

# The Implementation of Wordwall Game to Improve Students' Vocabulary Mastery

Devy Aprilia Mayaratih<sup>1</sup>, Pradnya Permanasari<sup>2</sup>

Pekalongan University, Indonesia

<sup>1</sup> dmayaratih@gmail.com, <sup>2</sup> pradnyaronita@gmail.com

## Abstract

Vocabulary is one of the essential components in mastering English, yet many students find it difficult and boring to learn, especially when taught using traditional methods. This study examines the Wordwall Game as an interactive media to improve students' vocabulary mastery, particularly the simple past tense. This research utilizes a Classroom Action Research (CAR) design and involves 25 tenth-grade students of SMK Negeri 1 Kandeman. Two research cycles were conducted: planning, acting, observing, and reflecting. The researchers collected data using vocabulary tests (pre-test and post-test), observation checklists, and a student questionnaire. The findings show a significant improvement in students' vocabulary mastery, as reflected by the higher average score from 44.28 during the pre-test to 93.68 in the post-test cycle 2. The students also showed high motivation and enjoyment in using Wordwall. The interactive features of the game helped increase participation, reduce boredom, and make vocabulary practice more effective. It can be concluded that the Wordwall Game is an effective and fun learning tool to improve vocabulary mastery among vocational high school students.

**Keywords:** Wordwall Game; Vocabulary Mastery

## INTRODUCTION

Language is the tool of communication and transmission of knowledge. According to Wiltschko and Fabra (2022) language is an integral part of both human thought and communication. Jeon (2023) states that language is an intimate process that virtually all humans can cognitively understand, produce, and/or engage with. Language is viewed as a human must engage with, consciously or unconsciously communicating, thinking, and gaining benefits. Dujardin et al. (2022) states that vocabulary is a key component of language proficiency, influencing various skills like decoding, comprehension, and literacy development. Vocabulary plays an integral role in all language skills: listening, speaking, reading, and writing. Gao (2021) states that effective vocabulary teaching is crucial in language learning, with various strategies proposed to improve student engagement and acquisition.

In the Indonesian EFL context, specifically at the vocational high school level, students are ideally equipped with practical English skills, including vocabulary mastery, to assist them professionally. However, vocabulary remains a prominent problem for students. Based on the observation at SMK Negeri 1 Kandeman, it was found that a large number of students in Grade X TO 2 still face problems in vocabulary retention and usage, particularly in the application of grammatical structures such as the Simple Past Tense. According to Ferdiyanto (2023) the simple past tense is a challenging aspect of English grammar for many learners. Studies have shown that students struggle with various elements of the simple past, including regular and irregular verbs, prepositions, and punctuation. Students lack motivation and are passive in learning vocabulary through conventional methods such as memorization and teacher-centered explanations. Mustafa (2021) states that the simple past tense indicates that an activity or situation began and ended at a specific time in the past, and is commonly used in writing,

especially in narrative and recount texts. This tense conveys a sense of remoteness, as it refers to an event that is no longer happening and emphasizes that the activity is over.

The challenges in vocabulary retention and usage are exacerbated by unengaging media and monotonous teaching methods, which often cause students to lose interest. To overcome this, educators are encouraged to adopt student-centered strategies, such as integrating educational games through platforms like Wordwall. Mikrouli (2024) states that game-based learning (GBL) innovatively utilizes the educational potential of games to enhance the learning process at various levels of education. Game-based learning can make learning more fun, engaging, and interactive for learners (Triantafyllou, 2022). While Jannah et al. (2020) state that using games to teach vocabulary effectively improves students' vocabulary mastery. According to Bin-Hady (2021) Games can enhance EFL students' vocabulary acquisition by making lessons enjoyable, reducing anxiety, and providing context. Arsini et al. (2022) state that Wordwall is an effective learning medium that helps increase students' vocabulary mastery during online learning. According to Nenohai and Rokhim (2022) Wordwall is an online platform that offers game-based learning opportunities, particularly effective for vocabulary acquisition and digital literacy enhancement. Studies have shown its effectiveness in various educational contexts, from elementary to university levels. Wordwall provides customizable templates for creating interactive games and quizzes. Çil (2021) state that Wordwall offers a gamified learning experience that promotes students' motivation and vocabulary acquisition. Previous research by Arafah and Ahmad (2020) also confirmed that digital game-based learning media enhances learners' vocabulary and engagement. By making learning more enjoyable and interactive, Wordwall can potentially transform passive learners into active learners. Wordwall, an online game-based learning platform, has emerged as an important tool for enhancing vocabulary acquisition and digital literacy in educational settings. Studies have shown that Wordwall effectively improves students' vocabulary mastery in both English and Arabic language learning (Andriani & Musthafa, 2023; Sakkir et al., 2023). Researchers chose this Wordwall game because Wordwall games have various features that can customize learning according to student needs, help make it easier for students to learn, and also create a more varied learning atmosphere. Aidah and Nurafni (2022) state that Wordwall game is an interactive and easy-to-use learning media that can increase students' interest and motivation in science learning . According to Hasram (2021) Wordwall is used as an effective supplementary learning material to improve students' vocabulary because it can attract attention and increase students' learning motivation through fun interactive games.

