The Effect of Word Wall Media on The Students Reading Comprehension at Eighth Grade of SMP Negeri 9 Pematangsiantar

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Abstrak

Penelitian ini berupaya untuk mengeksplorasi kemanjuran media dinding kata dalam meningkatkan pemahaman membaca siswa. Penelitian ini menggunakan pendekatan kuantitatif dengan desain eksperimen semu (quasi-experimental design) yang melibatkan dua kelas yang masing-masing berpartisipasi dalam pre-test dan post-test. Peneliti memilih dua kelompok yaitu VIII-8 (kelas eksperimen) yang berjumlah 30 siswa dan VIII-7 (kelas kontrol) yang berjumlah 30 siswa. Dengan menggunakan teknik purposif, sampel dibagi, dengan kelompok eksperimen diajar menggunakan media dinding kata di kelas, sedangkan kelas kontrol menerima pengajaran melalui cara konvensional. Setelah menganalisis data, terlihat bahwa nilai rata-rata siswa di kelas eksperimen meningkat dari 65,33 pada pre-test menjadi 81,83 pada post-test. Sebaliknya, kelas kontrol menunjukkan peningkatan skor rata-rata dari 58,5 menjadi 69,16 dalam rentang waktu yang sama. Hasilnya menunjukkan bahwa t-hitung (3,04) melebihi nilai t-tabel (1,67155) pada df 58. Akibatnya, hipotesis nol (H0) ditolak dan mendukung hipotesis alternatif (Ha), yang menyatakan bahwa penggunaan media dinding kata secara signifikan meningkatkan pemahaman membaca siswa.

Kata kunci: Dinding Kata, Pemahaman Bacaan, Kosakata.

Abstract

This research endeavors to explore the efficacy of word wall media in enhancing students' reading comprehension. Employing quantitative approach with quasi-experimental design, this research involved two classes, each participating in pre-test and post-test. The researchers selected two groups, namely VIII-8 (experimental class) comprising 30 students and VIII-7 (control class) comprising 30 students. By employing purposive technique, the sample were divided, with experimental group being taught using word wall media in the classroom, while control class received instruction through conventional means. Upon analyzing the data, it was observed that the average score of students in the experimental class increased from 65.33 in pre-test to 81.83 in post-test. In contrast, the control class exhibited an average score increase from 58.5 to 69.16 within the same time frame. The result revealed that the t-test (3.04) exceeded the critical t-value (1.67155) at 58 degree of freedom. Consequently, the null hypothesis (H0) was rejected in favor of the alternative hypothesis (Ha), suggesting that the use of word wall media significantly enhances students' reading comprehension.

Keywords : Word Wall, Reading Comprehension, Vocabulary.

INTRODUCTION

Humans utilize language as a tool for communication. Language can be a medium for sharing our ideas and thoughts with others. According to Nishanthi (2018), language we can share our ideas, feelings, views and thoughts with others. Every nation in this world has a distinct national tongue. In the era of globalization, the importance of English cannot be denied and ignored. English is of utmost significance due to its status as a global language, serving as

the primary means of communication for a vast majority of the global populace. In the Indonesian context, English has seamlessly integrated into educational framework, permeating across all academic tiers. In learning students studying English need to be proficient in four key areas: speaking, listening, reading, and writing.

Among the fundamental abilities required to learn English, reading is just as crucial as speaking, writing, and listening. Reading is a pleasurable pastime that helps us learn new things, broaden our knowledge, and acquire information. Healy (in Que and Wakim, 2020), stated that the most important ability for future academic and personal success is reading comprehension. According to the aforementioned claim, reading is the most crucial study activity and instrument for achieving academic achievement since it is crucial for personal growth. According to Surkamp and Vierbrock (2018), reading is a sophisticated and multifaceted process, involving the acquisition of information from written texts through various cognitive processes. Undeniably, reading comprehension holds immense significance for students, as it serves as gateway to unexplored realms of knowledge. Healy (in Que and Wakim, 2020) defines reading comprehension as ability to not only understand written language, but also grasp underlying concepts and derive profound meaning from the text. The ultimate objective of this invaluable skill is to extract the author's intended message, enabling the reader to enrich their education and foster intellectual growth.

