

Improving the Students' Reading Comprehension Mastery by Using Canva and Word Wall Application in Grade VIII of SMP Negeri 18 Medan

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Abstract

Reading comprehension is a critical skill that influences students' academic success and overall literacy development. However, many students face challenges in understanding texts, which can affect their learning process. The reading comprehension skills of eighth-grade students at SMP Negeri 18 Medan are low. Many students struggle to understand texts due to limited vocabulary and a lack of interest in reading. This study aims to investigate the effect of Canva and Wordwall Application into the students' reading comprehension mastery among Grade VIII students at SMP Negeri 18 Medan. The study adopts an experimental research methodology through a qualitative one-group design, focusing on class VIII-9 as the sample population. Data were collected through pre-tests and post-tests to assess students' reading comprehension development before and after using applications as learning media. The research sample consisted of 32 students, and the results indicated a significant improvement in reading comprehension scores after integrating digital applications.. The average score increased from 65 to 80, demonstrating a 25.29% enhancement in reading comprehension mastery. Research findings reveal that the experimental group demonstrated a marked improvement in reading comprehension scores, indicating that the integration of technology in the classroom can enhance learning outcomes. This research firmly establishes the critical role of innovative digital tools in modern educational practices and confidently presents recommendations for their broader implementation in classroom settings.

Keywords: Canva, Word Wall, Reading Comprehension

Abstrak

Pemahaman membaca merupakan keterampilan krusial yang memengaruhi keberhasilan akademik siswa serta perkembangan literasi secara keseluruhan. Namun, banyak siswa menghadapi kesulitan dalam memahami teks, yang dapat berdampak pada proses pembelajaran mereka. Keterampilan pemahaman membaca siswa kelas VIII di SMP Negeri 18 Medan masih tergolong rendah. Banyak siswa mengalami kesulitan dalam memahami teks akibat keterbatasan kosakata serta kurangnya minat membaca. Studi ini bertujuan untuk menyelidiki pengaruh penggunaan aplikasi Canva dan Word Wall terhadap kemampuan penguasaan pemahaman membaca di kalangan siswa Kelas VIII di SMP Negeri 18 Medan. Penelitian ini mengadopsi metodologi penelitian eksperimental dengan desain kualitatif satu kelompok (one-group design), dengan fokus pada kelas VIII-9 sebagai populasi sampel. Data dikumpulkan melalui pre-test dan post-test untuk mengukur perkembangan pemahaman siswa sebelum dan sesudah menggunakan aplikasi sebagai media pembelajaran. Sampel penelitian terdiri dari 32 orang siswa, dan hasil menunjukkan peningkatan signifikan dalam skor pemahaman membaca setelah integrasi aplikasi digital. Skor rata-rata meningkat dari 65 menjadi 80, menunjukkan peningkatan 25,39% dalam penguasaan pemahaman membaca. Temuan menunjukkan peningkatan signifikan dalam skor pemahaman membaca untuk kelompok eksperimen, menunjukkan bahwa mengintegrasikan teknologi di dalam kelas dapat mendorong hasil pembelajaran yang lebih baik. Penelitian ini menegaskan peran krusial alat digital inovatif

dalam praktik pendidikan modern serta dengan yakin merekomendasikan penerapannya secara lebih luas dalam lingkungan pembelajaran di kelas.

Kata Kunci: Canva, Word Wall, Pemahaman Membaca

INTRODUCTION

Reading comprehension is regarded as one of the most challenging activities humans can engage in (Kendeou, McMaster, and Christ 2016). This complexity complicates the establishment of a comprehensive theory capable of making accurate predictions across various readers, texts, and discourse contexts (Kendeou et al. 2009). As a result, researchers have developed models that concentrate on a specific set of components and processes related to reading comprehension. In the following sections, we will explore process models and then component models.

Reading encompasses three interconnected components: the reader, the text, and the reading task, all of which are framed within a wider sociocultural context. In order to understand a text, a reader needs to have a variety of skills (such as attention, memory, and inference), motivation (including reading objectives and interest), and knowledge (like subject matter expertise and language skills), all of which are shaped by the particular texts encountered and the tasks being performed (Snow 2002). While each of these components plays a crucial role in reading comprehension, this article focuses on reading processes, components, and individual differences.

