



TECHNOLOGY- ENHANCED WORD WALL MEDIA AND ITS IMPACT ON STUDENTS' WRITING SKILLS : AN ICT- INTEGRATED APPROACH IN EFL CONTEXT

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Abstract

This study investigated the impact of technology-enhanced Word Wall media on students' writing skills in an EFL context. The research aimed to determine whether the use of Word Wall as an ICT-integrated learning media could significantly improve students' writing performance, especially in writing descriptive text. The study employed a pre-experimental design with one group pre-test and post-test. The sample consisted of 20 eleventh-grade students selected from SMA Negeri 8 Padangsidempuan. The data were collected through writing composition tests and observation during the learning process. The results showed that the students' writing performance improved after being taught through Word Wall media. The mean score of the pre-test was lower than the post-test mean score, indicating a positive effect of the treatment. The hypothesis test also showed that the use of Word Wall media had a significant impact on students' writing skills. It can be concluded that technology-enhanced Word Wall media is effective in supporting students' writing development and creating more interactive and engaging EFL learning.

Keywords : Word Wall Media, Technology-Enhanced Learning, Writing Skills, ICT Integration, EFL Context.

Abstrak

Penelitian ini menyelidiki dampak media Word Wall yang didukung teknologi terhadap kemampuan menulis siswa dalam konteks EFL (English as a Foreign Language). Penelitian ini bertujuan untuk menentukan apakah penggunaan Word Wall sebagai media pembelajaran terintegrasi TIK dapat secara signifikan meningkatkan kinerja menulis siswa, terutama dalam menulis teks deskriptif. Penelitian ini menggunakan desain pra-eksperimental dengan satu kelompok pre-test dan post-test. Sampel terdiri dari 20 siswa kelas sebelas yang dipilih dari SMA Negeri 8 Padangsidempuan. Data dikumpulkan melalui tes komposisi tulisan dan observasi selama proses pembelajaran. Hasil menunjukkan bahwa kinerja menulis siswa meningkat setelah diajarkan melalui media Word Wall. Rata-rata skor pre-test lebih rendah daripada rata-rata skor post-test, menunjukkan efek positif dari perlakuan tersebut. Pengujian hipotesis juga menunjukkan bahwa penggunaan media Word Wall



memiliki dampak signifikan terhadap kemampuan menulis siswa. Dapat disimpulkan bahwa media Word Wall yang didukung teknologi efektif dalam mendukung perkembangan menulis siswa dan menciptakan pembelajaran EFL yang lebih interaktif dan menarik.

Kata Kunci : Media Dinding Kata, Pembelajaran yang Ditingkatkan Teknologi, Keterampilan Menulis, Integrasi TIK, Konteks EFL.

1. INTRODUCTION

Writing is one of the most important productive skills in English because it allows learners to express ideas, communicate information, and organize meaning in a clear and systematic way. It is not only a linguistic activity but also a cognitive process that helps students develop and transform ideas into written form. Brown (2011) states that writing is a consecutive expression of ideas using graphic conventions of language, vocabulary, and structural refinement to communicate with readers. Similarly, Harmer (2004) as cited in Wardhani et al. (2020) explains that writing is a way to produce language and express ideas, feelings, and opinions. Aditiawarman et al. (2018) also define writing as a method of representing language in visual or tactile form. These definitions show that writing requires learners to combine language knowledge, thought organization, and communicative purpose in order to produce meaningful text.

In English language teaching, students are expected to master several text types, including descriptive text. Descriptive text is a genre used to describe a person, place, animal, or thing in detail so that readers can imagine the object clearly. Hyland (2004) explains that descriptive text is a kind of text aimed at describing imagined or factual events, while Wardiman et al. (2020) define it as a text that describes something, someone, a place, or a thing. The generic structure of descriptive text generally consists of identification and description. Identification introduces the subject being described, while description provides details about its characteristics, qualities, or features (Djuharie, 2007; Wardani & Cahyono, 2008). In addition, descriptive text commonly uses specific participants, simple present tense, adjectives, noun phrases, and relational processes to build a vivid picture for the reader (Rizkiani et al., 2020; Amarain et al., 2009). Therefore, descriptive text is an important text type because it helps learners develop their ability to describe objects clearly and accurately.

To produce good descriptive writing, students need to understand the components of writing. Brown (2001) as cited in Sarwanti (2015) identifies five components of writing: content, organization, vocabulary, language use, and mechanics. Content refers to the unity and completeness of ideas. Organization concerns coherence and logical arrangement. Vocabulary relates to the effective use of words. Language use focuses on grammar and sentence accuracy, while mechanics include spelling, capitalization, and punctuation. These components are essential in assessing students' writing because they reflect both the quality of ideas and the accuracy of expression. In descriptive text, students are expected not only to write information, but also to organize it coherently and use appropriate language forms.

