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Integrating Wordwall to Increase Student's Enthusiasm in Learning English Vocabulary Achievement: A Study of Eighth Grade Students at UPT SMP Negeri 4 Panca Rijang

Nur Aini
fuetrynhurainhy.yahoo.com@gmail.com

Sam Hermansyah
sam.hermansyah82@gmail.com

Sitti Aisa
ichaaisyahvandy@gmail.com

Nurul Faradillah
nurulfaradillah1401@fkip.umsrappang.ac.id

Universitas Muhammadiyah Sidenreng Rappang

ABSTRACT

This study aimed to investigate the effectiveness of integrating Wordwall in enhancing students' enthusiasm and English vocabulary achievement among eighth-grade students at UPT SMP Negeri 4 Panca Rijang. Vocabulary plays a fundamental role in language learning; however, many students experience low motivation and limited engagement due to conventional teaching methods. Therefore, the use of interactive digital media is considered a potential solution to address this issue. This research employed a quantitative approach with a quasi-experimental design involving two groups: an experimental group taught using Wordwall and a control group taught through conventional methods. The sample consisted of 45 students. Data were collected through a vocabulary achievement test (pre-test and post-test) and an observation rubric measuring students' enthusiasm. The data were analyzed using descriptive and inferential statistics, including paired and independent sample t-tests. The findings revealed that students taught using Wordwall showed a significant improvement in both vocabulary achievement and learning enthusiasm compared to those taught using conventional methods. The experimental group demonstrated higher levels of active participation, motivation, and cognitive engagement during the learning process. The integration of Wordwall as a digital game-based learning medium is effective in improving students' enthusiasm and vocabulary achievement. It is recommended that English teachers incorporate interactive digital tools such as Wordwall to create more engaging and meaningful learning experiences.

Keywords: Wordwall; Students' Enthusiasm; Vocabulary Achievement; Digital Learning Media; EFL

INTRODUCTION

English has become a global language that plays a crucial role in communication, education, and access to information in the modern world. In the Indonesian educational context, English is taught as a foreign language and is considered an essential subject to support students' academic and professional development. To achieve communicative competence, learners must master several language components, among which vocabulary is the most fundamental. Without sufficient vocabulary, students cannot effectively understand or express ideas in listening, speaking, reading, and writing.

Vocabulary mastery is widely recognized as the foundation of language learning because it directly influences learners' ability to comprehend and produce language. Students with limited vocabulary often experience difficulties in understanding texts, participating in classroom activities, and communicating their thoughts. Conversely, learners who possess adequate vocabulary knowledge are more confident and capable of engaging in meaningful communication. Therefore, improving students' vocabulary achievement should be a primary focus in English language teaching.

Despite its importance, vocabulary learning remains a major challenge for many students, particularly at the junior high school level. In many classrooms, vocabulary is still taught through conventional methods such as memorization, translation, and repetitive exercises. These approaches tend to be teacher-centered and lack interactive elements, resulting in low student participation and limited retention of vocabulary items. As a consequence, students often feel bored and unmotivated during English lessons.

One of the key factors influencing successful vocabulary learning is students' enthusiasm. Enthusiasm reflects students' interest, motivation, and active involvement in the learning process. When students are enthusiastic, they are more likely to pay attention, participate actively, and persist in completing learning tasks. On the other hand, low enthusiasm can lead to passive behavior, lack of engagement, and poor learning outcomes. Therefore, enhancing students' enthusiasm is as important as improving their cognitive achievement. In response to these challenges, the integration of technology in language learning has gained increasing attention. Digital learning media provide opportunities to create more engaging, interactive, and student-centered learning environments. Through the use of multimedia elements such as images, sounds, and animations, digital tools can make vocabulary learning more meaningful and enjoyable. In addition, technology allows for immediate feedback and repeated practice, which are essential for vocabulary acquisition.

One of the digital tools that has been widely used in recent years is Wordwall. Wordwall is an interactive platform that enables teachers to create various game-based activities such as quizzes, matching tasks, and word games. These activities

encourage students to actively engage with vocabulary through fun and challenging exercises. The gamified nature of Wordwall not only increases students' motivation but also promotes active participation and deeper understanding of vocabulary.

