning vocabulary is not a passive process but requires the active participation of the learner through activities such as practice, usage, and interaction with vocabulary.

2.6.2. Learning and vocabulary

Learning vocabulary is getting, processing, and storing language information in memory. This implies that students don't only see or hear a new word; they also have to go through a lot of different mental stages to really grasp and apply it. Students need to not only remember the form and meaning of the term, but also how to utilize it in a certain circumstance, as a word can imply different things in different situations.

Nation (2001) says that being exposed to language in a lot of various settings helps you grasp and utilize the term better. The reason is that every time the student sees the term again, they remember it better and learn more about how to apply it. Not only does this repetition assist students remember the term better, but it also helps them go from “recognizing the word” to “being able to use the word”.

So, acquiring vocabulary isn’t something that happens on its own; the learner has to be involved. If students merely read or copy vocabulary words without thinking about them, they won’t be able to remember them for long. On the other hand, learners digest material more deeply when they do things like practice, use words in phrases, or engage with terminology through specific exercises and circumstances. This active engagement helps you remember words better and utilize them better.

2.6.3 Vocabulary Retention

Vocabulary retention is the capacity to remember and use words after acquiring them. Retention is the step of the memorizing process that shows how well learners can remember and apply terminology after they have learned it.

From a psychological standpoint, retention is contingent upon repetition and the degree of information processing. Ebbinghaus (1885) said that information is readily forgotten if it is not revisited, and that repetition aids in memory consolidation. The Levels of Processing hypothesis (Craik & Lockhart, 1972) posits that information processed at a deeper level is retained more successfully.

2.7. Conceptual framework

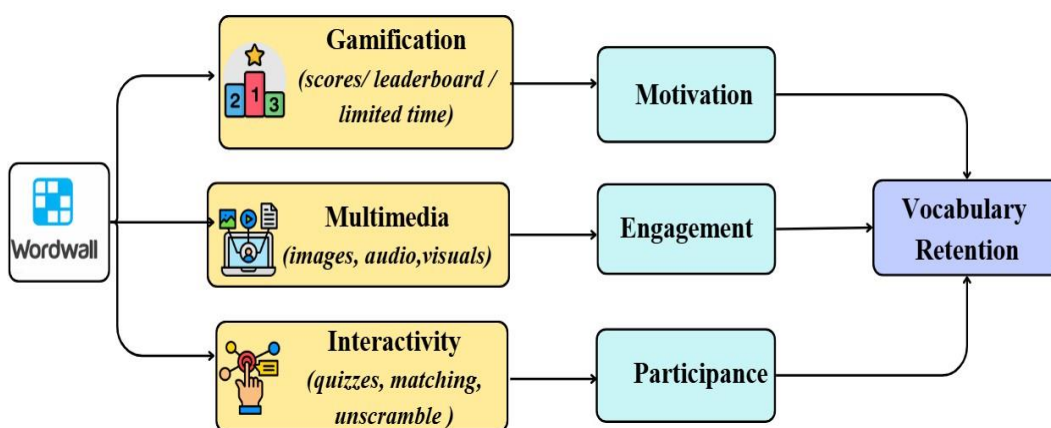


Figure 3. Conceptual Framework

This study is based on a practical perspective: students' ability to remember vocabulary is not a direct result of simply using an application, but rather stems from how they think and act during the learning process. More specifically, vocabulary retention is only truly formed through a combination of regular repetition and cognitive processing. These activities, in turn, depend heavily on whether students are genuinely engaged in the lesson. Therefore, I have combined theories of memory and motivation to better explain how Wordwall supports vocabulary learning.

First, from a cognitive perspective, memory is the key factor. According to Ebbinghaus's theory (1885), without review, we forget knowledge very quickly over time. This shows that repetition of a vocabulary word is extremely necessary to maintain memory. Furthermore, instead of rote memorization, if we apply spaced repetition, knowledge will easily transfer from short-term to long-term memory. When students process information systematically through memory encoding, they will remember words for longer. Therefore, repetition and deep processing of information are two 'keys' to effective vocabulary memorization.

However, the brain will not automatically memorize if students lack initiative and enjoyment in learning. According to the theory of Ryan and Deci (2000), if students are intrinsically motivated, they will participate in the lesson more naturally and actively. Once enthusiastic, students will focus more and practice more, thus making vocabulary repetition more enjoyable. Therefore, engagement is the most important bridge to bring teaching activities to actual memorization results.

In this process, Wordwall plays a crucial supporting role. By integrating gamification, multimedia, and interactive activities, Wordwall makes the learning environment more engaging. For example, features like scoring and leaderboards encourage a competitive spirit among students. Simultaneously, the combination of audio and visuals (following Mayer's theory, 2001) helps students absorb information more easily. Actions like drag-and-drop and matching also require students to pay attention and be more proactive during the exercises.

In short, Wordwall doesn't directly memorize words; instead, it indirectly

influences learning by making it more enjoyable. When students are actively involved in the lesson, they will spontaneously practice and think about vocabulary more. These processes are the decisive factors in forming long-term memory and improving vocabulary retention, as outlined in the model I have proposed.

Initially, this research applies Ebbinghaus's Forgetting Curve principle to explain the retention factor. Hermann Ebbinghaus indicates that consistent repetition serves to fortify the retention capabilities of learners' memories(Ebbinghaus, 2013). When students engage with vocabulary repeatedly through Wordwall activities such as exercises or games, they are more inclined to retain it effortlessly and for a longer duration. Consequently, repetition is deemed to exert a direct effect on vocabulary retention.

Also, gamification encompasses components such as scores, rankings, and time limitations. Self-determination theory elevates the learning experience, transforming it into an enjoyable interest. When students immerse themselves in the learning experience, they engage more completely in educational activities, eventually leading to superior learning results. (Ryan & Deci, 2000)

Moreover, Multimedia in Wordwall is explained by the Cognitive Theory of Multimedia Learning (Mayer, 2002; Mayer & Moreno, 2007), such as images, sounds, and visual elements, greatly enhances students' ability to understand and remember vocabulary more effectively. To illustrate, when students are presented with an image while listening to the pronunciation of a word, they are more likely to develop connections and retain the word better than if they relied solely on text.(Khan et al., 2023)

In this research, engagement is characterized by the level of student focus, participation, and enthusiasm for the learning adventure. When learners are significantly engaged in the learning process, they show improved focus and a heightened capacity to retain educational material more efficiently. Consequently, engagement is recognized as an essential intermediary factor connecting the features of Wordwall to vocabulary retention(Ngoc & Loc, 2025).

In summary, repetition applies a direct influence on vocabulary retention,

while gamification and multimedia serve to enhance student engagement, thereby indirectly augmenting retention levels. Furthermore, multimedia can directly facilitate improved memorization. These relationships are illustrated within the theoretical framework of the research.