Reading comprehension is essential for academic success across all subjects. In Indonesia, the National Assessment Program (AN) has highlighted the need to improve students' reading abilities, especially in today's learning environments (Kementerian Pendidikan dan Kebudayaan, 2020). PISA results show that Indonesian students often struggle with reading comprehension, ranking lower than many international peers (OECD, 2019), prompting the need for innovative strategies to make learning

more engaging.

According to (Pratiwi et al. 2024) the game-based learning design using Wordwall.net encourages classroom learning as a teaching aid and serves as supplementary material to encourage fun and independent learning outside the classroom. The game is also considered because teachers can extend it with materials that can be customised to suit students' needs. There are great benefits from the use of interactive worksheets, such as students' perception of the ease of use of online educational games is a consideration to ensure the effectiveness and success of online game implementation in the field of education.

This study focuses on Grade VIII students at SMP Negeri 18 Medan, where reading comprehension needs improvement. Preliminary assessments indicate many students struggle with text understanding, impacting their overall performance. By using Canva and Word Wall, this research aims to determine whether these tools can improve reading comprehension and academic success.

This study aligns with Indonesia's educational goals of integrating technology into learning (Kementerian Pendidikan dan Kebudayaan, 2021). The findings will contribute to the body of knowledge on technology use in education and provide practical recommendations for teachers seeking to enhance their instructional methods.

The Indonesian government, through the Ministry of Education, Culture, Research, and Technology, supports teachers in creating innovative, engaging, and relevant learning experiences for the digital generation. One government initiative is launching learning accounts under the "belajar.id" program. These accounts enable teachers to access various educational platforms

that enhance the learning process, such as Canva for Education, Quizizz, Google Site, etc.

Canva for Education is a graphic design application that enables teachers to create visually engaging teaching materials, such as presentations, infographics, modules, and posters. Through the belajar.id account, teachers can enjoy free access to the pro version, which was previously available only through a paid subscription. This premium feature allows teachers to utilize an extensive range of templates, design elements, and collaborative tools without limitations. (Hafidzin, Muzammil, and Teguh Sulistyio 2024)

Canva allows students to process information more effectively through engaging visual elements. By providing access to a wide range of templates, graphics, and design tools, Canva helps students create visually appealing presentations, infographics, and study materials. This enhances their understanding and retention of concepts, making learning more interactive and tailored to their needs. The application allows for the integration of multimedia elements such as images, videos, and infographics into reading materials. This visual support can help students better understand and retain information, making abstract concepts more tangible. (Atstsaniyah and Widagdo 2024)

Wordwall Media is a promising tool for creating a fun and interactive learning experience. It offers quizzes, puzzles, and games that engage students with science content (Antika Indah Listiana et al. 2023). According to Hasanah et al. (2024), using Wordwall media as a teaching aid is expected to motivate students in their learning. Wordwall provides a variety of game templates that foster interactive engagement, encouraging students to participate more enthusiastically in the teaching and learning process. (Furliana et al. 2023)

The visual presentation of words, including pictures and definitions, aids in creating mental associations that deepen understanding. It emphasizes that technology-enhanced vocabulary instruction, facilitated by media like Wordwall, engages students more actively in their learning process. By allowing learners to explore words in a contextually rich environment, the application offers a more immersive experience than traditional vocabulary teaching methods (Suryadi 2022)

The insights from Khadijah and Setyowati (2021) highlight how the Wordwall application can effectively enhance vocabulary during remote learning, emphasizing their role in sustaining student engagement even in challenging educational contexts. By integrating the Wordwall application into their lesson plans, teachers can cultivate a stimulating learning environment that encourages students to explore and learn autonomously.

Research by Prasetyo (2020) "The Impact of Digital Tools on Students' Reading Comprehension: A Case Study of Canva in EFL Classrooms". This research demonstrates that using Canva in English language learning enhances students' motivation and comprehension of reading materials. However, it primarily emphasizes student motivation and engagement rather than focusing on reading comprehension. Although this research concludes that Canva positively contributes to motivation, there is no in-depth analysis of how the use of Canva directly affects specific aspects of reading comprehension, such as the ability to analyze or summarize information from the text. Further research is needed to explore this relationship in more detail.