Previous studies have shown that digital game-based learning tools, including Wordwall, can significantly improve students' vocabulary achievement and engagement. However, most studies tend to focus on either cognitive outcomes or affective aspects separately. Research that simultaneously examines the impact of Wordwall on both students' enthusiasm and vocabulary achievement, particularly in junior high school contexts, is still limited. This gap highlights the need for further investigation to provide more comprehensive evidence. Based on these considerations, this study aims to examine the effectiveness of integrating Wordwall in increasing students' enthusiasm and English vocabulary achievement among eighth-grade students at UPT SMP Negeri 4 Panca Rijang. By employing a quasi-experimental design, this research is expected to contribute both theoretically and practically to the development of innovative and engaging English teaching strategies, particularly in the use of digital learning media in EFL classrooms.

LITERATURE REVIEW

Vocabulary is widely acknowledged as a fundamental component of language proficiency, as it enables learners to understand and produce meaning in communication. According to Nation (2020), vocabulary knowledge involves understanding the form, meaning, and use of words, which together contribute to effective language performance. Similarly, Thornbury (2019) emphasizes that without sufficient vocabulary, learners cannot convey ideas or comprehend messages, even if they possess adequate grammatical knowledge. Therefore, vocabulary mastery serves as the foundation for developing all language skills.

In addition to its linguistic importance, vocabulary learning is a complex cognitive process that requires repeated exposure, meaningful interaction, and active engagement. Schmitt (2021) explains that vocabulary acquisition occurs incrementally, where learners gradually build connections between words and their meanings through continuous practice. This process is strengthened when learners engage in activities that promote deep processing, such as categorizing, associating, and applying vocabulary in context. As a result, effective vocabulary instruction should provide opportunities for both recognition and productive use of words.

Students' enthusiasm is another crucial factor influencing successful language learning. Enthusiasm reflects learners' emotional and motivational engagement in the learning process, which significantly affects their participation and achievement. Fredricks, Blumenfeld, and Paris (2004) conceptualize student engagement as comprising behavioral, emotional, and cognitive dimensions. Emotional engagement, in particular, is closely related to enthusiasm, as it involves students' interest, enjoyment, and positive attitudes toward learning activities.

When students are enthusiastic, they tend to be more active, attentive, and persistent in completing tasks.

The role of emotions in learning is further supported by Pekrun's (2018) Control-Value Theory, which states that positive emotions such as enjoyment and interest enhance students' motivation and academic performance. When learners perceive learning tasks as valuable and feel capable of completing them, they are more likely to develop enthusiasm. Conversely, monotonous and teacher-centered instruction can reduce students' interest and lead to disengagement. Therefore, creating a learning environment that fosters positive emotional experiences is essential for improving both motivation and learning outcomes.

In recent years, the integration of digital technology has transformed the way vocabulary is taught and learned. Digital learning media offer interactive and multimodal experiences that can enhance students' understanding and retention of vocabulary. Mayer's (2021) Cognitive Theory of Multimedia Learning suggests that learners process information more effectively when verbal and visual elements are combined. This multimodal approach helps learners create stronger mental representations of vocabulary, making learning more meaningful and memorable.

One of the most effective approaches within digital learning is gamification, which incorporates game elements such as challenges, rewards, and competition into educational activities. According to Kapp (2018), gamification can increase students' motivation, engagement, and persistence by making learning more enjoyable and interactive. Game-based learning environments encourage learners to participate actively and provide immediate feedback, which is essential for reinforcing vocabulary knowledge. As a result, gamification has been widely adopted in language learning contexts.

Wordwall is one of the digital platforms that integrates multimedia learning and gamification principles to support vocabulary instruction. It allows teachers to design interactive activities such as quizzes, matching tasks, anagrams, and random games, which require students to actively engage with vocabulary items. The use of Wordwall promotes retrieval practice, which is a key strategy for strengthening memory and long-term retention (Brown et al., 2014). Additionally, its interactive features provide immediate feedback, enabling students to identify and correct their errors during the learning process.