CHAPTER 3. METHODOLOGY

3.1 Research Design

This study adopted a quantitative case-study approach conducted at Le Loi Secondary and High School. The research focused on Grade 6 students and aimed to explore their perceptions of the Wordwall platform in supporting English vocabulary retention. A case-study approach was selected because it allowed the researcher to investigate the phenomenon within a specific educational context, taking into account the characteristics of the learners and their learning environment (Yin, 2018). The study did not employ an experimental design or achievement tests. Instead, it focused on collecting students' perceptions regarding the effectiveness of Wordwall's gamification, multimedia, and interactivity features in supporting vocabulary learning and retention.

To collect data, a questionnaire was administered to 79 Grade 6 students. The questionnaire consisted of items related to gamification, multimedia, interactivity, and vocabulary retention. The collected data were analyzed using descriptive statistics and reliability analysis in SPSS to identify common patterns in students' perceptions and experiences with the platform. This approach provided a practical and efficient means of examining the role of Wordwall in vocabulary learning within the selected research context. The research design was considered appropriate for addressing the research questions, which focused on students' perceptions of Wordwall and its role in supporting vocabulary retention.

3.2 Research site and participants

3.2.1 Research site

The research was executed in Le Loi Secondary & High School, located in Phan Thiet city, Lam Dong province. It is a good place for learning since there is enough room for teachers to readily see and connect with each student while they are teaching. All of the classrooms have TVs that are connected to a robust internet network. These are good circumstances for using the Wordwall platform in teaching. The mix of music, pictures, and interactive activities makes the lectures much more interesting. Teachers here may try out new teaching techniques more easily than in places without technology. This helps them identify the most creative and successful ways to teach kids.

3.2.2 Participants

The study's participants consist of 79 sixth-grade students from classes 6A1 and 6A3 at Le Loi Secondary & High School in Phan Thiet. One reason for choosing these two classes is because they are easy to connect to, put into action, and gather data from. But most importantly, these teens are at a time in their lives when they are most sensitive in middle school.

Based on actual observation, early school students usually learn vocabulary at a basic recognition level, and games mainly serve to create a cheerful atmosphere. In contrast, high school students are struggling with university entrance exams and international certificates; at this age, language thinking has gradually taken shape, and they often prioritize test-taking strategies over spending time experiencing interactive platforms. Unlike early young learners and high school students, sixth graders, the first year of middle school, mostly face a significant shock when transitioning from primary to secondary school. They not only have to get used to

new teachers and classmates but are also overwhelmed by the new English curriculum with a dense and difficult academic vocabulary. At the age of 11-12, they still retain innocence, enjoy fun, and are extremely fond of interactive and vivid visual content.

But when students see large lists of words in their textbooks, they often start to be afraid of studying, forget things, and not like English (Nation, 2013). I discovered that this set of high school kids really needs help from technology platforms like Wordwall to help them learn new words in a fun way instead of just memorizing them. To get more detailed information for the study, I choose four typical students to interview in depth. Two of them were strong students and two of them had poorer English skills. This divide helps me figure out if Wordwall is really a "tonic" for all kinds of pupils. Also, since I don't teach personally, the voices of the subject instructors at Lê Lợi School have become a very useful resource for me.

The participants had various levels of English proficiency. Some students had a solid understanding fundamental vocabulary and language concepts, but others still had challenges comprehending and retaining new vocabulary. This variety made it a good time to look at how well Wordwall helped students of different skill levels learn new words.

Everyone in the study was required to learn English at school. The researcher did not actively instruct these students; they were chosen based on their availability and willingness to participate in the survey. So, I know that this is the group that needs a "boost" from Wordwall the most to make learning simpler and help students keep their basics from the first year of school.

3.3. Research instruments

To collect data comprehensively and objectively, this study uses a toolkit that combines quantitative and qualitative methods. The combination of multiple tools not only helps measure the effectiveness of Wordwall on a broad scale but also allows the researcher to delve into interpreting the psychological and emotional changes of 6th-grade students at Le Loi School.

A questionnaire was used as the main instrument for data collection. It was designed to investigate students' perceptions of learning vocabulary through Wordwall and to explore how the platform's features support vocabulary retention. The questionnaire professionally designed on the Google Forms platform. To ensure that the 6th-grade students – who had just transitioned to a new grade and were still unfamiliar with academic terms – could correctly understand the researcher's intent, the entire content of the form was presented entirely in Vietnamese. The survey used a 5-point Likert scale, helping the researcher accurately measure the nuances of students' opinions regarding the Wordwall platform.

The poll is organized into four categories of scientific criteria to better understand how the Wordwall platform affects vocabulary retention. The Gamification criteria group looks at how much fun learning is by adding competitive components. The Multimedia criteria group looks at how well integrating sounds and pictures works.

The Interactivity criteria group looks at how proactive the learners are when they get rapid feedback from the app. These three categories are tools that teachers may use to get students interested, motivated, and involved in their learning.

They also carefully prepared the installation process to make sure it was as exact as possible. 79 students took the survey at the same time, right after the break in the third session of the morning. During the same time, each student used their personal phone to go to the URL that the teacher had supplied them. The system was set up such that each account could only send in results once, which stopped any fake or duplicate data from being sent in. The researcher can elicit the most direct and honest answers by performing the survey in the classroom. This gives us a good starting point for looking at the data in the future chapters of the project.

In scientific research, making sure that a survey toolset is consistent and reliable is the first step to making sure that the data obtained is useful. The Cronbach's Alpha coefficient is used in this project as a standard way to check the internal consistency of questions that are all based on the same set of criteria. This exam makes sure that the students' answers aren't random or confused, but are instead a true

reflection of their constant thoughts on using the Wordwall platform.

According to the assessment standards set by Hair et al. the toolkit is considered reliable if the Alpha coefficient is 0.70 or above (Joseph F. Hair et al., 2019). Nonetheless, in an exploratory research with early-grade pupils, namely 6th graders, values between 0.60 and 0.70 are deemed acceptable, provided that the observed variables uphold theoretical rigor (George & Mallery, 2019). The reliability test results of this study showed that all groups achieved acceptable levels. Specifically, the Cronbach's Alpha coefficient for Gamification was 0.758; Multimedia was 0.805; Interactivity was 0.791; and Vocabulary Retention was 0.812. In addition, the corrected item-total correlation coefficients were all at appropriate levels, indicating that the questions within each group were closely linked. This demonstrates that the questionnaire has good reliability and is suitable for use in the study.

Based on the collected data, the study can analyze the extent to which each factor influences vocabulary learning, thereby drawing conclusions about the effectiveness of Wordwall in supporting students' vocabulary memorization. The complete questionnaire is presented in Appendix A.

3.4. Data collection procedure

The study used a clear and systematic approach for collecting data to make sure that it was full and accurate. After students had used Wordwall to acquire vocabulary for a while, they filled out surveys to gather data. The timeframe was established so that students would have enough time to do relevant learning activities, which would help them give accurate answers that were based on their real-life experiences. Also, data collecting happened when students weren't under too much academic pressure, which made it easier for them to answer honestly and comfortably. This made the data that was collected more reliable.