There are some problems in reading comprehension. The first is that students are confused about the meaning of words and sentences because of the lack of vocabulary that students have. The second is the inability of students to understand the contents of the text, which makes it difficult for them to find important information both about the topic and the details. The third is the inability of students to determining the main idea and inability to connect ideas in a text. The fourth is inability of students to making inference. The fifth is the lack of concentration of students while reading.

One of the key challenges discussed earlier pertains to vocabulary. In language education, vocabulary holds immense significance. It encompasses the understanding of words and their definitions. A well-developed vocabulary is indispensable for effective communication, enabling individuals to express their thoughts, emotions, and aspirations, and facilitating seamless interaction with others. Notably, vocabulary plays a pivotal role in honing the four essential language skills of listening, speaking, reading, and writing, making it an integral aspect of language acquisition. As Thornbury (2002) suggests, learning vocabulary is of utmost importance, as it forms the foundation for effective communication, with grammar alone being insufficient to convey ideas. Thus, it becomes clear that vocabulary is paramount in language, enabling effective expression. When students possess a rich lexicon, they can be deemed to have achieved mastery in vocabulary. According to Brown (2001), a robust vocabulary represents one of the fundamental pillars of foreign language acquisition, significantly influencing learners' ability to comprehend and read proficiently.

Based on the experiences and observations that researchers conducted during internship teaching program which started from 17 October 2022 – 28 February 2023 of SMP Negeri 9 Pematangsiantar, the researchers found several problems in students' reading comprehension as found in general reading problems. When the learning process began and students were faced with English reading texts, students felt unfamiliar with some words that they did not know the meaning of because students' lack of vocabulary. There were still many students who experienced difficulties in comprehend the text of the reading. Students could not comprehend the text because the lack of vocabulary they had. Lack of vocabulary was one of the problems that made students unable to understand the meaning of words of the text. So that many students did not succeed in answering the questions asked by the teacher regarding questions about the reading text given. This incident often occured and was repeated in almost every process of learning English. Another problems experienced by students was the lack of motivation to study because they felt that learning English was difficult and they had instilled in their minds that learning English was scary and boring. The next problem lied in the background of the students themselves such as their economic situation which could not get additional lessons outside of school such as English courses and also the condition of students born in

broken families so they did not get attention. The last problem lied in their own family and environment where the family did not encourage them to continue studying even at home, and in an environment where they are more engrossed in playing with their friends so that they were influenced not to study seriously. As emphasized by Laursen (2005), stated that peers are a very influential factor in the lives of adolescents.

The media is referred to as learning media if it contains messages or information intended for educational audiences. Learning media is one of the accelerators and devices that teachers provide learners to help them learn quickly, accurately, efficiently, and correctly—there is no verbalism in this process, according to Suhana (2014). To make it easier to select the right media for the learning process, the instructor should be familiar with the different types of media before utilizing them as a learning tool. According to Hamalik (in Arsyad, 2019), learning media can inspire and motivate students to engage in learning activities, create new desires and goals, and even have psychological affects on them. Students will find it easier and more enjoyable to learn with the help of learning media. Learning process can be conducted effectively by using the right learning process in the classroom. The way to make teaching reading effectively as a teacher we should have a good media to make the students interested to the material we will teach in the classroom. Media is an crucial thing in the teaching and learning process. Students need learning media that is more effective and also attracts their attention to learning English.

Based on the problems in this research, the researchers assumed that the problems above were possibly caused by the media used by teachers when teaching reading were not interesting for the students. Teachers were required to be able to choose more appropriate learning media to revive the enthusiasm and attractiveness of students in reading comprehension especially vocabulary mastery by applying learning media that are more centered on student activity. The researchers were interested in using word wall media because this media was recommended for students' vocabulary mastery in reading comprehension skills. A captivating and visually striking display of words showcased prominently on walls or bulletin boards is known as word wall. As described by Cronsberry (2004), word wall is an assortment of chosen words strategically exhibited on classroom walls, bulletin boards, chalkboards, or whiteboards. This ingenious creation serves as an interactive instrument, empowering students and individuals alike to augment their mastery of vocabulary.