The second research was conducted by Sari and Indriani (2021), "Using Wordwall to Enhance Vocabulary Mastery and Reading Comprehension of Eighth Graders". This study found that using the Wordwall application can improve

students' vocabulary mastery and reading comprehension. However, this research did not compare the effectiveness of Wordwall with other digital tools, such as Canva. The research provides insights into the effectiveness of Wordwall, but does not explore the interaction between the use of Wordwall and Canva in the same context. Further research can be conducted to compare the effectiveness of both applications simultaneously and how they complement each other in improving reading comprehension.

The selection of Canva and Word Wall was based on their user-friendly interfaces and the potential for enhancing interactive learning experiences. Canva allowed students to create visually appealing presentations of reading materials, while Word Wall facilitated vocabulary exercises and comprehension activities that encouraged active participation. This combination aimed to create a more engaging learning environment that could foster better understanding and retention of reading content.

Ethical considerations were considered, and parental consent was obtained for student participation in the study. The research adhered to ethical guidelines to ensure the confidentiality and anonymity of participants. Overall, the methodology employed in this study aimed to provide a robust framework for evaluating the effectiveness of digital tools in improving reading comprehension mastery among Grade VIII students.

The analysis reveals that while some studies examine the use of Canva and Wordwall applications to enhance reading comprehension, significant research gaps still exist. Further investigation is necessary to understand better the specific relationship between these applications and reading comprehension. Additionally, it would be beneficial to compare both applications' effectiveness simultaneously and consider contextual factors that may influence the outcomes.

In a preliminary study through observation regarding the teaching and learning process of reading, the researcher found that students' reading comprehension was still low because they needed more motivation to learn English. The teaching and learning process of reading is monotonous, and no attractive medium is used to teach them. As a consequence, they only learn English as an obligation without trying to comprehend the material. Based on the problems found, the researcher attempted to do research in this area by using Canva and Wordwall as attractive medium to teach English reading comprehension with two research questions as follows: Does the use of Canva Application significantly improve students' reading comprehension? Does the use of Wordwall Application significantly improve students' reading comprehension?

METHOD

Methodology of this study is quasi-experimental research method with a quantitative approach. The quantitative method is referred to as the positivistic method because it is based on the philosophy of positivism. According to (Sugiyono 2022), "Quantitative research methods can be defined as research methods based on the philosophy of positivism, used to study specific populations or samples."

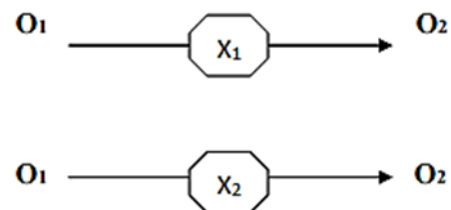


Figure 1. Quasi-Experimental Research Design.

According to (Syamsuddin AR, Damaianti 2011), "A research method is a systematic and carefully planned approach to solving research problems, aimed at obtaining facts and conclusions to understand, explain, predict, and control situations." Based on this definition, the researcher used a quantitative approach to

conduct this study.

The experimental research method is categorized into three major groups: pre-experimental, experimental, and quasi-experimental designs. In this study, the researcher employs a quasi-experimental design, specifically the nonequivalent control group design. According to (Arikunto 2022), "The pretest-posttest one group design is a study conducted twice, once before the experiment (pretest) and once after the experiment (posttest), with a single group of subjects." The researcher uses this research design because it aligns with the research title. Based on Arikunto's perspective, the researcher administers a pretest to students to assess their knowledge before the experiment. After the pretest, the researcher will conduct experiments by providing text to the students. The final action taken by the researcher is to administer a posttest and compare the data obtained from the pre-test to that from the posttest.