3.5 Reliability and Validity of the Instrument

Before the questionnaire was distributed to the participants, its reliability was examined to ensure that the items could consistently measure the intended constructs. Cronbach's Alpha was used to assess the reliability of the questionnaire. The questionnaire included four constructs: Gamification, Multimedia, Interactivity, and Vocabulary Retention. The reliability analysis was conducted using SPSS version 26, and the results are presented in Table 3.

Table 2. Cronbach's Alpha reliability for Gamification, Multimedia, Interactivity and Vocabulary retention outcome

<i>Reliability Statistics</i>			
Construct	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Gamification	0.758	0.763	5
Multimedia	0.805	0.806	5
Interactivity	0.791	0.791	4
Vocabulary retention	0.812	0.814	6

3.6. Data Analysis

After collecting all the survey forms, the data is processed to find practical conclusions for the project. The main approach is to connect statistical numbers with honest sharing from teachers and students, thereby providing the most objective results. SPSS software version 26 was utilized to process and analyze the data collected from 79 students. Well-established statistical approaches were employed to ensure the objectivity and accuracy of the research outcomes. The analysis process was conducted through the following steps: Firstly, a thorough screening of responses was performed to verify data authenticity and eliminate invalid entries. Subsequently, qualitative data from the 5-point Likert scale were encoded into numerical values to facilitate quantitative statistical analysis. Secondly, a reliability analysis of the scales was conducted using Cronbach's Alpha coefficient. This step was essential to evaluate the internal consistency of the variable groups, such as Gamification, Multimedia, and Interactivity. Thirdly, descriptive statistics, including Mean and

Standard Deviation, were calculated to assess the impact of the Wordwall platform on learning activities. These indices provided an empirical foundation for evaluating the degree of student agreement regarding each research factor. Finally, the resulting statistical data were synthesized to draw conclusions and provide insights into the effectiveness of using Wordwall in the English classroom. Detailed questionnaires and SPSS output tables are presented in Appendix A.

3.7. Ethical Considerations

During research at school, ethical standards are always taken very seriously to protect the rights and privacy of all participants. The approach is based on principles such as voluntariness, information confidentiality, and objectivity and honesty. Before students begin surveys or interviews, both teachers and students are fully informed about the purpose and procedures of the study. Participation is entirely voluntary, with no coercion of any kind. Keeping your identity safe is very important. All personal information collected through Google Forms is kept private and only used for research purposes. Then, all of the survey answers are written down in a fair and accurate fashion. The scheduling of student surveys and Wordwall exercises is carefully planned so that students don't feel hurried and their usual classwork isn't disturbed.

CHAPTER 4. FINDINGS AND DISCUSSION

4.1. Participants' Profile

This study involved 79 Grade 6 students from Le Loi Secondary and High School who participated in the questionnaire survey. All participants had experience using Wordwall in vocabulary learning activities before completing the questionnaire. The participants were selected because they represented the target population of the study and were directly involved in the implementation of Wordwall for vocabulary learning. The demographic information of the participants is presented in the following table to provide a clearer description of the study sample and support the interpretation of the findings.

4.2. Results of the Questionnaire Survey

This part is all about showing the data that came from 79 surveys filled out by 6th graders at Le Loi Secondary and High School. To help readers better understand how well Wordwall works in the real world, the study will start by looking at descriptive statistical indicators instead of jumping right into complicated technical tests. Using means and standard deviations, we will slowly get a picture of how students feel and what they have experienced in four main areas: gamification, multimedia, interactivity, and vocabulary retention. This arrangement makes it clear how a visual learning tool has helped students deal with the stress of learning during this difficult time of change. Finally, the last section will show the Cronbach Alpha reliability test to prove that these factual answers are completely objective and consistent. This will show that all the data is scientifically valid.

4.2.1. Descriptive statistics of Gamification element.

Table 3 provides the mean and standard deviation for each item within the Gamification construct.

Table 3. Mean and standard deviation of Gamification element

<i>Item Statistics of gamification</i>			
	Mean	Std. Deviation	N
The time pressure within the games forces me to react and memorize vocabulary more quickly.	3.46	1.152	79
I find myself putting more effort into memorizing vocabulary in order to achieve a higher ranking on the leaderboard.	3.76	0.977	79
Conquering the different difficulty levels in the game has helped me see significant progress.	3.87	1.055	79
During lessons using the Wordwall platform, I am less distracted and do not feel sleepy.	3.75	1.115	79
I always try to use reasoning and analysis to find the correct answer in every game.	3.78	1.021	79

Table 3 presents students' responses to the gamification features of Wordwall. The mean scores ranged from 3.46 to 3.87, showing that students generally had positive views of the gaming elements used in the platform. Among the items, the statement "Conquering the different difficulty levels in the game has helped me see significant progress" received the highest mean score ($M = 3.87$), suggesting that students felt motivated when they could overcome challenges and see their improvement. The item related to using reasoning and analysis to find correct answers also received a relatively high mean score ($M = 3.78$), indicating that the games encouraged students to think actively during learning activities.

In contrast, the statement about time pressure helping students memorize vocabulary more quickly received the lowest mean score ($M = 3.46$). This may

suggest that not all students felt comfortable with time-limited activities, although they still viewed this feature positively overall. In general, the results indicate that the gamification features of Wordwall were well received by the participants and contributed to a more engaging vocabulary learning experience.

4.2.2.Descriptive statistics of multimedia element

Table 4. Mean and standard deviation of Multimedia element

<i>Item Statistics</i>			
	Mean	Std. Deviation	N
Illustrative images help me understand the meaning of words immediately without needing to translate them into Vietnamese	3.81	0.988	79
The combination of images and words helps me learn vocabulary more easily.	3.91	1.064	79
The integration of images, sounds, and drag-and-drop actions helps me retain vocabulary better.	3.75	0.940	79
Sound effects in Wordwall help me hear pronunciations more clearly and memorize how to read words effectively.	3.57	1.106	79
After completing exercises on Wordwall, I feel more confident participating in vocabulary-related activities in class.	3.87	0.966	79

Table 4 shows that students liked the multimedia part very much, with average scores between 3.57 and 3.91. In fact, for 6th-grade students, incorporating visual illustrations helped them understand the meaning of words immediately without needing to translate them into Vietnamese (M=3.81), thus making knowledge acquisition much easier compared to traditional learning methods (M=3.91).

In addition, drag-and-drop operations along with vivid sound effects acted as a supporting tool, making memorization more sustainable and less stressful (M=3.75). This visual support helped students overcome psychological barriers, making them

feel significantly more confident when participating in vocabulary activities in class (M=3.87). There is a standard deviation of about 1.0, so it is safe to say that all 79 students at Le Loi School agree that multimedia has made lessons more fun and natural.