Based on the background mentioned previously and from the phenomenon above, the researchers were interested in selecting a research topic entitled "The Effect of Word Wall Media On The Students' Reading Comprehension At The Grade Eight of SMP Negeri 9 Pematangsiantar".

METHOD

Research Design

This research employed quantitative research and quasi-experimental design to explore the potential impact of Word Wall media on the reading comprehension of eighth-grade students at SMP Negeri 9 Pematangsiantar. The researchers applied a purposive sampling technique to carefully select the sample, which enabled them to establish a strong research design. Two intact groups were involved in this research, with each group receivin different treatment. The experimental group was exposed to vocabulary learning through Word Wall media, while the control group followed traditional methods of vocabulary instruction.

Population and Sample

The research focused on entire eighth-grade students of SMP Negeri 9 Pematangsiantar during the academic year 2023/2024, which comprised of 9 classes. Eight of these classes had an average of 30 students, while one class had 29 students. In total, there were 269 students in the eighth grade. To ensure a representative sample, the purposive sampling technique was employed, resulting in the selection of two classes: VIII-8 with 30 students for the experimental

group and VIII-7 with 30 students for the control group at SMP Negeri 9 Pematangsiantar. Therefore, the total sample size for this research were 60 students.

Research Instrument

In this research, an instrument of assessment was employed - multiple-choice test, comprising twenty questions. This research incorporated two distinct variants of the test: the pretest, artfully designed to ascertain the linguistic prowess of students prior to any intervention, and the post-test, adroitly devised to assess the students' expanded vocabulary subsequent to the aforementioned intervention.

Technique of Data Collection

The data were collected from a comprehensive test that involved a pre-test, treatment, and post-test. Before receiving any treatment, all participants underwent a pre-test, which was conducted by researchers in both experimental and control classes. The experimental class received special treatment known as Word Wall, while the control class continued with the traditional teaching method employed by the English teacher at the school. After the treatment phase, a post-test consisting of twenty multiple-choice questions was administered during the most recent meeting. The purpose of this post-test was to determine the average scores of both the experimental and control groups, allowing researchers to analyze the outcomes following the conclusion of the treatment.

RESULT AND DISCUSSION

Data Analysis

The research relied upon the vocabulary scores as its foundation, with the data being collected through the administration of designed test. The participants were eighth grade students from SMP Negeri 9 Pematangsiantar, with a sample size of 60 individuals. The experimental class, designated as grade VIII-8, utilized the innovative Word Wall media, while the control class, labeled as class VIII-7, followed the conventional teaching methods employed by the English subject teacher. The data were gathered through a set of 20 multiple choice questions.

Research Result

In light of the data analysis's conclusions, the researchers found that conducting Word Wall had significant effect to the reading comprehension especially vocabulary synonym and antonym adjectives on eighth grade students' of SMP Negeri 9 Pematangsiantar. Some of the findings were, as follows:

- 1. The results revealed a significant improvement in students' reading comprehension scores when taught using the Word Wall as a teaching tool, compared to conventional methods. Notably, the experimental class displayed a pre-test mean of 65.33, surpassing the control class's mean of 58.5. Following the intervention, the experimental class achieved an impressive post-test mean of 81.83, while the control class reached 69.16. The substantial difference is further exemplified by the quadrate score of the experimental class post-test value, which reached 205.000, compared to the control class's score of 162.275. Additionally, the standard deviation variable of the experimental class was 2.957,5, while the control class had a standard deviation of 404,17. These findings demonstrate that students in experimental class outperformed their counterparts in control group, highlighting the effectiveness of the Word Wall as a pedagogical tool.
- 2. The statistical analysis conducted at a level of significance of 0.05 revealed that the critical value from the t-table was 1.67155, with 58 degree of freedom. Remarkably, the obtained t-test value of 3.04 surpassed the critical value, leading to the acceptance of the Alternative hypothesis (Ha). This signifies that implementing Word Wall, particularly for vocabulary synonym and antonym adjectives, among eighth-grade students at SMP Negeri 9 Pematangsiantar had a substantial positive impact on their test scores. Consequently, the alternative hypothesis (Ha) was validated, while the null hypothesis (H0) was rejected.

