The Effect of Using Word Wall To Improve Students' Vocabulary At SMP Kartika 1 and 2 Medan

Frans Danu Sembiring[1], Dolli Rotua Sinaga[2], Reni Rosianna Lumbangaol[3]
[1,2]Universitas Prima Indonesia
[3]Universitas Potensi Utama, Indonesia
E-mail: dollirotuasinaga@unprimdn.ac.id

Article Info	Abstract
	This study examines the effectiveness of Word wall media in enhancing vocabulary acquisition among seventh-grade students at SMP Kartika 1&2 Medan through Classroom Action Research (CAR) methodology. The implementation followed a three-phase cyclical process: preliminary cycle, Cycle I, and Cycle II, involving Class VII-2 students as research participants. Quantitative data collected through vocabulary assessments administered during each research phase demonstrated progressive improvement, evidenced by rising mean scores and statistically significant results ($p < 0.05$). The findings conclusively establish Word Wall as an effective instructional tool for vocabulary development. This research proposes the adoption of this strategy as an innovative and engaging alternative for English language instruction.

Artikel Info	Abstrak
	Penelitian ini mengkaji efektivitas media Wordwall dalam meningkatkan pemerolehan kosakata di kalangan siswa kelas tujuh di SMP Kartika 1&2 Medan melalui metodologi Classroom Action Research (CAR). Implementasi mengikuti proses siklus tiga tahap: siklus pendahuluan, Siklus I, dan Siklus II, yang melibatkan siswa Kelas VII-2 sebagai peserta penelitian. Data kuantitatif yang dikumpulkan melalui penilaian kosakata yang diberikan selama setiap fase penelitian menunjukkan peningkatan progresif, dibuktikan dengan peningkatan skor rata-rata dan hasil yang signifikan secara statistik ($p < 0,05$). Temuan ini secara meyakinkan menetapkan Word Wall sebagai alat instruksional yang efektif untuk pengembangan kosakata. Penelitian ini mengusulkan adopsi strategi ini sebagai alternatif yang inovatif dan menarik untuk pengajaran bahasa Inggris.

I. INTRODUCTION

Language serves as a fundamental medium of interaction for all societies globally, playing a vital role in various aspects of daily life, from interpersonal communication to academic research and technological advancement. Given its ubiquitous presence in human activities, language is deeply intertwined with societal functioning. Currently, around 7,000 distinct languages exist worldwide, yet English has emerged as the predominant lingua franca (Park, 2023). This widespread adoption reinforces its status as the primary language for international discourse—a linguistic bridge facilitating communication across diverse cultures and nations. Consequently, proficiency in English has become essential, particularly for speakers of non-English backgrounds, necessitating effective acquisition strategies to participate fully in global exchanges.

Indonesia has integrated English as a core component of its national curriculum, emphasizing its significance in global competitiveness. Alongside Bahasa Indonesia,

English is a compulsory subject taught from early childhood education through tertiary levels, equipping learners with essential linguistic competencies for international engagement. Proficiency in English is measured through three macro-skills: oral communication (speaking), auditory comprehension (listening), and written expression (writing) (Mapalad & Bautista, 2021). Foundational to these macro-skills are micro-skills—grammatical accuracy, lexical knowledge, phonetic articulation, and orthographic precision (Supina, 2018). A hierarchical mastery of both skill sets facilitates more effective language acquisition, enabling learners to navigate English with greater confidence and capability.

The analysis of English language competencies reveals four fundamental skills crucial for proficiency: reading comprehension, auditory processing, written expression, and oral communication. These interconnected abilities present significant challenges when learners lack adequate lexical knowledge. A robust vocabulary serves as the foundation for developing these skills, enabling students to accurately interpret

written material, understand spoken language, produce coherent written work, and engage in meaningful verbal exchanges. Insufficient word knowledge hinders text comprehension, distorts auditory perception, impedes writing accuracy, and restricts conversational fluency. As emphasized by Sujadi and Wulandari (2021), lexical mastery forms the cornerstone of second language acquisition, providing learners with the necessary tools for both receptive and productive language use across various communicative contexts.