4.2.3. Descriptive statistics of interactivity element

Table 5. Mean and standard deviation of Interactivity element

<i>Item Statistics</i>			
	Mean	Std. Deviation	N
Word-ordering and sentence-ordering activities help me understand correct spelling and sentence structures.	3.85	0.988	79
When I receive immediate feedback on incorrect answers, I remember those mistakes better to avoid repeating them.	3.92	1.010	79
I become a more active learner because I am directly involved in the exercises rather than just looking at the board.	3.65	1.026	79
I clearly understand how to use vocabulary in different contexts through interactive games	3.73	1.022	79

Table 5 indicates that Wordwall's interactive features encouraged sixth-grade students to participate more actively in learning, with average scores ranging from 3.65 to 3.92. A key highlight was the ability to receive immediate feedback, helping students effectively remember mistakes without feeling pressured (M=3.92). Instead of simply listening, directly arranging words and sentences helped students naturally understand spelling rules and language structures (M=3.85). This interaction supported 79 students at Le Loi School in grasping the context of word usage and increasing their confidence in lessons (M=3.73). A near-perfect SD of 1.0 confirms strong agreement with the value of this learning aid

4.2.4. Descriptive statistics of retention outcome

Table 6. Mean and standard deviation of Vocabulary retention

<i>Item Statistics</i>			
	Mean	Std. Deviation	N
After completing exercises on Wordwall, I feel more confident participating in vocabulary-related activities in class.	3.81	1.001	79
I recognize the form and meaning of vocabulary faster when I encounter them again in textbooks.	3.46	1.119	79
I can accurately rewrite vocabulary I have learned after playing games like “Unscramble”.	3.61	1.055	79
Even after a week without reviewing, I can still remember more many words learned through Wordwall.	3.73	1.129	79
I can understand the meaning of the vocabulary I have practiced when taking tests.	3.81	0.975	79
Compared to traditional rote learning (copying words multiple times), I find that Wordwall helps me remember vocabulary more permanently.	3.68	1.104	79

Table 6 presents students’ responses to the vocabulary retention construct. The mean scores ranged from 3.46 to 3.81, indicating generally positive perceptions of Wordwall's role in supporting vocabulary retention. The highest mean score was found in the item related to understanding the meaning of vocabulary during tests ($M = 3.81$), suggesting that students felt more confident in recalling and using vocabulary they had practiced through Wordwall activities.

In addition, the item concerning remembering many vocabulary after one week received a relatively high mean score ($M = 3.73$). This result suggests that many students believed Wordwall helped them retain vocabulary for a longer period of time. Overall, the findings indicate that students viewed Wordwall as a useful tool

for supporting vocabulary retention and reinforcing vocabulary learning ($M=3.73$). Compared to traditional word-writing methods, students found that learning through Wordwall helped them remember longer ($M=3.68$) and recognize words faster when opening their textbooks ($M=3.46$). With 79 participating students, the high consensus (SD around 1.0) confirms that this is a very effective and natural method of supporting memorization.

4.3. Discussion of the research question

This section discusses the findings in relation to the two research questions of the study. Research Question 1 focuses on the role of Wordwall in supporting English vocabulary retention among Grade 6 students. Research Question 2 examines students' perceptions of the effectiveness of Wordwall's gamification, multimedia, and interactivity features. The discussion is organized around the key findings and interpreted through relevant theoretical perspectives.

4.3.1. Learner characteristics as the theoretical foundation

The significant improvement in vocabulary retention among sixth-grade students at Le Loi Secondary and High School is due not only to changes in teaching tools, but also to better psychological and cognitive conditions, as explained in Chapter 2. Sixth-grade students (around 11–12 years old) are in a crucial transitional stage in cognitive and psychological development. At this stage, they begin to have better logical thinking abilities, but they still learn most effectively when supported by visuals, concrete examples, and hands-on activities. Students in the concrete operational stage of thinking (mainly ages 11 to 12) have the ability to think logically, but primarily rely on things that can be seen or directly experienced. They learn better when supported by visuals, concrete examples, and hands-on activities, while abstract concepts remain difficult to understand. (Piaget, 1972).

Beside cognitive characteristics, psychological factors also play an important role. According to Erikson (1968), children at this age begin to care a lot about demonstrating their abilities. They often feel happy when they do things correctly and easily become anxious or lose confidence when they make mistakes.

Therefore, a friendly and pressure-free learning environment will help students learn better. Wordwall, with its quick feedback, game format, and scoring system, helps students feel engaged while also reducing stress during the learning process. Also, a lot of students still feel anxious or afraid of making errors while they are learning a foreign language, which might make it less successful (Krashen, 1982).

Furthermore, according to Mayer (2001), the combination of images, sounds, and text helps learners process information more effectively, thereby increasing their retention ability. At the same time, studies on game-based learning (Deterding et al., 2011) show that game elements help increase students' motivation, concentration, and level of participation. Wordwall, with interactive exercises such as drag-and-drop, multiple-choice, and gamified content, is suitable for the learning characteristics of 6th-grade students. The synthesis of the above theories shows that 11–12-year-old students have cognitive and psychological characteristics suitable for learning methods that are visual, interactive, and gamified. Therefore, using Wordwall not only helps improve understanding but also increases learning interest, reduces anxiety, and enhances the ability to memorize English vocabulary.

4.3.2. Discussion of Research Question 1

Research Question 1 aimed to explore the ways in which the Wordwall platform supports English vocabulary retention among young learners, particularly Grade 6 students. The findings indicate that students generally perceived Wordwall as a useful tool for learning and remembering vocabulary. The positive mean score of the Retention Outcome construct suggests that students believed Wordwall helped them retain vocabulary more effectively and increased their confidence in using newly learned words.

The findings suggest that Wordwall supports vocabulary retention through several mechanisms. First, the platform provides repeated exposure to vocabulary through different game-based activities, allowing students to encounter and practice vocabulary multiple times. Such repeated encounters may strengthen memory and facilitate vocabulary recall. Second, the use of immediate feedback helps students

recognize and correct mistakes during the learning process, which contributes to more effective vocabulary learning. Third, Wordwall encourages active participation rather than passive learning, allowing students to engage more deeply with vocabulary items.

These findings can be explained through relevant learning theories. According to Dual Coding Theory (Paivio, 1986), vocabulary is more likely to be remembered when information is presented through both verbal and visual channels. Furthermore, repeated practice and retrieval opportunities may contribute to vocabulary retention by reinforcing memory connections over time. Therefore, the findings suggest that Wordwall plays a positive role in supporting English vocabulary retention among Grade 6 students through repeated exposure, active participation, and immediate feedback.

4.3.3 Discussion of Research Question 2

Research Question 2 aimed to explore Grade 6 students' perceptions of learning vocabulary through Wordwall. The findings indicate that students generally had positive perceptions of the platform and viewed it as an engaging and supportive tool for vocabulary learning. Positive mean scores across the Gamification, Multimedia, and Interactivity constructs suggest that students appreciated different aspects of the learning experience provided by Wordwall.