Descriptive Statistics

Table 1. Score of Pre-Test and Post-Test in the Experimental Class										
	Name	Pre-Test		Post-Test		_				
No.		Correct	Score (Xa)	Correct	Score (Ya)	X²	Y ²	da	da²	
1.	ARK	15	75	16	80	5625	6400	5	25	
2.	ASM	15	75	17	85	5625	7225	10	100	
3.	AF	13	65	18	90	4225	8100	25	625	
4.	AOL	7	35	11	55	1225	3025	20	400	
5.	ANA	15	75	16	80	5625	6400	5	25	
6.	CIG	17	85	19	95	7225	9025	10	100	
7.	CPK	10	50	14	70	2500	4900	20	400	
8.	DF	5	25	15	75	625	5625	50	2500	
9.	D	18	90	19	95	8100	9025	5	25	
10.	FA	7	35	11	55	1225	3025	20	400	
11.	HJS	16	80	17	85	6400	7225	5	25	
12.	HSZ	8	40	12	60	1600	3600	20	400	
13.	JS	9	45	12	60	2025	3600	15	225	
14.	KAP	15	75	19	95	5625	9025	20	400	
15.	LP	13	65	17	85	4225	7225	20	400	
16.	LAA	15	75	19	95	5625	9025	20	400	
17.	MMS	16	80	17	85	6400	7225	5	25	
18.	MA	17	85	19	95	7225	9025	10	100	
19.	MK	17	85	19	95	7225	9025	10	100	
20.	NM	18	90	19	95	8100	9025	5	25	
21.	NH	9	45	13	65	2025	3600	20	400	
22.	RAS	11	55	16	80	3025	6400	25	625	
23.	RA	15	75	17	85	5625	7225	10	100	
24.	SPJ	13	65	17	85	4225	7225	20	400	
25.	SMS	15	75	19	95	5625	9025	20	400	
26.	SKP	17	85	18	90	7225	8100	5	25	
27.	TD	10	50	15	75	2500	5625	25	625	
28.	TOS	16	80	19	95	6400	9025	15	225	
29.	VQ	8	40	15	75	1600	5625	35	1225	
30.	ZML	12	60	18	80	3600	6400	20	400	
Total (Σ)		∑Xa =		∑Ya =			∑Y²= 205000	∑da =495		

Table 2. Score of Pre-Test and Post-Test in the Control Class

		Pre-Test		Post-Test					
No.	Name	Correct	Score (Xb)	Correct	Score (Yb)	X ²	Y ²	db	db²
1.	AG	11	55	12	60	3025	3600	5	25
2.	AW	12	60	14	70	3600	4900	10	100
3.	BA	12	60	15	75	3600	5625	15	225