According to Amirzai (2021) Teaching vocabulary has been shown to contribute to the improvement of receptive skills, especially in the context of learning English as a foreign language. Bergström et al. (2022) stated that some teachers do not view vocabulary as a distinct learning objective; instead, they put a strong focus on vocabulary acquisition through reading and games. While teachers do understand the significance of vocabulary and its complexity, they may lack diverse methods for instruction.

Furthermore, Chaidi and Drigas (2022) state that digital games are increasingly recognized as valuable educational tools across various disciplines. In special education, they promote active learning and independence for students with diverse needs. The Ministry of Education and Culture promotes the use of learning media that are interactive, innovative, and aligned with the needs and interests of students. Wulandari et al. (2023) state that learning media play a crucial role in enhancing the effectiveness of the teaching-learning process. It helps teachers convey information more effectively, making lessons more engaging and less monotonous.

With the above background, the researcher feels compelled to conduct a classroom action research on the utilization of Wordwall game in teaching vocabulary. Azizah and Fatamorgana (2021) state that Classroom Action Research is a practical approach aimed at improving teaching and learning quality through systematic inquiry and reflection. According to

Rahmadani and Bakri (2024), effective data analysis and interpretation techniques are essential for teachers conducting classroom action research to improve teaching quality. Putri, Nurhuda, and Anhar (2023) state that CAR follows principles as natural environment implementation, self-awareness for improvement, and smart planning. According to Milkias (2020) classroom action research can improve teachers' practice, empower them, and enhance their problem-solving and leadership skills. This study focuses on helping students improve their understanding of vocabulary related to the Simple Past Tense, a grammar point that many find tricky. It's common for students to make mistakes when using the simple past tense, especially errors in forming the correct tense. The goal here isn't just to boost vocabulary skills but also to make learning fun and engaging. The idea is to create a space where students feel motivated to participate and enjoy the process of learning new words and grammar.

The study is important in several ways. From a theoretical standpoint, it adds to what we know about using digital tools in language learning. On a practical level, it gives teachers useful ideas for making vocabulary lessons more engaging. Pedagogically, it shows how educational technology can support students' learning, especially in vocational high schools. The main goals of this study are: (1) to explain how the Wordwall Game is used in vocabulary learning; and (2) to see how effective it is in helping students improve their vocabulary, focusing on the Simple Past Tense.

## METHOD

According to Pandey (2023) which the teacher first identifies a problem, implements a strategy, monitors its impact, and finally evaluates the results to refine future teaching practices. According to Machali (2022) Classroom Action Research is described as a systematic and scientific investigation carried out by educators to enhance both instructional practices and learning results. Abdurrahman et al. (2022) state that classroom action research can help teachers improve and develop their teaching methods and practices. This framework forms the foundation for numerous classroom action research models. Kurt Lewin (1946) conceptualized the cycle of classroom action research in four distinct phases: (1) planning, (2) acting, (3) observing, and (4) reflecting, in which the teacher first identifies a problem, implements a strategy, monitors its impact, and finally evaluates the results to refine future teaching practices.

## RESULTS AND DISCUSSION

### Results

This study analyzes data on students' learning outcomes obtained through the application of Wordwall Game media as a means of vocabulary learning. The research process was carried out in two stages, Cycle I and Cycle II. Each cycle involved pre-test and post-test activities, which were then used as a reference to assess the improvement of students' vocabulary skills.

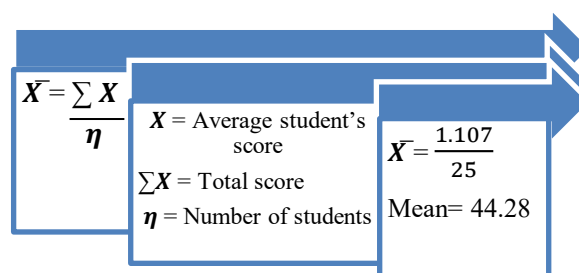
### Cycle I

In cycle 1, the application of Wordwall Game learning media has not shown maximum results. Some students still found it hard to understand and use vocabulary, especially when it came to the Simple Past Tense. Even though the activities were engaging and interactive, students' understanding of the material still needed to be improved.