4.3.3.1. Gamification and learning motivation

The average score for the Gamification element on the survey (mean = 3.72, Cronbach's alpha = 0.758) shows that the students mostly agree on this aspect. This shows that the students often play games on Wordwall several times, mainly in order to achieve better scores or try to move up the leaderboard. This means that kids don't simply play once; they usually go back to the same subject over and over again. Self-Determination Theory (Deci & Ryan, 1985) helps explain this occurrence from a psychological point of view. This hypothesis posits that individuals are more inclined to study when they see progress and possess control over their learning outcomes. Wordwall makes it easy for students to see how much they've improved by giving them scores, rankings, and instant feedback.

At this age, especially in sixth grade, students worry a lot about being recognized and compared to their friends. Seeing their name on the scoreboard frequently makes them excited and want to try again to get better results. Furthermore, according to Erikson (1968), students at this age greatly need the feeling of “I can do it”. When they achieve high scores or rank higher, they feel more confident, and this motivates them to continue learning. The fact that students choose to play the game more than once is interesting because it creates a form of “natural review”. Each time they repeat, pupils are required to recollect previously taught words, which reactivates their memory. Spaced repetition is a learning concept that this process is similar to. It helps to gradually reinforce knowledge so that you don't just learn it once and forget it. Students can remember words more easily and effectively with this method because they can review the information many times while playing and not getting bored.

4.3.3.2 Multimedia and vocabulary learning

The survey results showed that the overall average score for the multimedia factor group (mean = 3.78, Cronbach's alpha = 0.758) was the highest among the surveyed factor groups. This means that using Wordwall to learn vocabulary using pictures and colors helps children recall words faster and understand them better. Some students said that it was hard to recall what they learned when it was merely text, but they could remember the words right away when they saw pictures. According to Dual Coding Theory (Clark & Paivio, 1987), this behavior may be explained. This theory according to people tended to remember information better when they get them through both channels at the same time: text and images.

The brain makes more “connections” when both channels are engaged, which makes it easier and longer-lasting to remember things. For sixth graders, who require tangible examples to learn new ideas, a wordwall platform may provide them images, sound, and text to go along with the words instead of just looking at the words on the textbook. When students view a vocabulary word with an interesting picture, their brains generate two “pathways” for remembering

instead of just one. This makes it simpler for students to remember the word later. If students forget how to spell it, the picture they saw will help them remember it again.

Furthermore, Mayer's Multimedia Learning Theory (Mayer, 2002) also suggests that learners absorb information more effectively when it is presented using a combination of images and words, rather than relying solely on a single form of information. This reduces the pressure of processing information in working memory, especially for learners without a solid vocabulary foundation. In practice, using Wordwalls, vocabulary is often associated with illustrative images, colors, or visual context. This allows sixth-grade students to understand the meaning through images without having to mechanically translate each word. For secondary students whose thinking is still more concrete, this presentation method helps them approach vocabulary more naturally, while also increasing long-term retention because the information is "image-bound" in their memory instead of existing only in written form.

4.3.3.3. Interactivity and learning process

Survey results on interactivity (mean = 3.79, Cronbach's alpha = 0.791) show that students highly value the interactivity in Wordwall, especially activities such as drag-and-drop, answer selection, and receiving immediate correct/incorrect feedback. Many students also reported feeling "easier to understand" and "less confused" when learning vocabulary this way compared to traditional methods. Cognitive Load Theory can help us understand this phenomena. This idea says that students learn better when they break down material into smaller steps instead of trying to take in too much at once. Wordwall's questions are easy to understand and provide students instant feedback when they respond, so they avoid feeling overwhelmed as they learn new vocabulary.

Additionally, Schmidt's (1990) Noticing Hypothesis suggests that language acquisition only works when learners "recognize" what is correct and wrong as they are learning. In Wordwall, feedback on whether an activity was right

or wrong comes right away, which helps students find and fix their mistakes fast. This means that learning isn't only about picking the right answers; it's also about correcting yourself all the time. From a practical point of view in the classroom, this interactive method stops pupils from learning simply by doing nothing. Instead of just looking and taking notes, they are always told to think, choose, and respond. So, the brain processes vocabulary in greater detail, and remembering things becomes easier. This approach of “learning by doing and getting feedback” is far better for sixth graders than standard rote memorizing since it lets them grasp and recall the subject at the same time through hands-on experience.

Overall, the findings suggest that Grade 6 students perceived learning vocabulary through Wordwall positively. They viewed the platform as enjoyable, motivating, interactive, and helpful for vocabulary learning. The combination of gamification, multimedia, and interactivity contributed to creating a learning environment that students found both engaging and supportive.

4.4. Delimitations of the Study

Several delimitations were established to maintain the focus of this study. One important boundary of the research concerns the participants. The study was conducted only with Grade 6 students at Le Loi Secondary and High School and did not include learners from other grade levels or educational institutions.

Another delimitation relates to the instructional tool under investigation. The research focused exclusively on the use of Wordwall for English vocabulary learning. Other digital learning platforms and educational technologies were beyond the scope of the study. Likewise, the study concentrated on vocabulary learning and vocabulary retention rather than other language skills such as listening, speaking, reading, or writing.

In addition, the research explored students' perceptions of Wordwall and their learning experiences while using the platform. Therefore, the findings mainly reflect students' viewpoints within the selected educational context.

4.5. Limitations of the Study

Despite providing valuable findings, this study has several limitations that should be considered when interpreting the results.

One limitation is related to the sample size and research setting. The study involved only 79 Grade 6 students from a single school. Although the sample was appropriate for the research objectives, the findings may not fully represent students from other schools, regions, or educational contexts. A further limitation concerns the data collection instrument. The study relied primarily on a questionnaire to gather information. While this approach made it possible to collect data from a relatively large number of participants, the results were based on students' self-reported perceptions and experiences, which may be influenced by personal opinions and individual interpretations. Another consideration is the research design. Since the study employed a quantitative survey approach without pre-tests, post-tests, or experimental comparisons, it was not possible to directly measure the extent of vocabulary improvement resulting from the use of Wordwall. Finally, the research was conducted in a school with favorable learning conditions, including stable Internet access and adequate technological facilities. These conditions may have contributed to the positive experiences reported by students and may differ from those found in schools with more limited resources.

CHAPTER 5. CONCLUSION AND RECOMMENDATIONS

This chapter presents a summary and interpretation of the main research findings, and offers some pedagogical recommendations to improve the effectiveness of English vocabulary learning through Wordwall for 6th-grade students.

5.1. Recommendations

This chapter presents a summary and interpretation of the main research findings, and offers some pedagogical recommendations to improve the effectiveness of English vocabulary learning through Wordwall for 6th-grade students.

