
THE EFFECTIVENESS OF USING POWTOON AS MEDIA IN TEACHING VOCABULARY

(A Pre-experimental Study to the Eighth Grade Students of SMP Negeri 1 Kendawangan in the Academic Year of 2024/2025)

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Abstrak

Penelitian ini bertujuan untuk mengetahui efektivitas penggunaan media Powtoon dalam pembelajaran kosakata pada siswa kelas VIII A SMP Negeri 1 Kendawangan. Penelitian ini menggunakan metode kuantitatif dengan desain pra-eksperimen one-group pre-test post-test. Subjek penelitian terdiri dari 24 siswa. Data dikumpulkan melalui tes berupa pre-test dan post-test, kemudian dianalisis menggunakan statistik deskriptif dengan bantuan SPSS versi 24. Uji hipotesis dilakukan dengan paired sample t-test, sedangkan ukuran efek dihitung menggunakan Cohen's effect size. Hasil penelitian menunjukkan adanya peningkatan signifikan pada kemampuan kosakata siswa setelah pembelajaran dengan media Powtoon. Skor rata-rata pre-test sebesar 48,75 meningkat menjadi 72,70 pada post-test, dengan standar deviasi masing-masing 8,75 dan 7,79. Hasil uji t-test memperoleh nilai 17,380 dengan df 23, sehingga hipotesis nol (H_0) ditolak dan hipotesis alternatif (H_a) diterima. Nilai Cohen's effect size sebesar 1,44 menunjukkan bahwa pengaruh media Powtoon tergolong kuat. Dengan demikian, dapat disimpulkan bahwa media Powtoon efektif digunakan dalam pembelajaran kosakata pada siswa SMP Negeri 1 Kendawangan

Kata Kunci : Powtoon, pembelajaran kosakata, desain pra-eksperimen, SMP Negeri 1 Kendawangan

Abstract

The purpose of this research was to determine whether the use of Powtoon media is effective or not in teaching vocabulary and to assess the effect of the Powtoon media in teaching vocabulary to grade VIII A students of SMPN 1 Kendawangan. This study uses a quantitative method, specifically a pre-experimental design with a one-group pre-test post-test. The subjects in this study were 24 eighth-grade A students at SMPN 1 Kendawangan. In this study, the measurement technique was used to collect data through tests. Pre-test and post-test assessments were given to collect data from students. The collected data analysis using descriptive statistics with SPSS for Windows version 24. The paired sample test analysis was used to test the hypothesis. In addition, Cohen's effect size was used to evaluate the impact of using the Powtoon Media in teaching vocabulary. The research findings of the study showed the effectiveness of the Powtoon media in teaching vocabulary to eighth grade students of SMPN 1 Kendawangan. This was evidenced by the differences observed in the mean scores between the pre-test (48.75) and post-test (72.70), indicating a positive change after the treatment. The standard deviation pre-test (8.75) and the post-test (7.79). Furthermore, the sample t-test of 17.380 and the degrees of freedom (df) 23. This result allows us to reject the null hypothesis (H_0) and accept the alternative hypothesis (H_a). In conclusion, PowToon media is effective in teaching vocabulary. The effect size, based on the Cohen effect, was determined to be 1.44, indicating a strong effect of the Powtoon media in teaching vocabulary.

Keywords: Powtoon, teaching vocabulary, pre-experimental design, SMP Negeri 1 Kendawangan

INTRODUCTION

Vocabulary is the most basic and very essential thing when learning English. Vocabulary is also a skill that supports listening, speaking, reading, and writing. Without

sufficient vocabulary, it will cause difficulties in learning a language. According to Peeva et al., (2021) vocabulary is important in teaching and learning English because learning English can be useless if students do not understand the meaning of vocabulary. People who do not have a large vocabulary will find it difficult to express and describe their feelings both orally and in writing. Mastering a more extensive vocabulary will improve all skills. According to Alqahtani (2015), the relationship between vocabulary knowledge and language use as complementary knowledge of vocabulary enables language use and, conversely, language use leads to an increase in vocabulary knowledge

In vocabulary, several aspects need to be known, such as meaning, spelling, pronunciation, word classes, and word use. According to Susanto (2021), some items need to be taught in teaching vocabulary as follows: Pronunciation, Spelling, Grammar, Collocation, and Aspect of Meaning. A deep understanding of the aspects of vocabulary is essential for developing comprehensive language skills. By knowing the aspects of vocabulary, students can gain a broader and deeper understanding of the use of words in the right context. This not only improves communication skills but also supports critical and analytical thinking skills. However, understanding each aspect in learning vocabulary is not easy, especially for students new to language learning. Acquiring vocabulary requires more than just memorization, it also requires understanding the meaning of words. According to Afzal (2019), Vocabulary learning is difficult for beginners as students will face problems with spelling, pronunciation, meaning of new words, correct use of words, guessing meaning through context, and more.