4.	BPU	13	65	14	70	4225	4900	5	25
5.	CS	11	55	14	70	3025	4900	15	225
6.	DS	15	75	17	85	5625	7225	10	100
7.	F	11	55	12	60	3025	3600	5	25
8.	FA	11	55	14	70	3025	4900	15	225
9.	FH	11	55	13	65	3025	4225	15	225
10.	MKHP	11	55	12	60	3025	3600	5	25
11.	MRA	11	55	12	60	3025	3600	5	25
12.	MSI	12	60	15	75	3600	5625	15	225
13.	MSY	12	60	15	75	3600	5625	15	225
14.	NUYS	13	65	16	80	4225	3600	15	225
15.	NSP	10	50	13	65	2500	4225	15	225
16.	OJS	10	50	13	65	2500	4225	15	225
17.	PAM	12	60	14	70	3600	4900	10	100
18.	PIS	12	60	15	75	3600	5625	15	225
19.	RK	11	55	13	65	3025	4225	10	100
20.	SGS	10	50	12	60	2500	3600	10	100
21.	SAS	12	60	14	70	3600	94900	10	100
22.	SC	10	50	12	60	2500	3600	10	100
23.	VAA	12	50	15	75	3600	5625	15	225
24.	WRT	13	65	15	75	4225	5625	10	100
25.	WAA	16	75	17	85	5625	7225	10	100
26.	YR	12	60	14	70	3600	4900	10	100
27.	YP	10	50	12	60	2500	3600	10	100
28.	ΥT	11	55	13	65	3025	4225	10	100
29.	ZA	12	60	13	65	3600	4225	5	25
30.	ZN	13	65	15	75	4225	5625	10	100
Total (∑)	Na = 30	∑Xb = 1755		∑Yb = 2075		∑X² <i>=</i> 103875	∑Y² <i>=</i> 162275	∑db =325	∑db² =3925

The data above was recalculated by using the t_{test} formula. Compared to the control class, the experimental class's mean and standard deviation were higher. Since the two classes (Na and Nb) added up to the same amount, calculating the two classes using the t_{test} formula was simple. The degrees of freedom *(df)* formula had to be used by the researchers to determine the value of the t_{table} to be compared with the t_{test} before the t_{test} could be performed.

Therefore, the result of *df* is: Na + Nb - 2 = 30 + 30 - 2 = 60 - 2 = 58

Based on the calculated results, it is evident that the t-test value exceeds the critical t-value at a significance level of α = 0.05, with 3.04 being greater than 1.67155. Consequently, researchers can affirm the acceptance of the Alternative Hypothesis (Ha) while rejecting the Null Hypothesis (H0).

Discussion

Upon completion of the research process, encompassing data analysis and hypothesis testing, an enlightening discovery emerged that offers a compelling solution to the research conundrum. The primary aim of this research was to unveil profound impact of Word Wall on

bolstering the eighth-grade students' reading comprehension, particularly in realm of vocabulary enrichment encompassing synonyms and antonyms. Employing a quasi-experimental design and quantitative methodology, the researchers administered pre- and post-tests to both experimental and control groups, processing and gathering the invaluable data.

The sum of the students' score in reading comprehension especially vocabulary in pretest from 30 students in experimental class was 1960 ($\Sigma X = 1960$) with the mean score was 65.33 ($\Sigma X = 65.33$). Meanwhile, the total score of students reading comprehension especially vocabulary in post-test from 30 students in experimental class was 2455 ($\Sigma Y = 2455$) with the mean score was 81.33 ($\Sigma Y = 81.33$). The total score of students reading comprehension especially vocabulary in pre-test from 30 students in control class was 1755 ($\Sigma X = 1755$) with the mean score was 58.5 ($\Sigma X = 58.5$). Meanwhile, the total score of students reading comprehension especially vocabulary in posttest from 30 students in control class was 2075 ($\Sigma Y = 2075$) with the mean score was 69.16 (($\Sigma Y = 69.16$).

Following completion of the data analysis, the researchers revealed that the t_{test} value was 3.04 and that, determined by degrees of freedom *(df)* at the significant level of 0.05, the t_{table} value was 1.67155. The researchers then put the hypothesis Ha and the hypothesis H0 to the test using the criterion that Ha had to be accepted and H0 had to be rejected if Word Wall significantly affected the students' reading comprehension. The computation results indicated that the value of ttest > t_{table} 3.04 was greater than 1.67155. Consequently, Ha was accepted while H0 was rejected as the research's findings.