At the beginning of the lesson, the teacher motivated and introduced the use of Wordwall Game to the students. Then, a pre-test was given to measure students' initial vocabulary mastery before the learning action began. During this process, the researcher observed and recorded students' participation and performance. The pre-test results are presented as follows:

**Table 1.** Students' Scores in Pre-Test

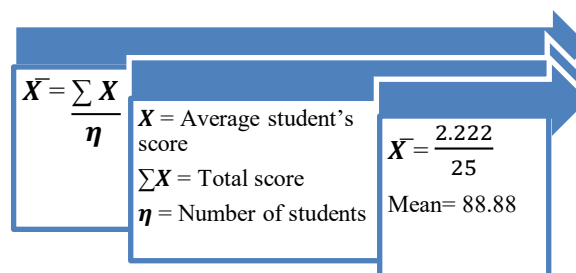
No	Students Code	Fluency	Acuracy	Consistency	Score	Category
1.	A-1	12	12	14	38	Poor
2.	A-2	14	8	15	37	Poor
3.	A-3	16	15	15	46	Poor
4.	A-4	22	24	24	70	Fair
5.	A-5	10	18	17	42	Poor
6.	A-6	10	14	15	39	Poor
7.	A-7	16	16	18	50	Poor
8.	A-8	11	16	14	41	Poor
9.	A-9	12	14	17	43	Poor
10.	A-10	13	16	19	48	Poor
11.	A-11	15	14	17	47	Poor
12.	A-12	13	15	15	43	Poor
13.	A-13	12	17	15	44	Poor
14.	A-14	15	14	14	43	Poor
15.	A-15	12	14	14	40	Poor
16.	A-16	10	13	11	34	Poor
17.	A-17	11	15	18	44	Poor
18.	A-18	16	15	15	46	Poor
19.	A-19	22	25	24	34	Fair
20.	A-20	14	16	14	44	Poor
21.	A-21	10	14	16	40	Poor
22.	A-22	12	16	14	42	Poor
23.	A-23	10	14	15	39	Poor
24.	A-24	12	16	14	42	Poor
25.	A-25	24	21	25	71	Fair
Total		1.107				

**Figure 1.** The Mean Score of the Students in the Pre-test.

After calculating the pre-test scores, the researcher observed that the average was 44.28 in the "poor" category. Among 25 students, 3 were in the "fair" category, and 22 were still "poor." The test was supervised by the English teacher. These results indicated that students had limited vocabulary skills and needed further improvement. The researcher incorporated Wordwall as a learning tool to help students improve their vocabulary while studying the Simple Past Tense.

**Table 2.** Students' Scores in Post-Test Cycle 1

No	Students Code	Fluency	Acuracy	Consistency	Score	Category
1.	A-1	30	34	35	99	EXCELLENT
2.	A-2	25	30	27	82	Great
3.	A-3	30	28	32	90	EXCELLENT
4.	A-4	20	24	26	70	Fair
5.	A-5	30	31	34	95	EXCELLENT
6.	A-6	20	25	22	67	Fair
7.	A-7	29	30	33	92	EXCELLENT
8.	A-8	31	32	30	93	EXCELLENT
9.	A-9	29	28	30	87	EXCELLENT
10.	A-10	28	28	29	85	Great
11.	A-11	31	33	29	92	EXCELLENT
12.	A-12	18	26	25	69	Fair
13.	A-13	32	28	33	93	EXCELLENT
14.	A-14	30	29	32	91	EXCELLENT
15.	A-15	32	31	34	97	EXCELLENT
16.	A-16	28	33	31	92	EXCELLENT
17.	A-17	24	30	26	80	Great
18.	A-18	29	28	30	87	EXCELLENT
19.	A-19	30	32	29	91	EXCELLENT
20.	A-20	30	34	30	94	EXCELLENT
21.	A-21	32	32	34	98	EXCELLENT
22.	A-22	30	31	32	93	EXCELLENT
23.	A-23	28	30	29	87	EXCELLENT
24.	A-24	32	30	34	96	EXCELLENT
25.	A-25	30	32	34	96	EXCELLENT
Total		2.222				