However, writing descriptive text remains difficult for many EFL students. They often struggle with limited vocabulary, weak grammar mastery, poor idea development, and low motivation. These difficulties are also found among the eleventh-grade students of SMA Negeri 8 Padangsidempuan. Based on the researcher's observation, the students' writing performance was still low, and many of them had difficulty constructing sentences and developing ideas into paragraphs. Their average pre-test score was 35, while the minimum mastery criterion was 75. This indicates that the students' ability in writing descriptive text was far below the expected standard. Interviews with students also revealed that their difficulties were caused by weak vocabulary, low confidence, low interest, and inadequate learning facilities.

Although the teacher and school had attempted to solve the problem through exercises, homework, and improved facilities, the students' writing performance remained unsatisfactory. As a result, writing activities in the classroom tended to become less active, and students were less



motivated to express their ideas in written form. Therefore, an innovative learning medium is needed to support students' writing development and make the learning process more engaging and effective.

One possible solution is Wordwall media. Wordwall is an interactive digital platform that can be used to create quizzes, games, and learning activities in both classroom and online settings. Kasa et al. (2021) explain that Wordwall is suitable for building interactive learning because students can work on quizzes simultaneously and see their rankings after completing tasks. Sun'iyah (2020) notes that Wordwall supports learning evaluation and provides variation in teachers' instructional methods. Cil (2021) also states that Wordwall enables teachers to create educational games using ready-made templates without needing advanced coding skills. In addition, Wordwall can be accessed easily through a website and shared with students through other digital platforms. Because of its game-based and technology-enhanced features, Wordwall has the potential to increase students' motivation, participation, and confidence in writing activities.

Previous studies support the use of Wordwall in language learning. Rohmatunnisa (2022) found that Wordwall had a positive effect on students' learning outcomes in biographical text listening. Meanwhile, Wijayanti et al. (2023) reported that Wordwall improved students' vocabulary mastery in descriptive text. These studies show that Wordwall can create an engaging learning environment and support language skill development. However, more research is still needed to examine its effect on students' writing ability, especially in descriptive text instruction in EFL classrooms.

Based on this background, the present study investigates Technology- Enhanced Word Wall Media And Its Impact On Students' Writing Skills : An ICT- Integrated Approach In EFL Context. This study aims to provide empirical evidence on the use of technology-enhanced media in English writing instruction and to offer practical implications for teachers who want to improve students' writing performance through interactive learning tools. Writing is one of the most important productive skills in English because it allows learners to express ideas, communicate information, and organize meaning in a clear and systematic way. It is not only a linguistic activity but also a cognitive process that helps students develop and transform ideas into written form. Brown (2011) states that writing is a consecutive expression of ideas using graphic conventions of language, vocabulary, and structural refinement to communicate with readers. Similarly, Harmer (2004) as cited in Wardhani et al. (2020) explains that writing is a way to produce language and express ideas, feelings, and opinions. Aditiawarman et al. (2018) also define writing as a method of representing language in visual or tactile form. These definitions show that writing requires learners to combine language knowledge, thought organization, and communicative purpose in order to produce meaningful text.

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2. RESEARCH METHOD

This study employed a pre- experimental design using a one- group pretest- posttest design. This design was chosen to examine the effect of Wordwall media on students' writing descriptive text ability. In this design, the students were given a pretest before the treatment, followed by the implementation of Wordwall media, and then a posttest after the treatment. The design can be represented as follows:

$$O_1 X O_2$$

Where:

O_1 : Pre-test (before giving treatment)

X : Treatment

O_2 : Post-test (after giving treatment)



This design was appropriate because the study focused on measuring students' writing improvement after being exposed to technology-enhanced learning through Wordwall.

The research was conducted at SMA Negeri 8 Padangsidempuan, located in Padangsidempuan, North Sumatra, Indonesia. The study was carried out over a period of three months. This school was selected because the researcher found that students in the eleventh grade experienced difficulties in writing descriptive text, and the topic had not previously been studied in this setting. The population of this study consisted of all eleventh-grade students of SMA Negeri 8 Padangsidempuan in the 2023/2024 academic year, totaling 80 students across four classes. The sample was XI MIA 2, consisting of 20 students. This class was chosen through purposive sampling because the students in this class were considered to have the lowest writing performance and were therefore suitable for the purpose of the study. The data were collected using observation and writing composition test. Observation was used to examine the implementation of Wordwall media during the teaching and learning process. The writing test was used to measure students' descriptive text ability before and after the treatment.