Data collection included pre-tests and post-tests to evaluate the reading comprehension levels of the students before and after the intervention. The pre-test established baseline scores, while the post-test measured the effects of Canva and Wordwall applications on the students' reading comprehension development after the treatments. In the one-group design, the treatment and measurement are conducted in a single group. In contrast, the two-group design involves two research groups, where each group receives different variations of the independent variable (Seniati, Yulianto, & Setiadi, 2005:148). In this research, the researcher applied a pre-experimental research design, one group pre-test, and a post-test. (Cohen 2011) stated that pre-experimental designs are the researcher studies a single group and implements an intervention during the experiment. The population for this research was second-grade students of the SMP Negeri 18 Medan. The researcher used simple random sampling and obtained VIII-9 as a sample of the research, consisting of 32 students.

FINDINGS AND DISCUSSION

The findings from this study revealed a significant improvement in the reading comprehension scores of the experimental group compared to the control group. Analysis of the pre-test and post-test results indicated that learning which utilized by Canva and Word Wall applications, exhibited a higher mean improvement of 25,39%.in the students reading comprehension scores. This difference was statistically significant, with a p-value of less than 1.05, indicating that the use of digital tools had a meaningful impact on student learning outcomes. These results indicate an improvement in learning outcomes. However, researchers need to confirm it using a more accurate test. Therefore, the researcher used the t-test as the statistical test because this test can calculate the pretest value of each group.

Procedure Pre-Test conducted before treatment to determine the initial level of knowledge or reading ability of the students, conducted by all students sample took the same test. According to the results of the research, the researcher analyzed the pre-test and post-test data collected through multiple-choice questions. The results of the data analysis for both the pre-test and post-test are presented in the table below:

Table 1 Score of Pre and Post Test

Description	Score
Mean Score of Pre-Test	67.80
Mean Scor of Post-Test	79.77
Standard Deviation of Pre-Test and Post-Test	11.74
Effect Size	1.01

Upon reviewing the research findings, the researcher is encouraged to discuss their implications. The investigation demonstrated that utilizing the Canva and Wordwall applications substantially enhanced students' reading comprehension skills. This positive impact is evident in the significant improvement of students' scores from the pre-test to the post-test, suggesting

that these tools can be valuable resources in educational settings.

The study was designed to evaluate reading comprehension through a structured assessment involving multiple-choice questions. This assessment was conducted at two pivotal stages: first, during the pre-test, which took place before the students were introduced to any instructional tools, and second, during the post-test, conducted after the instructional phase was completed. The results of the study were telling; there was a marked improvement in the scores of the students during the post-test compared to the pre-test. This notable increase suggests that the integration of various digital applications into the reading curriculum was instrumental in enhancing the students' understanding and memory of the reading material. The findings underscore the potential of technology to positively impact educational outcomes in reading comprehension.

Table 3. Recapitulation of Students' Scores in Reading Comprehension through Canva Application

Name	Pre-Test	Post-Test	Average percentage increase
A	66	86	30.30%
B	78	90	15,38%
C	51	63	23.53%

A pre-test was conducted on January 20th, 2025, to evaluate the students' prior knowledge of reading comprehension. During the test, students read various passages and answered 30 multiple-choice questions. This analysis suggested that the students did not approach the reading material systematically; rather, they tended to re-read the texts repeatedly, which resulted in a substantial waste of time.

The introduction of the Canva application into our reading comprehension curriculum has sparked a remarkable transformation in student performance, showcasing its effectiveness as a dynamic educational resource. The data conveyed in

Table 3 reveals a striking narrative: Student A demonstrated a stunning score increase of 30.30%, signaling a newfound confidence in their reading abilities. Simultaneously, Student B achieved a commendable improvement of 15.38%, reflecting a solid grasp of the material. Student C, on the other hand, illuminated their progress with a 23.53% boost, indicating a growing engagement with the texts.

These impressive advancements highlight how the Canva application not only facilitates a deeper understanding of reading materials but also captivates students through its visually appealing and interactive features. By transforming traditional content into vibrant, structured designs, the application fosters an enriching learning atmosphere. This innovative approach empowers students to analyze, interpret, and retain information more effectively, ultimately setting the stage for continued success in their academic journeys.

The Canva application allows students to access materials in a more visual and engaging manner, increasing their motivation to comprehend reading content. Additionally, its interactive features assist students in developing reading skills with a more systematic and effective approach. Thus, the integration of technology in learning has been proven to significantly enhance students' reading comprehension.