**Figure 2.** The Mean Score of the Students in Post-test Cycle 1

The post-test in Cycle 1 was given after the students learned the vocabulary using Wordwall. The purpose was to see their progress in understanding the vocabulary, especially in the Simple Past Tense. The total score of the 25 students was 2.222, which showed a clear improvement compared to the pre-test score of 1.107. In this post-test, 3 students were in the “fair” category, 3 were in the “great” category, and 19 reached the “excellent” category. This shows that Wordwall helps students understand and remember vocabulary better. The fun and interactive features made them more motivated and active in learning. These positive results in Cycle 1 are

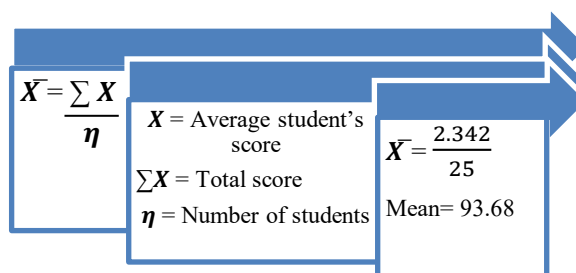
a good starting point. In the next cycle, the researcher will continue and improve the process to see even better results.

### Cycle 2

In cycle 2, using Wordwall Game media for learning continued and was improved based on reflections from the previous cycle. Some adjustments were made, such as providing more contextualized example sentences and more intensive guidance while students were playing. The results showed that students developed a better understanding of vocabulary, especially in applying the Simple Past Tense verb forms. They appeared more confident, engaged actively, and learned the material more quickly through more directed and fun activities.

**Table 3.** Students' Scores in Post-Test Cycle 2

No	Students Code	Fluency	Acuracy	Consistency	Score	Category
1.	A-1	32	32	35	99	EXCELLENT
2.	A-2	31	34	32	97	EXCELLENT
3.	A-3	30	31	32	93	EXCELLENT
4	A-4	29	30	31	91	EXCELLENT
5.	A-5	31	30	31	92	EXCELLENT
6	A-6	29	30	33	92	EXCELLENT
7.	A-7	30	34	32	96	EXCELLENT
8.	A-8	24	25	29	78	Great
9.	A-9	30	31	33	94	EXCELLENT
10.	A-10	32	31	34	97	EXCELLENT
11.	A-11	30	32	33	95	EXCELLENT
12.	A-12	29	30	29	88	EXCELLENT
13.	A-13	32	32	33	97	EXCELLENT
14.	A-14	32	33	33	98	EXCELLENT
15.	A-15	30	34	33	97	EXCELLENT
16.	A-16	30	29	31	90	EXCELLENT
17.	A-17	31	33	33	97	EXCELLENT
18.	A-18	32	33	33	98	EXCELLENT
19.	A-19	30	31	34	95	EXCELLENT
20.	A-20	32	34	33	99	EXCELLENT
21.	A-21	26	28	28	82	Great
22.	A-22	31	34	33	98	EXCELLENT
23.	A-23	32	33	32	97	EXCELLENT
24.	A-24	26	30	29	85	Great
25.	A-25	32	33	33	97	EXCELLENT
Total		2.342				



**Figure 3.** The Mean Score of the Students in Post-test Cycle 2



The final test in Cycle 2 was administered after students completed the second round of vocabulary learning using the Wordwall Game. The results showed further improvement in students' vocabulary acquisition, especially in the use of the Simple Past Tense. In this final test, 3 students were in the "Fair" category, 3 students were in the "Great" category, and 19 students successfully achieved the "Excellent" category. Compared to the results in Cycle 1, students' performance became more consistent, and their confidence in using English vocabulary improved significantly.

The use of Wordwall's interactive features, such as games and quizzes, made the learning process more fun, which encouraged students to participate more actively in class. This second cycle shows that the continuous and well-structured use of Wordwall can produce more effective results. Observation data also supported this finding, as students showed greater motivation, engagement, and enthusiasm during the learning process.

### The Analysis of the Questionnaire

After the second cycle, questionnaires were handed out to students to support the research findings. According to Taherdoost (2022) Questionnaires are important instruments in a study to obtain relevant data, and this paper provides a comprehensive guide to designing an efficient questionnaire. This questionnaire is designed to gather students' feedback on their experience using Wordwall to learn vocabulary. The following summary of the questionnaire results.