CONCLUSION

The findings of this research suggested that the use of Word Wall Media effectively improves students' reading comprehension, particularly in the areas of vocabulary synonym and antonym adjectives. This was evidenced by the higher scores achieved by students in experimental class compared to those in control class. Through analysis using hypothesis testing, it can be concluded that the results obtained were statistically significant (ttest > ttable). As a result, the null hypothesis is rejected, and the alternative hypothesis is accepted. In other words, the utilization of Word Wall has a significant impact on students' ability to comprehend and utilize vocabulary, specifically in the areas of synonyms and antonyms..

Hence, it is evident that the utilization of Word Wall as an educational tool holds immense potential in enhancing the reading comprehension skills, particularly in the domain of vocabulary synonym and antonym adjectives, among eighth grade students at SMP Negeri 9 Pematangsiantar.

REFERENCES

Ainy, F. The effectiveness of word wall strategy on students' vocabulary mastery (A Quasi Experimental Study in the Seventh Grade of Mts Manaratul Islam Jakarta in the Academic Year 2014/2015) (Bachelor's thesis, Fakultas Ilmu Tarbiyah dan Keguruan (FITK) UIN Syarif Hidayatullah Jakarta).

Arsyad, A. (2019). Media Pembelajaran (21st ed.). Jakarta: PT Raja Grafindo Persada.

Brown, H. D. (2001). Teaching by Principles: An Interactive Approach to Language Pedagogy. New York: Longman.

Callella-Jones, T., & Samoiloff, S. (2001). *Making your word wall more interactive*. Creative Teaching Press.

Cronsberry, J. (2004). Word Walls: A Support for Literacy in Secondary School Classes. Curriculum Services Canada.

Grabe, W. (2008). *Reading in a second language: Moving from theory to practice*. Cambridge university press.

Horowitz, M. (2014). Reading Comprehension Assisting Children with Learning Difficulties. London: Springer Science.

Jackson, J., & Narvaez, R. (2013). Interactive word walls. Science and Children, 51(1), 42.

Khoiriyah. (2010). Reading 1. Kediri: English Department Nusantara PGRI Kediri University Press.

Laursen, B. (2005). Dyadic and group perspectives on close relationships. International Journal of Behavioral Development, 29(2), 97-100. https://doi.org/10.1080/01650250444000450

Mikulecky, B. S. (2011). A Short Course In Teaching Reading. USA: Pearson Education.

- Nishanthi, R. (2018). The importance of learning English in today world. *International Journal of Trend in Scientific Research and Development*, *3*(1), 871-874.
- Nunan, David. (2003). Practical English Language Teaching. New York, USA: McGraw-Hill Companies, Inc.
- PRATIWI, J. A. (2023). THE EFFECT OF USING WORD WALL STRATEGY TOWARD STUDENTS'VOCABULARY MASTERY AT THE SEVENTH GRADE OF MTS AL HAMIDIYAH PANGKALAN BUNUT (Thesis, UNIVERSITAS ISLAM NEGERI SULTAN SYARIF KASIM RIAU).
- Que, S. R., & Wakim, V. A. (2020). Using RAP (Read, Ask, Put) Strategy to Improve Students' Ability in Reading Comprehension at Class VIII2 of SMP Negeri 2 Dobo. *MATAI:* International Journal of Language Education, 1(1), 23-38.
- Ramadhan, K., & Zaharani, H. (2021). THE EFFECT OF WORD WALL MEDIA ON STUDENTS'VOCABULARY MASTERY. Jurnal Mahasiswa Fakultas Ilmu Sosial dan Kependidikan, 2(1), 31-40.
- Richards, J. C., & Renandya, W. A. (Eds.). (2002). *Methodology in language teaching: An anthology of current practice*. Cambridge university press.
- Suhana, C. (2014). Konsep Strategi Pembelajaran. Bandung: Refika Aditama.
- Surkamp, C., & Viebrock, B. (2018). *Teaching English as a Foreign Language*. Stuttgart: JB Metzler.
- Thornbury, S. (2002). How to Teach Vocabulary. Essex: Longman.
- Wallace, M. L. (2017). Vocabulary Building and Word Study. Mc Graw-Hill Book Company.