3. RESULT AND DISCUSSION

1. Implementation of Wordwall Media

The observation result results showed that the implementation of Wordwall media in teaching writing descriptive text was very good. The observation sheet consisted of 22 indicators, and the total score obtained was 88 with an average score of 3.6. The pre-activity stage obtained a mean score of 3.7, the while-activity stage also obtained 3.7, and the post-activity stage obtained 3.5. These results indicate that the researcher was able to carry out the teaching procedure effectively and that Wordwall media was implemented well in the classroom.

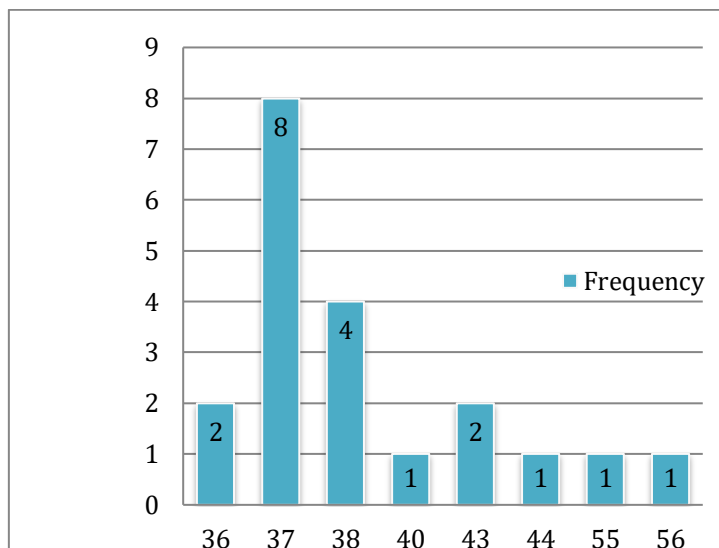
The highest score was found in the while-activity stage, showing that the core learning process was conducted successfully and that students were engaged in the interactive learning activities. The observation data suggest that Wordwall media supported an active and well-organized learning environment. It also helped the teacher deliver the material more clearly and attractively, which contributed to students' understanding of the lesson.

2. Students' Writing Performance before Treatment

The pre-test results showed that students' writing ability was still low before the use of Wordwall media. The highest score was 56, and the lowest score was 36. The mean score was 40.05, which was categorized as fail. The median score was 37.5, and the mode was 37. These results indicate that most students had difficulty writing descriptive texts and had not yet achieved the expected standard.

The frequency distribution also showed that the most common score was 37, obtained by 8 students. This means that a large number of students were clustered at a low achievement level. The histogram confirmed that the students' writing performance before the treatment was generally weak. In terms of writing indicators, the students obtained the highest average score in content, but organization, vocabulary, language use, and mechanics were still in the low category. Mechanics was the weakest aspect, showing that students had serious problems with spelling, punctuation, and capitalization.

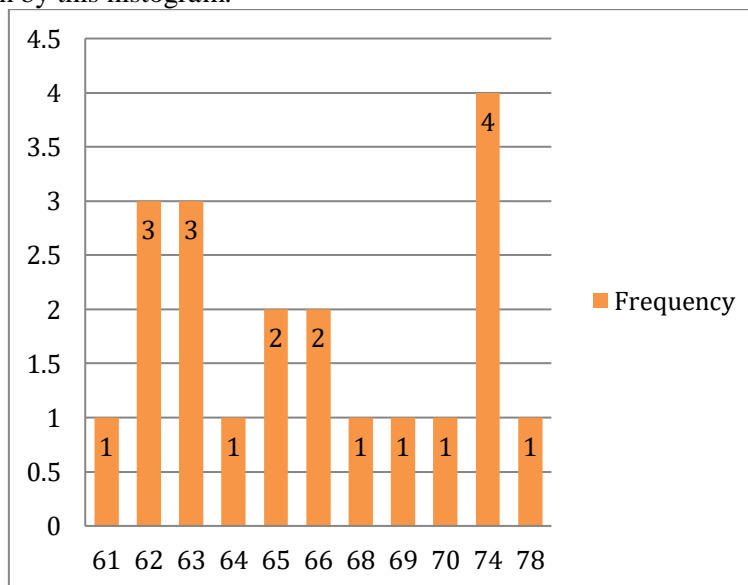
The data can be shown by this histogram:



3. Students' Writing Performance after Treatment

After the treatment, the post-test results showed an improvement in students' writing ability. The highest score increased to 78, while the lowest score became 61. The mean score rose to 67.15, which was categorized as enough. The median score was 65.5, and the mode was 74. This indicates that students' performance improved after learning through Wordwall media. The frequency distribution shows that the highest frequency was at score 74, obtained by 4 students. Compared to the pretest, the posttest scores were distributed at a higher level, showing a positive shift in achievement. Based on the writing indicators, content obtained the highest average score after treatment, while organization, vocabulary, and language use also improved. However, mechanics remained the weakest component. This suggests that Wordwall media helped students understand the topic better and develop ideas more effectively, although they still needed more practice in applying writing conventions.