**Table 4.** Students' Responses to the Use of Wordwall in Vocabulary Learning

No	Questions	Total Responses
1.	How useful was the Wordwall Game in helping you understand vocabulary?	
	(1) Not useful	
	(2) Less useful	
	(3) Quite useful	12%
	(4) Very useful	88%
2.	How easily could you understand the vocabulary material using the Wordwall Game?	
	(1) Very difficult	
	(2) Quite difficult	
	(3) Easy	24%
	(4) Very easy	76%
3.	How motivated are you to learn vocabulary with Wordwall Game?	
	(1) Not motivated	
	(2) Less motivated	
	(3) Moderately motivated	28%
	(4) Very motivated	72%
4.	How often do you want to use Wordwall Game in future lessons?	
	(1) Never	

	(2) Rarely	8%
	(3) Sometimes	20%
	(4) Often	72%
5.	How much fun do you have learning vocabulary with the Wordwall Game?	
	(1) No fun at all	
	(2) A little fun	
	(3) Quite fun	8%
	(4) Very fun	92%

Based on the questionnaire given to 25 students after using the Wordwall Game, most students gave very positive responses. About 88% of them said Wordwall was very useful for learning new vocabulary. About 76% found it very easy to use, indicating that the platform is simple and user-friendly.

The game-based format also had a strong influence on motivation. 72% of students felt very motivated, and another 72% said they preferred this kind of learning to traditional methods. 92% of students said it was very fun to learn vocabulary using Wordwall, which helped to make the class more enjoyable and less boring.

Some students did mention internet connection issues, but this did not stop them from liking the medium. Most said Wordwall helped them remember and understand vocabulary more easily. They liked it more than learning from books.

Many students also said it was their first time learning vocabulary through a digital game, and they felt happy and excited. What they liked most were the colorful visuals, animations, sounds, and interactive features that made learning feel like playing a game.

## Discussion

The results of this study show that using the Wordwall Game helped students improve their vocabulary, especially in learning the Simple Past Tense. In Cycle I, the average pre-test score was 44.28, and the post-test score increased to 88.88. In Cycle II, the pre-test average improved to 51.76, and the post-test score reached 93.68. This shows consistent progress in both cycles. The number of students who achieved the “excellent” category also increased, with 22 out of 25 students reaching this level by the end of Cycle II.

In addition to the scores, students also became more motivated and engaged in the learning process. According to the questionnaire, 88% of students found Wordwall very useful, 76% said it was very easy to use, 72% felt very motivated, 72% often used Wordwall in their learning, and 92% described the experience as very enjoyable. The interactive features, like animations, sound, and colorful visuals, helped create an enjoyable environment and boosted students' confidence.

The findings of this study are in line with the study conducted by Sakkir, Azis, and Jabu (2023), which also found that Wordwall is effective in improving vocabulary acquisition. Their study, conducted at SMAN 1 Gowa with 35 students of class XI MIPA 3, showed a significant increase in students' vocabulary scores from a pre-test average of 82.34 to a post-test average of 98.31, an increase of 15.97 points. Similarly, the current study showed significant improvement, with students' scores increasing from 44.28 in the pre-test to 93.68 in the final post-test. Both studies confirmed that using Wordwall as a digital game-based learning tool not only improved vocabulary acquisition but also increased students' motivation and engagement in the learning



process. These results highlight the potential of Wordwall to be an effective medium to support vocabulary acquisition in various educational contexts.

## CONCLUSION

This study concludes that the use of Wordwall Game is a highly effective and engaging approach to improve students' vocabulary acquisition, particularly in mastering the Simple Past Tense. The platform's interactive features, like matching activities, quizzes, and sentence completion games, help motivate students and encourage them to participate more. Compared to traditional textbook methods, students found game-based learning more fun and interesting, even though there were occasional minor internet-related issues. Throughout the learning cycle, students showed marked improvement in their vocabulary skills. Initially, some students faced challenges, particularly with irregular verbs. However, as the learning process progressed, most students showed significant improvement in both vocabulary acquisition and confidence in using English, particularly in constructing sentences using the Simple Past Tense. The shift in student performance between the two cycles highlighted better vocabulary retention and increased fluency and enthusiasm in language use. Observations during lessons confirmed that students became more active and involved. They participated more confidently in classroom discussions, enjoyed the competitive and educational nature of the game. Their learning experience became more meaningful and less monotonous. In addition, students' responses in the questionnaire reflected very positive perceptions of the Wordwall Game. Most students said that the game was easy to use, fun, and very motivating. They preferred this method over traditional learning approaches and felt that it made learning English vocabulary much more interesting. Even with some occasional technical difficulties, students generally agreed that Wordwall had a positive impact on their learning, helping them improve academically while also increasing their engagement and overall satisfaction with the learning process.

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