Previous studies have demonstrated the effectiveness of Wordwall and other digital tools in improving vocabulary achievement and student engagement. Research by Çakır and Baytar (2022) and Putri and Sari (2021) found that students who learned vocabulary through Wordwall showed significant improvement compared to those taught using conventional methods. Moreover, digital learning tools have been shown to enhance students' enthusiasm, motivation, and participation in English classes. However, limited studies have simultaneously examined both vocabulary achievement and students' enthusiasm within a single experimental framework.

Therefore, this study seeks to fill this gap by investigating the combined effect of Wordwall on these two important aspects of English language learning.

METHOD

Design and Sample

This study employed a quantitative research approach using a quasi-experimental design to examine the effectiveness of integrating Wordwall in enhancing students' enthusiasm and vocabulary achievement. A quantitative approach was considered appropriate as the study focused on measuring variables and analyzing relationships through statistical procedures. The quasi-experimental design was selected because the researcher utilized existing classroom groups without random assignment, which is a common practice in educational settings. The research was conducted at UPT SMP Negeri 4 Panca Rijang during the 2025/2026 academic year. The population consisted of all eighth-grade students, totaling 45 learners. Due to the limited number of students, the entire population was used as the sample. The participants were divided into two groups: the experimental group (22 students), which received instruction using Wordwall, and the control group (23 students), which was taught using conventional teaching methods. The independent variable in this study was the use of Wordwall as a digital game-based learning medium, while the dependent variables were students' enthusiasm and vocabulary achievement.

Instruments and Procedures

Data were collected using two main instruments: a vocabulary achievement test and an observation rubric. The vocabulary test consisted of 25 items, including multiple-choice, matching, and short-answer questions, designed to measure students' knowledge of word form, meaning, and use. The test was administered as both a pre-test and post-test. Students' enthusiasm was measured through an observation rubric focusing on cognitive engagement, including attention, persistence, and effort during the learning process. The data collection procedure was conducted in several stages. First, a pre-test was administered to both groups to determine students' initial vocabulary ability. Second, the treatment was implemented over three instructional meetings. The experimental group was taught using Wordwall through interactive activities such as quizzes, matching tasks, and game-based exercises. In contrast, the control group received conventional instruction, including teacher explanations, textbook exercises, and written practice without digital media. During the treatment sessions, students' enthusiasm was observed and recorded. Finally, a post-test was administered to both groups to measure students' vocabulary achievement after the intervention.

Data Analysis

The collected data were analyzed using both descriptive and inferential statistics. Descriptive statistics, including mean scores and standard deviations, were used to summarize students' performance. Inferential statistics were applied using paired sample t-tests to examine differences within each group (pre-test and post-test results) and independent sample t-tests to compare the results between the experimental and control groups. These analyses were conducted to determine whether the use of Wordwall had a statistically significant effect on students' enthusiasm and vocabulary achievement.

RESULT AND DISCUSSION

The results of this study present the findings on students' vocabulary achievement and enthusiasm after the implementation of Wordwall. The analysis includes descriptive and inferential statistics to determine the effectiveness of the treatment. The descriptive statistics of the pre-test scores showed that both the experimental and control groups had relatively similar initial abilities. The mean score of the experimental group was slightly comparable to that of the control group, indicating that both groups started at a similar level of vocabulary knowledge before the treatment. After the treatment, the post-test results indicated a noticeable improvement in both groups. However, the increase in the experimental group was significantly higher than in the control group. This suggests that the use of Wordwall contributed positively to students' vocabulary learning outcomes. Table 1 presents the descriptive statistics of students' vocabulary achievement in both groups.

Table 1. Descriptive Statistics of Vocabulary Achievement

Group	N	Pre-test Mean	Post-test Mean	Gain Score
Experimental	22	55.45	82.73	27.28
Control	23	54.87	68.21	13.34

The table shows that the experimental group achieved a higher gain score compared to the control group. This indicates that students who learned using Wordwall experienced greater improvement in vocabulary achievement. To examine whether the improvement within each group was statistically significant, a paired sample t-test was conducted. The results showed that both groups experienced significant improvement from pre-test to post-test. However, the level of significance was higher in the experimental group.