The English language learning process at SMP Negeri 1 Kendawangan still using the 2013 curriculum. According to Istiqomah & Hassan (2023), the 2013 curriculum emphasizes thinking based on attitudes, abilities, and knowledge. Teachers in this curriculum are expected to encourage students to observe, ask questions, talk, and share what they have understood. In learning activities there are several obstacles found in the classroom such as not knowing the meaning of the vocabulary, and difficulty in pronouncing words by students. Easily forgetting the vocabulary that has just been learned and grammatical forms are also another cause of difficulty where students find it difficult to identify written and spoken.

This makes students passive when invited to discuss learning, when the teacher explains the students seem to understand but if they are asked to do exercises or problems the students still feel confused, after the teacher explains the material the students are asked to ask about things that have not been understood the students are just silent, no one asks.

Most students find it difficult to understand the teacher's explanation. From this explanation, the researcher concludes that this obstacle occurs because of the lack of vocabulary in students, this can also be caused because they are just learning English at the Junior high school level, so students have to learn from scratch, not only that, students' lack of enthusiasm in learning English also causes a lack of vocabulary in students, therefore the researcher will try to use media in learning English so that learning can be more interesting and increase students' enthusiasm in learning vocabulary.

Researchers will try media that can be used in teaching English because by using media students will more easily understand learning. According to Arifin (2023), Media is a component of learning resources or material carriers containing instructional content that can enhance students' learning. There are many exciting learning media types, ranging from audio, visual, and audio-visual. According to Wirama Hari (2019), Media can be used to teach students. Teachers can create new teaching tools that encourage students to learn, especially English, by combining learning materials with suitable media. Teachers can use many media types to make students interested in learning English. One of them is audio-visual media. According to (Ardaningsih & Adnyayanti, 2022), Using a combination of audio and visuals can help the audience receive information. Audio-visual media is a tool that produces visuals and audio that can be seen and heard by students. Audio-visual media such as videos, TV, and movies strongly affect students' minds and can increase their concentration and understanding of learning.

Nowadays, there are so many audio-visual media. One of them is Powtoon. Powtoon stands for "presentation cartoon". Powtoon is an absorbing audio-visual medium that attracts attention and increases interaction. Powtoon can be an innovative medium for teaching vocabulary. Powtoon was founded in January 2012 by Spitalnik and Zaturansky. Powtoon is an online presentation software that provides cartoon animation, handwriting animation, and transition effects. There are so many features in Powtoon, it is free and easy to use. Users only need to register using email, google account, or Facebook account. According to Diah (2020), Using Powtoon, everyone can create video presentations with cartoon animations and transition effects. Teachers can use Powtoon to make creative slides as media that can increase students' vocabulary. Powtoon can also keep students involved in learning because Powtoon makes the learning atmosphere relaxed, fun, and interesting.

In previous studies, several researchers used Powtoon media in learning English, in research Wardani (2023), The use of Powtoon media to increase vocabulary mastery of

seventh-grade students of Madrasah Tsanawiyah Ashri Jember states Students in the seventh grade of Madrasah Tsanawiyah Ashri in Jember have better mastery of understanding after using PowToon media. Results showed that students improved their mastery of English to 77.77% before using PowToon media. From these results, researchers concluded that using PowToon media can improve students' comprehension mastery.

Research from Sakinah (2021), The effect of using Powtoon application on student's listening comprehension in the narrative text at the eleventh grade of MA Nurul Iman Rokan Hulu. Shows that, yes, there is a significant effect of using the Powtoon application on students' listening comprehension of narrative text. Based on data presentation and data analysis, students' listening comprehension score before using the Powtoon app was 79.63, and their comprehension score after using the Powtoon app increased to 90.96. The effect size of learning based on the Powtoon app on listening comprehension of narrative text amounted to a large effect, which includes an increase in students' listening comprehension level of narrative text.