5.1.1 *Recommendations for teachers*

According to the research, Wordwall is a great tool for helping 6th graders learn new words, especially when it comes to memory, enthusiasm in learning, and involvement. So, there are a few suggestions for instructors on how to use this technology better in the classroom. Wordwall should be used routinely and in a planned way in vocabulary courses, not only as a fun or extra exercise. When Wordwall is made with clear pictures, colors, and context, it makes it easy for kids to connect new words with certain pictures. This is in line with Paivio's Double Encoding Theory (Clark & Paivio, 1987), which says that integrating linguistic and visual channels makes remembering easier, especially for students who are still thinking in concrete terms, according to Piaget.

Also, points, levels, and rankings are examples of gamification aspects that should be used correctly. In fact, pupils are more likely to do activities again and again if they are competitive or hard. This is important since it not only makes things interesting, but it also naturally leads to more practice. The Self-Determination Theory (Ryan & Deci, 2000) posits that when students perceive themselves as capable of attaining achievement and obtaining acknowledgment, their intrinsic drive to study is markedly elevated. Teachers can also provide Wordwalls as assignments, in conjunction with using them in class. This offers students more opportunities to see vocabulary outside of class, which means they

may study it more often without feeling pressured. This repetition is very important for transferring information from short-term to long-term memory, which helps people remember things better.

However, to avoid overload, Wordwall activities need to be designed at a moderate level. According to Sweller's Cognitive Load Theory (Sweller, 1988), if too much information or task is given at once, students will easily become overwhelmed and their learning efficiency will decrease. Therefore, breaking down vocabulary content into thematic groups will help students access and remember it more easily.

Finally, the element of encouragement should not be overlooked. Sixth-grade students are often sensitive to evaluation and greatly need a sense of progress. Therefore, words of encouragement, timely recognition, or small forms of encouragement will contribute to creating a more positive learning environment and enhance their confidence in learning a foreign language.

5.1.2 Recommendations for students

Based on the research results, several recommendations are proposed for different learner groups to maximize the effectiveness of Wordwall in vocabulary learning. For young children, learning should focus on concise, simple, and visually rich Wordwall activities. At this stage, learners absorb best through colorful images, simple instructions, and frequent repetition of basic vocabulary. Learning should be integrated into play-oriented activities to maintain attention and reduce cognitive load.

For students (elementary, middle, and high school), Wordwall should be used as a regular learning tool rather than just an entertainment game. Learners are encouraged to set clear goals such as improving accuracy, speed, and scores over time. Additionally, students should combine repetitive practice with reviewing mistakes and applying the spaced repetition method to reinforce long-term memory. This helps transform Wordwall from a game activity into a systematic learning strategy.

For adult learners, Wordwall can be used as a self-study tool to support

vocabulary acquisition for communication, study, or work. Learners should choose vocabulary topics that align with their practical needs, such as business English, travel, or daily communication, and use Wordwall as a quick self-assessment tool. Because adults often have little time, short but regular study sessions are recommended to ensure effective memorization.

In general, Wordwall can be effectively applied to various age groups if used appropriately according to the learners' cognitive levels, learning objectives, and educational contexts.

5.1.3. Recommendations for school administrators

Studies show that Wordwall helps sixth-grade students remember language by integrating pictures, games, and other interactive aspects. But for this technology to really last and be utilized all the time at school, the school needs to provide it constant help. One of the most crucial things is technology. As long as they have a good internet connection and enough resources in the classroom, teachers may simply employ Wordwall activities in the classroom. This makes it easier to make technology a more natural aspect of teaching foreign languages, instead of just something to do.

Also, teachers need to be good at using the tools. In truth, not all teachers know how to use gamification to plan events. So, training programs or sessions where teachers share their experiences on how to use WordPress to make lessons will help make sure that all teachers use the same approaches and that the quality of implementation stays high across the school. From a management perspective of perspective, schools may also help by showing teachers how to use digital learning platforms to teach English. When Wordwall is seen as part of a plan for new ways to educate, it will be used more often and in ways that fit with current educational trends that encourage students to learn via experience and engagement.

Another good idea is to plan events that celebrate students' successes. Online vocabulary contests and showing off learning achievements on digital platforms are two ways to engage students that also indirectly strengthen the

gamification aspect of Wordwall, which is one of its best features. Students will be more likely to keep participating in and being interested in learning if they perceive that their efforts are being appreciated.

Finally, the process of putting the plan into action has to be watched and changed based on what instructors and students say. Schools will be able to quickly fix problems that come up if management is flexible, and Wordwall will constantly be used to assist students learn language better.

5.1.4. Recommendations for Different Educational Levels

Although this study focused on Grade 6 students, the positive findings suggest that Wordwall may also be adapted for learners at different educational levels. For primary school students, the platform can be used to introduce basic vocabulary through visual and game-based activities that match young learners' interests and cognitive development. For secondary and high school students, Wordwall may serve as an effective tool for reviewing vocabulary, reinforcing grammar points, and increasing classroom participation. In higher education and adult learning contexts, the platform can be used to support language practice, revision activities, and learner engagement. However, the design and difficulty of activities should be adjusted according to learners' age, proficiency level, and learning objectives.

5.1.5. Suggestions for further research

From the results and limitations of this study, it can be seen that there are still many directions to continue exploring and clarifying the effectiveness of Wordwall in learning English vocabulary. First of all, the following studies can expand the target audience. Instead of primarily focusing on 6th-grade students, other groups should be considered, such as elementary school students, middle school students, high school students, university students, or even adults learning conversational English. This will help understand how Wordwall is suitable for different ages and learning needs. In addition, the scope of the research should also be expanded. Surveying in many schools, different areas, and under various learning conditions will help the results reflect a more diverse

reality, rather than being limited to a specific environment. Furthermore, future studies should also use various other data collection methods. Not only should surveys be used, but interviews, classroom observations, or pre-and post-tests can also be combined to better assess the learners' progress. This approach will yield results that are more in-depth and reliable. Finally, more in-depth studies are needed on the long-term effectiveness of Wordwall. For example, whether students can remember vocabulary for a long time, whether they can use the words in real-life communication, or whether Wordwall is truly more effective than traditional learning methods like flashcards or rote memorization.

In summary, there are still many directions to explore, and further research will help clarify the true role of Wordwall in learning English vocabulary.

5.2. Conclusion

In summary, the research shows that Wordwall is an effective tool for supporting English vocabulary learning, especially for young students such as sixth graders. The use of Wordwall with elements such as images, colors, games, and interactive activities makes learning more understandable, lively, and relatable for learners. The research results also show that Wordwall contributes to improving students' vocabulary retention. Thanks to the repetition of knowledge in various types of exercises and quick feedback, students can easily reinforce and remember vocabulary for a longer period. This helps the learning process not only to stop at short-term memorization but also to support better knowledge retention over time.