Lexical knowledge plays a pivotal role in fostering students' confidence across various English language domains, including verbal communication, text comprehension, and written expression. Classroom observations, however, reveal a prevalent challenge among learners in achieving English proficiency. This became particularly evident during a simple self-introduction activity, where students could only respond in basic question-answer patterns without demonstrating the ability to elaborate or personalize their responses. These limitations appear to originate from insufficient vocabulary acquisition, which subsequently affects learners' self-assurance in language production. Juliana and Fariska (2021) corroborate this observation, emphasizing that vocabulary serves as the fundamental building block for effective self-expression in both oral and written forms. Recognizing this correlation between lexical limitations and language difficulties, the current study proposes the implementation of Word Wall as an instructional tool to enrich vocabulary acquisition among seventh-grade learners at Kartika 1 & 2 School in Medan.

Drawing upon the contextual framework established in the preceding discussion, this study seeks to investigate the effectiveness of Word Wall as an instructional tool in enhancing vocabulary acquisition among seventh-grade learners at SMP Kartika 1 & 2 Medan and examines the pedagogical mechanisms through which Word Wall instructional media facilitates vocabulary development among seventh-grade learners at SMP Kartika 1 & 2 Medan. Specifically, the research explores the cognitive and interactive processes by which this visual-aid strategy contributes to lexical acquisition, retention, and application in English language learning contexts.

This research will be conducted in grade 7 at SMP Kartika 1 & 2 Medan. There are 65 students for the total students in grade 7 as the research population and sample. Then, this research will focus on the influence of Wordwall in improving the vocabulary of grade VII students. The research will use PTK (Classroom Action Research) as a research method. This research will use 3 instruments, such as tests, questionnaires, and interviews (students and teachers) to obtain data on vocabulary improvement in students of SMP Kartika 1 & 2 Medan.

II. METHOD

This study utilizes Classroom Action Research (CAR) as its methodological framework, an educator-driven approach designed to identify and resolve practical instructional issues while enhancing pedagogical effectiveness through iterative refinement (Nurulanningsih, 2023). As a research paradigm, CAR offers a structured mechanism for ongoing learner evaluation (Pelton, 2010) and enables rigorous examination of educational interventions within authentic classroom environments (Aziz & Gantara, 2021).

The research setting is SMP Kartika 1 & 2 Medan, specifically the 7th grade, which is divided into three sections (7-1, 7-2, and 7-3) with a total enrollment of 65 students. While the entire 7th grade could be considered the population of interest, class 7-1 was selected as the sample for this classroom action research project. Therefore, the 22 students in class 7-1 will be the research subjects.

This study will employ a three-stage research design consisting of an initial pre-cycle assessment, followed by two iterative implementation cycles. The chronological framework for these investigative phases is systematically organized as follows:

No	Cycle	Meeting (Duration)	Activity
1	Pre-Cycle	Meeting 1 (± 90 minutes)	Learning Process for Pre-Cycle
		Meeting 2 (± 90 minutes)	Test 1
2	Cycle 1	Meeting 1 (± 90 minutes)	Collecting Data Research 1 (Action)
		Meeting 2 (± 90 minutes	Test 2 and Reflection
3	Cycle 2	Meeting 1 (± 90 minutes)	Collecting Data Research 2 (Action)
		Meeting 2 (± 90 minutes	Test 3 and Reflection

The meetings for each cycle will take place on separate days. Consequently, the pre-cycle, Cycle 1, and Cycle 2 are expected to be completed within four weeks in the same month.

The focus of this phase is for the researcher to identify any issues arising during instruction in

class 7-1. Subsequently, the researcher will collaborate with the mentor teacher to determine suitable methods for resolving these identified issues.

During this preparatory stage, the investigator will design assessment tools to systematically examine the research problems. The principal instrument for data acquisition will be a standardized evaluation, implemented through multiple measurement points: an initial pre-test, interim post-tests after each instructional cycle, and a comprehensive final assessment following the completion of all phases (preliminary, first cycle, and second cycle).