There are several differences between the research to be carried out and previous studies such as Research focus: Previous research focused on improving vocabulary acquisition (Wardani, 2023) and listening comprehension of narrative text (Sakinah, 2021). Meanwhile, this study will focus on trying powtoon media in vocabulary learning. Subjects in the research are also different. The previous research was conducted on grade 7 Madrasah Tsanawiyah students (Wardani, 2023) and grade 11 MA (Sakinah, 2021) while this research will be conducted on grade 8 SMP Negeri 1 Kendawangan students.

Based on previous research, the researcher is also interested in conducting a study on The effectiveness of using Powtoon as media in Teaching vocabulary to the Eighth-grade Students of SMP Negeri 1 Kendawangan in the Academic Year 2024/2025. In this case, the researcher will use a pre-experimental research design using Powtoon as a media for teaching vocabulary. The researchers conducted this research because the researchers wanted to determine whether Powtoon Media effectively teaches language to eighth-grade students of SMP Negeri 1 Kendawangan.

METHODOLOGY

The researcher employed a pre-experimental design consisting of a pre-test, treatment, and post-test to measure the effectiveness of using Powtoon in teaching vocabulary. Following Cohen et al. (2007), the design allowed the researcher to control and

manipulate conditions to observe the effects of an intervention. A single class, VIII A, was selected as the experimental group through cluster random sampling from the eighth-grade population of SMP Negeri 1 Kendawangan in the academic year 2024/2025, consisting of five classes with a total of 123 students.

The data collection employed a vocabulary test comprising 20 multiple-choice questions to assess students' vocabulary knowledge before and after treatment. The validity and reliability of the test were confirmed through a try-out in class VIII D, with only valid and reliable items used for the final test. The pre-test measured students' initial vocabulary knowledge, while the treatment involved teaching vocabulary using Powtoon, and the post-test evaluated the impact of the intervention.

Data analysis utilized SPSS Version 27 to calculate individual scores, mean scores, standard deviation, and dependent t-test results to determine the effectiveness of Powtoon. Hypothesis testing was conducted using a critical value from the t-distribution table at a significance level of 0.05. The researcher also calculated the effect size to quantify the degree of impact, categorizing the results based on Cohen et al.'s (2007) interpretation. The procedures included systematic steps of administering a pre-test, implementing the treatment, and conducting a post-test to ensure a structured and efficient research process.

FINDINGS AND DISCUSSIONS

A. Finding

This research was conducted with eighth-grade students of SMP Negeri 1 Kendawangan in the academic year 2024/2025. Based on the title of the study, this research employed a pre-experimental design with only one class serving as the sample. The study process consisted of five meetings, including one pre-test, three treatment sessions, and one post-test. All students participated in the learning process from start to finish, with the material focusing on how to invite someone.

The purpose of this research was to analyze the results of the pre-test and post-test, including individual scores, mean scores, t-test results, and the effect size of the treatment. Data analysis was conducted using the Statistical Package for Social Science (SPSS) version 27.

During the pre-test phase, students' individual scores were analyzed to determine their vocabulary abilities before the treatment. The pre-test included multiple-choice questions and a reading aloud activity, where the highest score obtained was 70, the lowest

score was 35, and the total score was 1170 for the 24 students who participated in the study. After the treatment, which involved vocabulary instruction using Powtoon media, students completed a post-test to measure their improvement. In the post-test, the highest score increased to 85, the lowest score to 55, and the total score to 1745.

The descriptive statistical analysis showed an improvement in scores from the pre-test to the post-test. The mean score for the pre-test was 48.75, while the mean score for the post-test reached 72.71. The standard deviation for the pre-test was 8.75, whereas for the post-test, it was 7.80, indicating that students' scores were closer to the mean after the treatment with Powtoon media. This suggests that the use of Powtoon enhanced the consistency of students' learning outcomes.

A t-test was then performed to determine whether there was a significant difference between the pre-test and post-test scores. Based on the analysis, the t-value was 17.380, compared to the t-table value of 1.714 at a 5% significance level with 23 degrees of freedom (df). Since the t-value exceeded the t-table value ($17.380 > 1.714$), the null hypothesis (H_0) was rejected, and the alternative hypothesis (H_a) was accepted. Thus, it can be concluded that Powtoon media is effective in teaching vocabulary to eighth-grade students of SMP Negeri 1 Kendawangan.