Furthermore, an independent sample t-test was conducted to compare the post-test scores between the two groups. The results revealed a significant difference between the experimental and control groups ($p < 0.05$), indicating that the use of Wordwall had a significant effect on students' vocabulary achievement. In addition to vocabulary achievement, students' enthusiasm was also analyzed through observation. The results showed that students in the experimental group

demonstrated higher levels of engagement, attention, and persistence compared to the control group. Table 2 presents the results of students' enthusiasm observation.

Table 2. Students' Enthusiasm Scores

Group	Mean Score	Category
Experimental	4.32	High
Control	2.87	Moderate

The table indicates that students in the experimental group reached a high level of enthusiasm, while the control group remained at a moderate level. This finding suggests that Wordwall not only improves cognitive outcomes but also enhances students' emotional and cognitive engagement. The findings of this study demonstrate that the integration of Wordwall significantly improves students' vocabulary achievement. The experimental group showed higher post-test scores compared to the control group, indicating that interactive digital media can enhance vocabulary learning more effectively than conventional methods. This supports the idea that active engagement and repeated exposure to vocabulary contribute to better learning outcomes.

The improvement in vocabulary achievement can be explained through the concept of retrieval practice. Wordwall activities require students to repeatedly recall vocabulary through quizzes, matching tasks, and games. This repeated recall strengthens memory retention and helps students internalize vocabulary more effectively compared to passive learning. In addition, the use of multimedia elements in Wordwall supports Mayer's Cognitive Theory of Multimedia Learning. By combining visual and textual input, students are able to process information more deeply. This enhances their understanding of word meaning, form, and usage, which are essential components of vocabulary mastery.

The results also show that students' enthusiasm increased significantly in the experimental group. This finding highlights the importance of emotional engagement in learning. When students feel interested and enjoy the learning process, they are more likely to participate actively and persist in completing tasks. The increase in enthusiasm can be attributed to the gamification features of Wordwall. Elements such as competition, instant feedback, and interactive challenges create a fun learning environment. This aligns with the theory of gamification, which suggests that game-based elements can increase motivation and engagement.

Moreover, the findings are consistent with previous studies that reported positive effects of Wordwall and digital learning tools on vocabulary learning. Studies by Putri and Sari (2021) and Çakır and Baytar (2022) also found that students taught using Wordwall achieved better results and showed higher engagement. Another important finding is that students in the experimental group demonstrated higher cognitive engagement, including focus, persistence, and effort. This indicates that

Wordwall not only attracts students' attention but also encourages deeper thinking and active learning processes.

However, this study also acknowledges some limitations. The sample size was relatively small, and the study was conducted in a single school context. Therefore, the findings may not be fully generalizable to other educational settings. Future research is recommended to involve larger samples and explore different educational levels. The integration of Wordwall proves to be an effective strategy in improving both students' vocabulary achievement and enthusiasm. The findings suggest that teachers should consider incorporating digital game-based learning tools to create more engaging and effective English learning environments.

CONCLUSION

This study concludes that the integration of Wordwall as a digital game-based learning medium is effective in improving students' enthusiasm and English vocabulary achievement. The findings revealed that students who were taught using Wordwall demonstrated significantly higher vocabulary scores compared to those who received conventional instruction. This indicates that interactive and technology-based learning environments can enhance students' ability to understand and use vocabulary more effectively. In addition to cognitive improvement, the use of Wordwall also contributed to increased students' enthusiasm during the learning process. Students in the experimental group showed higher levels of engagement, attention, and persistence, suggesting that the gamified and interactive features of Wordwall can create a more enjoyable and motivating learning atmosphere. This highlights the importance of addressing both cognitive and affective aspects in language learning. Overall, this study provides empirical evidence that integrating digital learning media such as Wordwall can support more effective and meaningful vocabulary instruction. Therefore, it is recommended that English teachers incorporate interactive digital tools into their teaching practices to enhance students' engagement and learning outcomes. Future research is encouraged to explore the use of similar digital platforms in different contexts and with larger samples to further validate these findings.

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