At action planning, the researcher will begin utilizing all of the data collection instruments that were developed in the previous phase. The data collection instrument to be used in this study is a test.

Plan activation focuses on implementing the Wordwall-based intervention and collecting data to answer the research question regarding its impact on English vocabulary development. The researcher will use the previously developed test to assess vocabulary gains in class 7-1 students.

Outcome assessment involves the processing and analysis of all data gathered from the initial identification phase to the conclusion of the implementation phase. These findings will serve as the basis for concluding the research question.

This research employs a 15-item multiple-choice vocabulary test as its data collection instrument. The test will be administered twice: a pre-test before instruction and a post-test after instruction. Each administration will be limited to one 40-minute class period. The assessment scoring methodology will calculate final results by multiplying the total count of accurate answers by the predetermined point value assigned to each question.

This study will utilize data derived from tests administered during the intervention phase. Data will be collected based on the results of the pretest and posttest conducted throughout the learning process. The steps involved in the data collection process undertaken by the researcher are as follows: first, the researcher will administer a pretest to both the experimental and control groups. Second, the researcher will implement the instructional media, Wordwall, exclusively to the experimental group. The pretest results will be used to assess the initial vocabulary level of each student before the implementation of Word Wall, while the posttest results will be used to measure each student's

vocabulary level after the implementation of Word Wall.

Based on these test results, the researcher will conclude the impact of Word Wall on students' vocabulary enhancement. The researcher will employ a scoring method for multiple-choice tests, which involves calculating the total points obtained by each student, dividing it by the total possible points, and then multiplying the result by 100%. This approach aligns with the method proposed by Dameis & Candra (as cited in Merta & Sueca, 2024), who suggest that determining a student's learning outcome can be achieved using the following formula:

$$P = \frac{Xi}{Xt} \times 100\%$$

Where,
P = Percentage
Xi = Total Score
Xt = Maximum Score

the researcher will also analyze the data using a qualitative predicate scale, as presented below:

Score	Point	Predicate
86 - 100	13 - 15	A (Excellent)
72 - 80	11 - 12	B (Good)
60 - 67	9 - 10	C (Enough)
47 - 53	7 - 8	D (Poor)
0 - 40	0 - 6	E (Very Poor)

The obtained test scores will also be evaluated against the school's established Kriteria Ketuntasan Minimal (KKM). Subsequently, the researcher will analyze the percentage of students demonstrating improvement based on their test scores.

III. RESULTS AND DISCUSSION

This research employs the Classroom Action Research (CAR) approach, utilizing Word Wall media across three phases: pre-cycle, Cycle 1, and Cycle 2. The pre-cycle is an initial assessment to pinpoint existing learning challenges before implementing Word Wall interventions. In contrast, Cycles 1 and 2 focus on implementing Word Wall-based learning strategies. Each phase consists of two 40-minute sessions. The subsequent sections detail the researcher's observations and assessment outcomes from all three phases.

During the initial phase, the investigator performed a diagnostic assessment by delivering instructions without utilizing the Wordwall technique. Classroom observations were conducted between 10:25 and 11:45 WIB (Western Indonesian Time) in Grade VII-2. This preliminary stage comprised three distinct

components: preparatory arrangements, instructional delivery, and final evaluation.

1. Planning

In the preparatory stage, the educator collaborated with the subject instructor to establish the instructional focus for the initial assessment phase. Subsequently, the educator designed comprehensive teaching materials, including a structured instructional blueprint and complementary digital slides aligned with the selected theme. Furthermore, assessment tools were developed, consisting of a 10-question multiple-choice evaluation instrument and post-instruction self-assessment forms for learner feedback.

2. Implementation

The instructional session was delivered through conventional lecture-based pedagogy. Commencing with a morning salutation, collective prayer, and student attendance verification, the educator proceeded to articulate the lesson's intended learning outcomes. The core instructional segment focused on fundamental transportation concepts, featuring dynamic question-and-answer exchanges between the instructor and learners. Upon completion of content delivery, a summative assessment was administered to evaluate student comprehension.