Additionally, the effect size was calculated to measure the extent of the treatment's impact on students' vocabulary improvement. The calculation yielded an effect size value of 1.44, which falls under the "strong effect" category according to Cohen, Manion, and Morrison (2007). Therefore, it can be concluded that the treatment using Powtoon media had a significant and strong effect on enhancing the vocabulary skills of eighth-grade students at SMP Negeri 1 Kendawangan in the academic year 2024/2025.

B. Discussion

The research aimed to determine the effectiveness of Powtoon Media in teaching vocabulary to eighth-grade students of SMP Negeri 1 Kendawangan during the 2024/2025 academic year. A pre-experimental method was employed, involving pre-tests, treatments, and post-tests over five sessions. Before administering the pre-test, the researcher validated the test items in a different class (VIII D) using SPSS Version 27 to ensure their reliability and validity.

The study revealed significant improvements in students' vocabulary skills after using Powtoon. The pre-test results showed a total score of 1170, with scores ranging from

35 to 70 and a mean score of 48.75. Post-test results indicated a total score of 1745, with scores ranging from 55 to 85 and a mean score of 72.70. Standard deviations for the pre-test and post-test were 8.75 and 7.80, respectively, reflecting a closer alignment of student scores to the mean after treatment. A t-test analysis further confirmed these findings, with a t-value of 17.380 surpassing the critical value (1.714) at a 5% significance level. This led to the rejection of the null hypothesis (H_0) and acceptance of the alternative hypothesis (H_a), indicating that Powtoon significantly impacted vocabulary learning.

The study also calculated the effect size, yielding a strong effect of 1.44 based on Cohen's criteria. This robust result underlines the significant impact of Powtoon on vocabulary acquisition. These findings align with previous research by Wardani (2023) and Pitriyani (2023), who also reported positive outcomes when using Powtoon in different educational contexts. Wardani observed improvements in vocabulary mastery among seventh-grade students, while Pitriyani found it effective in teaching narrative writing to ninth-grade students.

Despite similarities in utilizing Powtoon to enhance learning outcomes, the studies differ in focus and methodology. This research and Wardani's work focused on vocabulary acquisition, while Pitriyani's centered on writing skills. Methodologically, this study used a pre-experimental design, Wardani employed classroom action research, and Pitriyani applied a quantitative experimental approach comparing experimental and control groups.

The findings of this study suggest that Powtoon Media is an effective and engaging tool for teaching vocabulary, enhancing both learning outcomes and student motivation. By offering a visual and interactive medium, Powtoon creates a dynamic and inclusive learning environment, supporting the broader notion that integrating technology into education improves both processes and outcomes. This conclusion aligns with Wirama H's (2019) assertion that media use enhances students' understanding and engagement in the learning process.

In summary, this research affirmed the effectiveness of Powtoon in teaching vocabulary, evidenced by a strong effect size and significant improvement in test scores. The study underscores the potential of modern technological tools like Powtoon in fostering better educational experiences and highlights the importance of innovation in teaching methodologies.

CONCLUSION

This study concludes that Powtoon is an effective tool for teaching vocabulary to eighth-grade students at SMP Negeri 1 Kendawangan. The research aimed to answer two main questions: the effectiveness of Powtoon and the degree of its effect size on vocabulary learning.

The findings revealed a significant improvement in students' vocabulary scores. The average pre-test score was 48.75 (total 1170, min. 35, max. 70), which increased to 72.70 in the post-test (total 1745, min. 55, max. 85). The t-test value of 17.380 exceeded the t-table value of 1.714, confirming the statistical significance of the improvement. Furthermore, an effect size of 1.44 indicated a strong practical impact.

These results align with prior research by Wardani (2023) and Pitriyani (2023), highlighting Powtoon's effectiveness in improving academic outcomes and fostering engagement. Powtoon's interactive and visual approach makes learning more accessible and enjoyable, supporting the view that technology-based media enhances the learning process.

In summary, Powtoon is a highly effective medium for teaching vocabulary, providing both statistical and practical benefits. This study underscores the importance of integrating modern technology into education to create dynamic, effective, and engaging learning experiences.

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