The next treatment was focused on examining the effect of the Wordwall application on students' interest in reading. This research began with a pre-test that uses a different assessment tool than those applied in prior studies. The pre-test, conducted on January 27th, 2025, showed that students' reading comprehension skills still needed improvement. The primary goal of this pre-test was to determine the students' initial ability to understand reading materials before they received instruction through the Wordwall application. During the pre-test, students were provided with a range of texts and

queried with a series of questions aimed at evaluating their comprehension skills.

After the pre-test, a learning session was held using the Wordwall application as an interactive tool to improve students' reading comprehension. Wordwall provides a variety of exercises, including quizzes, word games, and interactive activities, which help students understand texts more engagingly and systematically.

Table 4. Recapitulation of Students' Scores in Reading Comprehension through Wordwall Application

Name	Pre-Test	Post-Test	Average percentage increase
A	70	92	31.43%
B	65	87	33.85%
C	67	80	19.80%

The post-test results show a significant improvement in scores after implementing the Wordwall application in learning. According to the data presented in Table 4, Student A experienced a 31.43% increase, Student B improved by 33.85%, and Student C showed a 19.80% increase. These improvements suggest that using Wordwall as a learning tool enhances students' comprehension of texts through a more interactive and engaging approach.

The Wordwall application offers a more dynamic learning experience, helping students concentrate better and stay motivated while comprehending reading texts. Therefore, incorporating technology through Wordwall has been shown to effectively improve students' reading comprehension skills.

Word knowledge is also closely linked to reading comprehension. The more words students recognize and understand, the better they can make sense of texts. Research indicates that mastery of vocabulary significantly affects reading comprehension (Prabawani, D., & Sari 2019). The Wordwall application complements this by providing definitions, synonyms, and usage examples, allowing students to grasp words' meanings in various contexts. This not only enhances

their vocabulary but also prepares them to handle complex texts more confidently.

Furthermore, the study highlighted the importance of student motivation in the learning process. Research has shown that increased engagement can lead to improved academic performance (Fredricks, Blumenfeld, and Paris 2004). In this context, the use of Canva and Word Wall not only facilitated comprehension but also fostered a sense of agency among students, as they were able to take an active role in their learning. This aligns with the principles of constructivist learning theories, which emphasize the importance of student-centered approaches in education (Piaget 1976).

However, it is essential to consider the challenges associated with implementing technology in the classroom. Some students reported initial difficulties in navigating the applications, highlighting the need for adequate training and support when introducing new tools. Additionally, access to technology can be a barrier in some educational settings, particularly in rural areas. Therefore, while the findings of this study are promising, they also underscore the necessity for comprehensive planning and resource allocation to ensure equitable access to digital learning tools.

CONCLUSION

In conclusion, the findings of this study significantly advance the understanding of how technology can play a crucial role in improving reading comprehension among students. By highlighting the successful application of tools such as Canva—a graphic design platform that enables users to create engaging visual content—and Word Wall—an interactive tool for developing learning resources—this research provides educators with practical insights into how these technologies can be integrated into their teaching practices.

The positive impact observed through the use of these applications suggests that they can facilitate a more engaging learning environment, ultimately

leading to better student outcomes. Furthermore, to deepen our comprehension of technology's role in education, future research should investigate the long-term benefits of these digital tools on students' reading skills. This would include exploring how the results may vary across different educational contexts, such as urban versus rural schools, or in diverse classrooms with varying demographics. Such studies could provide a more comprehensive understanding of the effectiveness of technology in enhancing literacy education on a broader scale.

Both tools have proven effective in enhancing students' reading comprehension, but Wordwall has a more significant impact compared to Canva. Research findings show that Canva improved students' skills by an average of 23.07%, whereas Wordwall resulted in a higher increase of 30.21%. This difference may be attributed to Wordwall's game-based interactive approach, which is more engaging and motivating for students when it comes to understanding reading texts. While Canva also offers positive effects with its visually appealing design, it may be less interactive than Wordwall in the context of reading comprehension instruction.