3. Conclusion

During the assessment phase, participants completed a 10-item multiple-choice evaluation instrument, with each correct response valued at 10 points. The examinees were allocated a 20-minute timeframe to finalize their answers. Following the assessment period, the instructor concluded the instructional session by previewing the subsequent lesson's subject matter and necessary preparation materials.

4. Data Analysis

Post-instruction analysis revealed a significant learning obstacle among students in grasping the English lesson content: insufficient vocabulary knowledge. This issue became apparent when the educator employed English-based PowerPoint slides and delivered instruction primarily in English. Although this teaching strategy was designed to enhance learners' English immersion, evaluation of both test performance and student feedback from the first session indicated that Class VII-2 pupils lacked sufficient lexical competence to fully comprehend the material.

Following the established Minimum Mastery Standard (KKM) of 70 points, successful candidates were those attaining scores of 70 or above, while scores below this threshold indicated unsatisfactory performance. Analysis shows that just 8 learners (40%) met the passing criteria, contrasted with 12 (60%) who fell short. Expressed proportionally, only 35% of participants reached the 70-point benchmark, indicating that a substantial majority (65%) have not yet attained adequate English language competency. During this implementation stage, the Word Wall technique was utilized by the educator to enhance lexical knowledge acquisition for seventh-grade class 2 pupils. Two evaluation tools were incorporated in this cycle: a terminology examination and learner self-assessment questionnaires. The instructional content remained consistent with the prior session's focus on "Private and Public Transportation Systems."

1. Planning

In the preparatory phase, the educator maintained instructional continuity by retaining the "Private and Public Transportation" theme from previous lessons. After finalizing this thematic focus, various pedagogical resources were developed, including an in-depth lesson strategy and corresponding digital slides tailored to the subject. The preparation also encompassed constructing a 10-question multiple-choice evaluation instrument to measure understanding. Post-lesson self-evaluation sheets were similarly prepared for student use. A critical component of this stage involved methodically structuring the Wordwall integration framework, with specific implementation protocols designed for educational deployment.

2. Implementation

The instructional period began with conventional classroom procedures, initiating with a verbal morning salutation, collective prayer, and student attendance confirmation. To foster active participation, the instructor delivered an inspiring introduction related to the English subject matter. The educator then explicitly presented the lesson structure and defined precise educational targets for the initial learning encounter. Upon completing these preliminary arrangements, learners were instructed to organize themselves into

their designated teams, enabling the teacher to execute the scheduled Word Wall exercises methodically following the predetermined guidelines.

3. Conclusion

During the concluding phase, students undertook a 20-minute concept mastery assessment covering core lesson material. After the examination, participants engaged in structured reflective writing exercises aimed at capturing their subjective experiences with the Word Wall instructional approach. This comprehensive evaluation framework simultaneously addressed two critical dimensions: (1) objective measurement of lexical knowledge development via controlled testing parameters, and (2) subjective appraisal of pedagogical efficacy through systematic learner metacognition analysis.

4. Data Analysis

The vocabulary assessment was strategically crafted to serve two key educational purposes: (1) broadening learners' word knowledge base, and (2) enhancing their capacity to articulate ideas with varied terminology. Rather than focusing solely on memorization, this evaluation method emphasized advanced thinking skills by challenging students to apply vocabulary in meaningful contexts to express conceptual mastery. The test consisted of 10 purposefully designed multiple-choice questions that assessed both precise word meanings and practical application in sentences.