The data can be shown by this histogram:



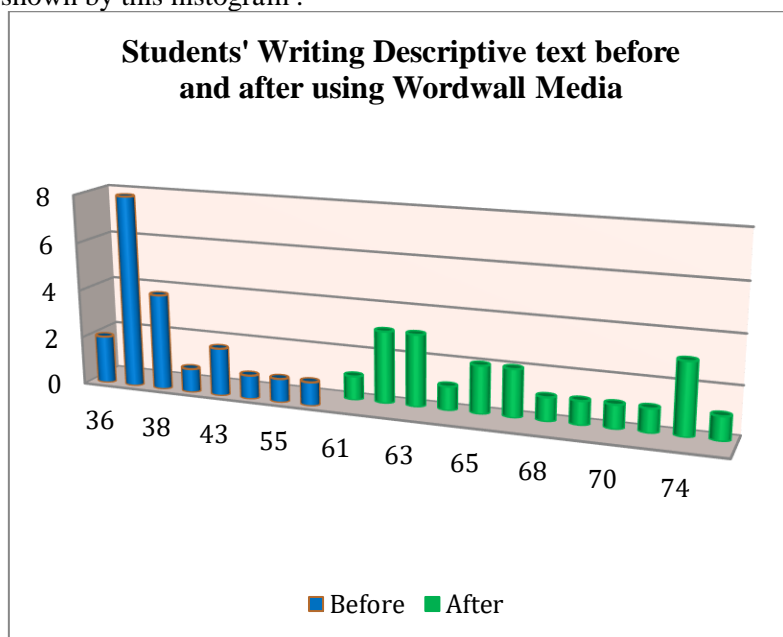
4. Comparison of Pre-test and Post-test

Comparison between pretest and posttest scores shows that Wordwall media had a positive effect on students' writing descriptive text ability. Before the treatment, most students scored in the fail category, while after the treatment, many students moved to the enough category. The score



improvement was especially visible in the content aspect, which increased significantly after the treatment. This finding shows that Wordwall media created a more engaging and motivating learning environment. The interactive and game-based features of Wordwall made students more interested in the lesson and helped them participate more actively in writing activities. As a result, they were better able to generate ideas and organize them into descriptive texts.

The data can be shown by this histogram :



Discussion

The findings of this study are in line with the view that interactive digital media can enhance language learning by increasing students' motivation, participation, and comprehension. Wordwall provided an enjoyable and technology-based learning experience that made students more active in class. Through this media, students were exposed to more interesting tasks, which helped them understand the topic and develop their descriptive writing more confidently.

The result also support previous studies that found Wordwall effective in improving students' language performance. The improvement in content, organization, vocabulary, and language use suggests that Wordwall can be a useful instructional tool in EFL writing classes. Although mechanics remained a challenge, the overall improvement indicates that the media contributed positively to students' writing development.

4. CONCLUSION

The use of Wordwall Media in teaching writing descriptive text at the eleventh grade of SMA Negeri 8 Padangsidempuan had a significant effect on students' writing ability. The findings showed that students' understanding and performance in writing descriptive text improved after the treatment. Based on the data analysis, the conclusions of this study are presented as follows:

1. The implementation of of Wordwall media in teaching writing descriptive text at the eleventh grade of SMA Negeri 8 Padangsidempuan in the 2023/2024 academic year was classified as very good, with an average score of 3.6.
2. The students' writing descriptive text ability improved after the use of Wordwall media. Before the treatment, the mean score was 40.05, which was categorized as fail. After the treatment, the mean score increased to 67.15, which was categorized as enough.
3. The statistical analysis showed that Wordwall media had a significant effect on students' writing descriptive text ability. The Wilcoxon signed-ranks test produced a significance value of 0.01,



which was lower than 0.05. In addition, the N-Gain score was 0.44693, indicating a medium level of effectiveness. Therefore, the alternative hypothesis (H_a) was accepted.

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