Also, Wordwall creates a clear learning motivation, especially for young students. Factors such as scores, rankings, and challenges make students more interested, actively participate in the learning process, and practice more proactively. Learning in the form of “learning while playing” also helps reduce pressure and increase concentration. Moreover, Wordwall also contributes to creating a positive, gentle, and less stressful learning environment compared to traditional learning methods. This is very suitable for the psychological and

cognitive characteristics of young students, who need a lot of encouragement and visual learning experiences.

However, to achieve the best results, Wordwall needs to be used in a targeted manner, combined with other learning methods and the guidance of teachers. At the same time, the effectiveness of this tool may vary depending on the learners and the learning environment.

In summary, Wordwall is not just a simple vocabulary learning tool but also a means to make learning English more dynamic, accessible, and effective, especially in enhancing the motivation and vocabulary retention of young students.

REFERENCES

- Agazzi, A. (2022). *The importance of learning vocabulary for young learners. International Journal of Multicultural and Multireligious Understanding*, 9(8), 56–60. <https://doi.org/10.18415/ijmmu.v9i8.3897>
- Al Fraidan, A., & Alharthi, T. (2025). *The impact of technology use on cognitive development and lexical attrition in L1 and L2 among younger students with ADHD: Opportunities and challenges. Journal of Education and Health Promotion*, 14, 180. https://doi.org/10.4103/jehp.jehp_100_25
- Alia, Z., Bakar, N. A., Ahmad, W., & Saputra, J. (2022). *Evaluating the use of web-based games on students' vocabulary retention. International Journal of Data and Network Science*, 6, 711–720. <https://doi.org/10.5267/j.ijdns.2022.4.001>
- Anjani, N. M., Karim, S. A., Matas, G., Winarna, & Radjaban, R. Y. (2025). *Enhancing EFL vocabulary mastery via Wordwall.net: A mixed-methods study on achievement and student challenges. Jurnal Pendidikan Progresif*, 15(4), 2310–2327.
- Dieu, L. T. H., & Anh, N. T. C. (2025). *Enhancing vocabulary retention through gamified learning: Evidence from Vietnamese EFL secondary classrooms. International Journal of Language Studies*, 2(2), 111–128. <https://doi.org/10.60087/ijls.v2.n2.011>
- Do, T. C., & Huynh, N. T. (2024). *Students' perception of using Wordwall application to enhance vocabulary memorization. International Conference on Research in Education and Science*.
- George, D., & Mallery, P. (2019). *IBM SPSS statistics 26 step by step: A simple guide and reference*. Routledge.
- Howard, J. L., Bureau, J. S., Guay, F., Chong, J. X. Y., & Ryan, R. M. (2021). *Student motivation and associated outcomes: A meta-analysis from self-determination theory. Perspectives on Psychological Science*, 16(6), 1300–1323. <https://doi.org/10.1177/1745691620966789>
- Huy, T. Đ. N. Á. (2022). *Sử dụng ứng dụng Wordwall để tạo các trò chơi tương*

tác trong việc dạy từ vựng tiếng Anh. Khoa Học & Công Nghệ – Trường Đại Học Xây Dựng Miền Tây.

Jannah, M., & Syafryadin. (2022). *EFL students' perspectives on the use of Wordwall.net as vocabulary learning media*. *Journal of English Language Teaching*, 11(2).

Khan, M., et al. (2023). *Multimedia-assisted vocabulary learning and retention among EFL learners*.

Lestari, R., & Rohmani, S. (2024). *The effectiveness of Wordwall in enhancing vocabulary learning among EFL students*.

Nenohai, J. A., Rokhim, D. A., Agustina, N. I., & Munzil, M. (2022). *Development of gamification-based Wordwall game platform on reaction rate materials*. *The Electronic Journal of Chemistry*, 12(2), 116–122.

Ngoc, N. T. B., & Loc, P. T. (2025). *Using Wordwall to improve 11th-grade EFL students' vocabulary retention in a high school in Thai Nguyen*. *International Journal of Education Humanities and Social Science*, 8(22). <https://doi.org/10.54922/IJEHSS.2025.0953>

Nova, Sa'adah, L., & Weran, Y. T. I. (2024). *Improve students' vocabulary through Wordwall application*. *Paraplu Journal*, 1(3).

Susilo, A., et al. (2025). *The role of Wordwall in vocabulary acquisition and learner engagement*.

Wordwall. (2026). Wordwall. <https://wordwall.net>

❖ **Seminal Theories**

Bonwell, C. C., & Eison, J. A. (1991). *Active learning: Creating excitement in the classroom*.

Clark, J. M., & Paivio, A. (1991). *Dual coding theory and education*.

Mayer, R. E. (2002). *Multimedia learning*. Cambridge University Press.

Mayer, R. E., & Moreno, R. (2007). *A cognitive theory of multimedia learning: Implications for design principles*.

Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge University Press.

Paivio, A. (1986). *Mental representations: A dual coding approach*. Oxford University Press.

Piaget, J. (1952). *The origins of intelligence in children*. International Universities Press.

Ryan, R. M., & Deci, E. L. (2000). *Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being*. *American Psychologist*, 55(1), 68–78.

Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.)

APPENDIX A

QUESTIONNAIRE (ENGLISH VERSION)

Dear students,

This survey is for you to take part in. It wants to find out how Wordwall helps sixth graders learn new words. Your answers will help us understand how this tool affects your learning, especially when it comes to remembering new words.

There are a few short-answer questions and a lot of multiple-choice and rating-scale questions on this form. When you use Wordwall in your English classes, please answer all of the questions based on your personal experience.

We will not know who you are when you answer, and we will only use the information we get for study. There are no right or wrong responses, so please feel free to say what you really think.

It should take around 10 to 15 minutes to fill out the survey. We really appreciate your support, and it will help make vocabulary lessons better in the classroom.

Thanks a lot for working with us.

Best wishes

No.	Question	Likert scale				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	Construct 1: Gamification					
1	<i>The time pressure within the games forces me to react and memorize vocabulary more quickly.</i>					

No.	Question	Likert scale				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
2	<i>I find myself putting more effort into memorizing vocabulary in order to achieve a higher ranking on the leaderboard.</i>					
3	<i>Conquering the different difficulty levels in the game has helped me see significant progress.</i>					
4	<i>During lessons using the Wordwall platform, I am less distracted and do not feel sleepy.</i>					
5	<i>I always try to use reasoning and analysis to find the correct answer in every game.</i>					
	Construct 2: Multimedia					
6	<i>Illustrative images help me understand the meaning of words immediately without</i>					

No.	Question	Likert scale				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	<i>needing to translate them into Vietnamese.</i>					
7	<i>The combination of images and words helps me learn vocabulary more easily.</i>					
8	<i>The integration of images, sounds, and drag-and-drop actions helps me retain vocabulary better.</i>					
9	<i>Sound effects in Wordwall help me hear pronunciations more clearly and memorize how to read words effectively.</i>					
	Construct 3: Interactivity					
10	<i>Word-ordering and sentence-ordering activities help me understand correct</i>					