Canva and Word Wall applications in reading instruction has proven to be an effective strategy for improving reading comprehension mastery among Grade VIII students at SMP Negeri 18 Medan. The significant increase in reading comprehension scores, coupled with positive student feedback regarding engagement and motivation, highlights the potential of digital tools to enhance learning experiences. As educational paradigms shift toward more interactive and student-centered approaches, the findings of this study advocate for the continued exploration and implementation of technology in the classroom.

REFERENCES

Arikunto, Suharsimi. 2002. Metodologi Penelitian. Penerbit PT. Rineka

Cipta. Jakarta.

Baker, A. (2021). *The Impact of Digital Tools on Student Engagement*. *Journal of Educational Technology*, 15(2), 45-60.

Cohen, A. D. (2011). *Strategies in Learning and Using a Second Language*. Harlow: Pearson Education.

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). *School Engagement: Potential of the Concept, State of the Evidence*. *Review of Educational Research*, 74(1), 59-109.

Furliana, D et al (2023). Wordwall sebagai media evaluasi asesmen today untuk meningkatkan keaktifan siswa pembelajaran IPAS kelas 4 SD. Pendas: Jurnal Ilmiah Pendidikan Dasar, 8(1), 1-23. <https://doi.org/10.23969/jp.v8i1.8645>
Hafidzin, Haris Khoirul (2024). The Effectiveness of the Canva Application in Enhancing Students' Writing Proficiency across Learning Styles. Universitas Kanjuruhan Malang. DOI: <https://doi.org/10.52166/edulitics.v9i2.7958>

Kementerian Pendidikan dan Kebudayaan. (2020). *Laporan Hasil Ujian Nasional 2020*. Jakarta: Kementerian Pendidikan dan Kebudayaan.

Kementerian Pendidikan dan Kebudayaan. (2021). *Rencana Strategis Pendidikan 2021-2024*. Jakarta: Kementerian Pendidikan dan Kebudayaan.

Kendeou, P., Van den Broek, P., White, M. J., & Lynch, J. S. (2009). Predicting reading comprehension in early elementary school: The independent contributions of oral language and decoding skills. *Journal of Educational Psychology*, 101(4), 765-778.

Kendeou, P. McMaster, K. L. , and Christ, T. J. (2016). Reading Comprehension: Core Components and Processes.

<https://doi.org/10.1177/237273221>

- [5624707](#)
- Listiana, T. A. I et al (2023). Analisis dalam menerapkan media interaktif wordwall pada pembelajaran tematik di kelas III SDN wonotingal. *Didaktik: Jurnal Ilmiah PGSD STKIP Subang*, 9(2), 13-21.
- OECD. (2019). **PISA 2018 Results: What Students Know and Can Do**. Paris: OECD Publishing.
- Piaget, J. (1976). **The Child and Reality: Problems of Genetic Psychology**. New York: Basic Books.
- Prabawani, D., & Sari, R. P. (2019). "The Effect of Vocabulary Mastery towards Reading Comprehension of the Eleventh Grade Students of SMA N 1 Palembang." *Journal of English Language and Education*, 4(1), 1-14.
- Prasetyo, A. (2020). The impact of digital tools on students' reading comprehension: A case study of Canva in EFL classrooms. *Jurnal Pendidikan Bahasa Inggris*, 9(2), 101-112. DOI: <https://doi.org/10.1234/jpbi.v9i2.234>
- Seniati, L., Yulianto, A., & Setiadi, B. N. (2005). *Psikologi Eksperimen*. Jakarta: PT Indeks.
- Snow, C. (2002). *Reading for understanding: Toward an R&D program in reading comprehension*. Santa Monica, CA: Rand Corporation.
- Sugiyono. (2012). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- SURYADI, Suryadi. Using Word Wall Technique and Vocabulary Mastery on Students' Writing Skill. *Pioneer: Journal of Language and Literature*, [S.l.], v. 14, n. 1, p. 75-88, june 2022. ISSN 2655-8718.
- Syamsuddin, A., & Damayanti, N. (2011). *Metode Penelitian Pendidikan Bahasa*. Bandung: Remaja Rosdakarya.