The evaluation of post-intervention assessment data revealed that 80% of learners (16 students) met or exceeded the established Minimum Mastery Standard (KKM) of 70 points, reflecting substantial gains in lexical understanding. Conversely, the remaining 20% (4 students) performed below this benchmark, suggesting these individuals would benefit from targeted remedial instruction. Through comparative analysis of pre- and post-intervention results from Cycle 1 (featuring Wordwall integration), the investigation identified marked progress in academic achievement, with quantitative evidence showing pronounced improvement across the participant group.
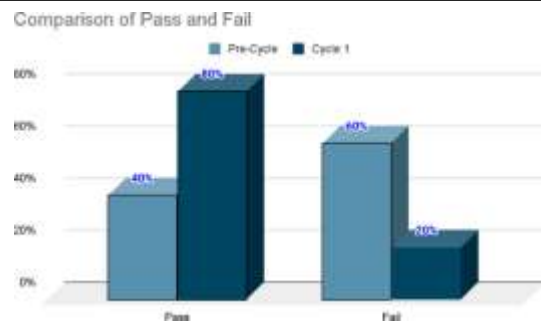
The findings reveal that incorporating Word Wall games led to marked enhancements in students' lexical knowledge. Initial assessments indicated merely 35% of learners met proficiency standards, whereas post-intervention evaluations demonstrated an impressive increase to 80% mastery - a substantial 45% growth that validates the technique's effectiveness. The dynamic, participatory characteristics of this digital tool facilitated superior vocabulary retention when contrasted with conventional instructional approaches.

Despite these positive outcomes, a minority of learners (20%) did not achieve the passing threshold, indicating potential benefits from tailored instructional adjustments or individualized reinforcement. This data substantiates that interactive, gamified pedagogy can significantly enhance second language development. Moving forward, educators should maintain Word Wall implementation while incorporating differentiated support strategies for students requiring additional assistance. The approach demonstrated notable success in transforming vocabulary instruction into a dynamic and engaging process for the majority of participants.

During the subsequent implementation phase, the investigator reapplied the identical Word Wall technique employed in the initial cycle, aiming to optimize and enhance lexical acquisition results. The research protocol continued utilizing the established evaluation instruments: standardized assessments and learner reflection documents.

1. Planning

During the preparatory phase, the educator selected instructional content by continuing the previously established theme of "Travel & Direction." Following this topic selection, development of teaching materials commenced, including the creation of a detailed lesson strategy and corresponding digital presentation. A 10-item multiple-choice exercise sheet was subsequently designed to evaluate comprehension.

Furthermore, post-instruction self-evaluation forms were prepared for distribution to participants upon lesson completion.

2. Implementation

The instructional session commenced with standard classroom procedures, beginning with a morning greeting, followed by a collective prayer and attendance verification. The instructor then delivered motivational remarks to stimulate engagement with the English lesson content. Subsequently, the educator outlined the session's agenda and clearly stated the learning targets for this second instructional encounter. Each learner received individualized feedback through the distribution of their previous assessment results. The teacher then directed students to reassemble in their pre-established groups before systematically initiating all components of the planned Word Wall instructional sequence.

3. Conclusion

During the second implementation cycle, participants completed a 20-minute assessment covering the instructional material. Following this evaluation, the educator facilitated a reflective discussion to analyze the educational experience, with special emphasis on examining the effectiveness of the Word Wall technique throughout the lesson.

4. Data Analysis

The assessment administered to students was structured to achieve two key objectives: broadening their lexical knowledge and promoting the use of varied terminology in context. This approach encouraged learners to progress beyond simple word recognition and instead develop their ability to express ideas with greater linguistic diversity. The evaluation instrument consisted of 10 carefully crafted multiple-choice items. Below are the findings from the Cycle II implementation assessment.

The tabulated results indicate that all 20 participants achieved scores exceeding the 70-point threshold, with no students falling below this benchmark. This demonstrates complete class mastery, as every learner met or surpassed the established Minimum Mastery Standard (KKM) of 70. When converted to percentages, the data reveals a perfect 100% success rate in achieving the KKM requirements. Furthermore,