No.	Question	Likert scale				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	<i>spelling and sentence structures.</i>					
11	<i>When I receive immediate feedback on incorrect answers, I remember those mistakes better to avoid repeating them.</i>					
12	<i>I become a more active learner because I am directly involved in the exercises rather than just looking at the board.</i>					
13	<i>After completing exercises on Wordwall, I feel more confident participating in vocabulary-related activities in class.</i>					
14	<i>I clearly understand how to use vocabulary in different contexts through interactive games</i>					

No.	Question	Likert scale				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	Construct 4: Vocabulary retention					
15	<i>I recognize the form and meaning of vocabulary faster when I encounter them again in textbooks.</i>					
16	<i>I can accurately rewrite vocabulary I have learned after playing games like "Unscramble."</i>					
17	<i>Even after a week without reviewing, I can still remember many words learned through Wordwall.</i>					
18	<i>I can understand the meaning of the vocabulary I have practiced when taking tests.</i>					
19	<i>Compared to traditional rote learning (copying words multiple times), I find that Wordwall helps me remember vocabulary more permanently.</i>					

No.	Question	Likert scale				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
20	<i>Overall, I feel my vocabulary learning ability has significantly improved since using Wordwall.</i>					

APPENDIX B

QUESTIONNAIRE (VIETNAMESE VERSION)

Các em học sinh thân mến,

Đây là bản khảo sát dành cho các em tham gia. Mục đích là để tìm hiểu xem Wordwall giúp học sinh lớp 6 học từ mới như thế nào. Câu trả lời của các em sẽ giúp chúng tôi hiểu rõ hơn công cụ này ảnh hưởng đến việc học của các em ra sao, đặc biệt là trong việc ghi nhớ từ mới.

Bản khảo sát này có một vài câu hỏi ngắn và rất nhiều câu hỏi trắc nghiệm và câu hỏi thang điểm. Khi sử dụng Wordwall trong các tiết học tiếng Anh, vui lòng trả lời tất cả các câu hỏi dựa trên kinh nghiệm cá nhân của mình.

Chúng tôi sẽ không biết danh tính của các em khi các em trả lời, và chúng tôi chỉ sử dụng thông tin thu được cho mục đích nghiên cứu. Không có câu trả lời đúng hay sai, vì vậy hãy thoải mái nói lên suy nghĩ thật sự của mình.

Việc hoàn thành khảo sát sẽ mất khoảng 10 đến 15 phút. Chúng tôi rất trân trọng sự hỗ trợ của các em, và điều đó sẽ giúp cải thiện các bài học từ vựng trong lớp học.

Cảm ơn các em rất nhiều vì đã hợp tác với chúng tôi.

Chúc các em học tốt!

STT	Câu hỏi	Thang đo				
		Hoàn toàn không đồng ý	Không đồng ý	Trung lập	Đồng ý	Hoàn toàn đồng ý
	Nhóm 1: Trò chơi hóa					
1	<i>Áp lực về thời gian trong các trò chơi buộc tôi phải</i>					

STT	Câu hỏi	Thang đo				
		Hoàn toàn không đồng ý	Không đồng ý	Trung lập	Đồng ý	Hoàn toàn đồng ý
	<i>phản ứng và ghi nhớ từ vững nhanh hơn.</i>					
2	<i>Tôi thấy mình nỗ lực hơn trong việc ghi nhớ từ vững để đạt thứ hạng cao hơn trên bảng xếp hạng.</i>					
3	<i>Việc chinh phục các mức độ khó khác nhau trong trò chơi giúp tôi nhận thấy sự tiến bộ rõ rệt.</i>					
4	<i>Trong các tiết học sử dụng nền tảng Wordwall, tôi ít bị xao nhãng và không cảm thấy buồn ngủ.</i>					
5	<i>Tôi luôn cố gắng sử dụng suy luận và phân tích để tìm ra đáp án đúng trong mỗi trò chơi.</i>					
	Nhóm 2: Đa phương tiện					

STT	Câu hỏi	Thang đo				
		Hoàn toàn không đồng ý	Không đồng ý	Trung lập	Đồng ý	Hoàn toàn đồng ý
6	Hình ảnh minh họa giúp tôi hiểu nghĩa của từ ngay lập tức mà không cần dịch sang tiếng Việt.					
7	Sự kết hợp giữa hình ảnh và từ ngữ giúp tôi học từ vựng dễ dàng hơn.					
8	Việc kết hợp hình ảnh, âm thanh và thao tác kéo – thả giúp tôi ghi nhớ từ vựng tốt hơn.					
9	Hiệu ứng âm thanh trong Wordwall giúp tôi nghe phát âm rõ hơn và ghi nhớ cách đọc từ hiệu quả.					
	Nhóm 3: Tính tương tác					
10	Các hoạt động sắp xếp từ và sắp xếp câu giúp tôi hiểu đúng chính tả và cấu trúc câu.					

STT	Câu hỏi	Thang đo				
		Hoàn toàn không đồng ý	Không đồng ý	Trung lập	Đồng ý	Hoàn toàn đồng ý
11	<i>Khi nhận được phản hồi ngay lập tức về các câu trả lời sai, tôi nhớ lỗi đó tốt hơn để tránh lặp lại.</i>					
12	<i>Tôi trở thành người học chủ động hơn vì được trực tiếp tham gia vào bài tập thay vì chỉ nhìn lên bảng.</i>					
13	<i>Sau khi hoàn thành bài tập trên Wordwall, tôi cảm thấy tự tin hơn khi tham gia các hoạt động từ vựng trên lớp.</i>					
14	<i>Tôi hiểu rõ cách sử dụng từ vựng trong các ngữ cảnh khác nhau thông qua các trò chơi tương tác.</i>					
	Nhóm 4: Ghi nhớ từ vựng					
15	<i>Tôi nhận diện hình thức và nghĩa của từ vựng</i>					

STT	Câu hỏi	Thang đo				
		Hoàn toàn không đồng ý	Không đồng ý	Trung lập	Đồng ý	Hoàn toàn đồng ý
	<i>nhANH hơn khi gặp lại chúng trong sách giáo khoa.</i>					
16	<i>Tôi có thể viết lại chính xác từ vựng đã học sau khi chơi các trò như “Unscramble”.</i>					
17	<i>Ngay cả sau một tuần không ôn tập, tôi vẫn nhớ được nhiều từ vựng đã học qua Wordwall.</i>					
18	<i>Tôi có thể hiểu nghĩa của các từ vựng đã luyện tập khi làm bài kiểm tra.</i>					
19	<i>So với cách học thuộc truyền thống (chép từ nhiều lần), tôi thấy Wordwall giúp tôi ghi nhớ từ vựng lâu hơn.</i>					
20	<i>Nhìn chung, tôi cảm thấy khả năng học từ vựng của mình đã cải thiện đáng kể kể từ khi sử dụng Wordwall.</i>					