the investigator conducted a comparative analysis between these outcomes and the performance metrics from Cycle I. The subsequent section presents this comparative evaluation, highlighting the progression in pass rates across both instructional cycles.
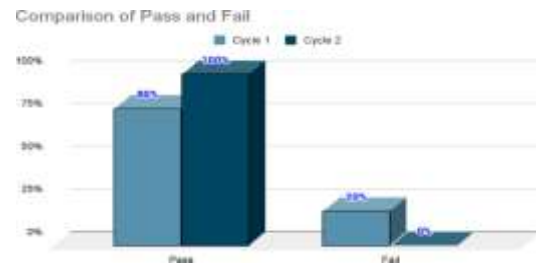
A comparative analysis of student performance between the two cycles revealed substantial improvement in achievement rates. The empirical data illustrated in the graphical representation clearly demonstrates that the Word Wall technique significantly enhanced learners' English lexical mastery, as evidenced by the notable progression in test scores.

IV. CONCLUSION AND SUGGESTION
A. Conclusion

The empirical findings outlined in the preceding analysis chapter demonstrate substantial progress in lexical competence among Grade VII-2 learners at SMP Kartika 1-2 following the implementation of the Word Wall technique. An analysis of learning outcomes across the three implementation stages demonstrates significant progress:

Initial baseline measurements using conventional lecture methods showed only 40% of participants reaching the Minimum Mastery Standard (KKM), while subsequent implementation of Word Wall interventions yielded progressive enhancement - 80% attainment in Cycle 1, culminating in universal achievement (100%) in Cycle 2. This consistent upward trajectory in learning outcomes provides compelling evidence for the pedagogical efficacy of Word Wall strategies in facilitating vocabulary development.

The study further reveals that the efficacy of the Word Wall approach in enhancing lexical acquisition was substantially contingent upon the instructor's systematic preparation of topic-relevant instructional materials. This thorough organization of resources enabled comprehensive student participation in the designed Word Wall exercises as initially planned by the

investigator. These findings consequently demonstrate that the successful application of this methodology requires meticulous adherence to well-defined implementation guidelines.

B. Suggestion

The discussion related to this research is still very limited and requires a lot of input, suggestions for future authors are to study it more deeply and comprehensively about The Effect of Using Word Wall To Improve Students' Vocabulary At SMP Kartika 1and 2 Medan.

REFERENCES

Aziz, A., & Gantara, P. (2021). Penggunaan Media Wordwall Dwi Bahasa Untuk Meningkatkan Kemampuan Bahasa Inggris Peserta Didik di SMPN Satap 3 Hanau Desa Paring Raya. Jurnal Studi Guru dan Pembelajaran, Vol. 4, No. 3, 627 - 634.

Mapalad, E. C., & Bautista, A. M. (Volume 4, 2022). Macro Skills in English of Grade 11 Senior High School in Balayan, Batangas: A Guided Learning Activity. International Journal of Multidisciplinary Research, 109-123.

Merta, N. W., & Sueca, I. N. (2024). Implementasi Permainan Bahasa Wordwall Dalam Penguasaan Kosa Kata Bahasa Inggris. Journal on Education Volume 07, No. 01, 7101-7109.

Nurulanningsih, (2023). PENELITIAN TINDAKAN KELAS (PTK) SEBAGAI PENGEMBANGAN PROFESI GURU BAHASA INDONESIA. JURNAL DIDACTIQUE BAHASA INDONESIA Vol 4 No 1, 50-61.

Park, S. (2023). Multilingualism, Social Inequality, and the Need for a Universal Language. Journal of Universal Language 24-1, 77-93.

Pelton, R. P. (2010). Action Research for Teacher Candidates. USA: Rowman & Littlefield Education.

Sujadi, J., & Wulandari, F. (2021). STUDY OF STUDENTS' VOCABULARY DIFFICULTIES IN THIRD-SEMESTER STUDENTS OF FOOD TECHNOLOGY MAJOR. Edukasi: Jurnal Pendidikan, Volume 19 Nomor 1 , 90 - 104.

Supina. (2018). FOUR BASIC SKILLS PROFICIENCY BASED ON STUDENTS' PERCEPTION IN HOSPITALITY & TOURISM STUDY PROGRAM, BUNDA MULIA UNIVERSITY. Journal of English Language and Culture, Vol 8 No 2, 128-139.