

The Use of Wordwall as a Learning Medium in Indonesian Language Instruction to Improve the Activeness and Learning Outcomes of Fifth-Grade Elementary School Students

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Abstract

Background: Indonesian language learning at the elementary school level often encounters challenges related to low student activeness and suboptimal learning outcomes due to the dominance of conventional, teacher-centered instructional methods. The integration of digital learning media is considered a potential solution to create a more engaging and interactive learning environment.

Aims: This study aims to improve students' learning activeness and learning outcomes in Indonesian language instruction through the utilization of Wordwall as an interactive digital learning medium for fifth-grade elementary school students.

Method: This research employed a Classroom Action Research (CAR) design based on the Kemmis and McTaggart model, conducted in two cycles consisting of planning, action, observation, and reflection stages. The research subjects were 32 fifth-grade students at SD Saraswati Tabanan. Data were collected through observation sheets, learning achievement tests, interviews, and documentation. Qualitative data were used to describe students' activeness, whereas quantitative data measured improvements in learning outcomes.

Results: The results showed a significant improvement in both students' activeness and learning outcomes. Students' activeness increased from 60% in the pre-cycle stage to 75% in Cycle I and reached 88% in Cycle II. Meanwhile, the average learning outcome improved from 65.0 in the pre-cycle to 74.3 in Cycle I and increased to 83.5 in Cycle II. Classical mastery also increased from 36.6% to 93%.

Conclusion: The use of Wordwall media effectively enhances students' activeness and learning outcomes in Indonesian language learning. Wordwall creates an interactive, enjoyable, and student-centered learning environment, making it a relevant and effective digital learning innovation for elementary school education.

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INTRODUCTION

Education plays a crucial role in shaping human resources who are intelligent, creative, and adaptive to the rapid development of the times. As emphasized by Özkan et al. (2025), the teaching and learning process is a systematic interaction that must be designed to achieve specific goals effectively. In the context of the 21st century, literacy skills, critical thinking, and technological competence have become essential demands for students (Yasdin et al., 2021). Sajja et al. (2023) highlight that the integration of information and communication technology is no longer an option but a necessity to support modern learning. Learning at the elementary school level serves as the foundation for the successful acquisition of these basic competencies (Ackermans et al., 2024; Sigalingging et al., 2023).

One subject that plays a significant role in developing students' thinking and communication skills is Indonesian language instruction (Rozy & Sukardi, 2023; Saddhono et al., 2019; Sari & Mardhotillah, 2023). Through this subject, students are expected to be able to understand, express, and convey ideas effectively. However, in practice, Indonesian language learning in elementary schools still faces

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various challenges. Based on observations at SD Saraswati Tabanan, the learning process tends to rely on conventional methods where teachers dominate, and students primarily listen. This results in low activeness and suboptimal learning outcomes. This phenomenon aligns with observations by Kurniasih & Sani, who noted that without digital innovation, elementary education often struggles to maintain student engagement.

One effort to address these issues is utilizing technological advancements. [Aligo & Prudente \(2025\)](#) and [Alshammary & Alhalafawy \(2023\)](#) in their meta-analysis found that digital learning tools have a significantly impact on student achievement compared to traditional methods. The use of digital technology enables teachers to create a more engaging environment ([Osmani & Tartari, 2024](#); [Sim & Ismail, 2023](#); [Urbanus, 2024](#)). [Khoiri et al. \(2024\)](#) and [Winarti et al. \(2024\)](#) argue that developing innovative learning media is crucial to bridge the gap between abstract concepts and students' concrete understanding. Furthermore, [Puspitarini et al. \(2018\)](#), [Apriani \(2023\)](#), and [Nugraini & Nugroho \(2023\)](#) define educational media as anything that can channel messages, stimulate thoughts, feelings, and willingness so that the learning process occurs.

One suitable technology is Wordwall, an online platform that provides educational games such as quizzes and matching activities ([Mazelin et al., 2022](#); [Misfa'atin et al., 2024](#)). [Ratih et al. \(2025\)](#), [Emilia et al. \(2024\)](#), and [Dewi et al. \(2025\)](#) emphasize that digital media in elementary learning must be user-friendly and visually appealing, which are key characteristics of Wordwall. Globally, Wordwall is widely implemented. [Ukgoda \(2025\)](#) and [Sailer & Homner \(2019\)](#) found that gamification of learning effectively enhances cognitive, motivational, and behavioral learning outcomes.

The selection of fifth-grade students is based on their developmental stage. According to [Wang & Wong \(2025\)](#) and [Syawaludin et al. \(2019\)](#), they are transitioning from concrete operational to early formal operational thinking. Therefore, game-based learning is highly suitable. Based on the explanation above, this study aims to utilize Wordwall to improve activeness and learning outcomes, providing a solution to the conventional learning issues identified at SD Saraswati Tabanan.

Although previous studies have demonstrated the effectiveness of digital media and gamification in education, there is still a lack of research specifically examining the use of Wordwall in Indonesian language learning at the elementary school level in Indonesia. Most existing studies focus on general subjects or higher education contexts, leaving a gap in understanding how Wordwall impacts students' activeness and learning outcomes in Indonesian language instruction at the primary school level. Although platforms such as Kahoot and Quizizz have been widely used in digital learning, Wordwall was selected in this study because it offers more flexible activity formats, allows both online and offline use, and provides customizable templates that are more suitable for elementary students' learning characteristics. Therefore, this study seeks to fill this gap by investigating the implementation of Wordwall in fifth-grade Indonesian language learning at SD Saraswati Tabanan.

METHOD

This study employed a Classroom Action Research (CAR) method using the Kemmis and McTaggart model, conducted collaboratively between the researcher and the fifth-grade teacher at SD Saraswati Tabanan. Classroom action research aims to improve the learning process and enhance students' learning outcomes through the implementation of innovative instructional media. This study adopted a mixed-method approach, combining qualitative and quantitative methods. The qualitative approach was used to describe changes in students' behavior and activeness during the learning process, while the quantitative approach was applied to analyze improvements in students' learning outcomes after the implementation of the action.

The research was conducted in two cycles, with each cycle consisting of four stages: (1) planning, which involved preparing learning instruments such as lesson plans, student activeness observation sheets, evaluation tests, and Wordwall media tailored to Indonesian language learning materials; (2) acting, which involved implementing the learning activities using Wordwall media in the classroom according to the planned procedures; (3) observing, which involved observing students' activities during the learning process to obtain data on students' levels of activeness and engagement; and (4)

reflecting, which involved analyzing the results of the action, discussing identified shortcomings, and planning improvements for the subsequent cycle.

The subjects of this study were 32 fifth-grade students of SD Saraswati Tabanan in the 2025/2026 academic year, consisting of 16 male students and 16 female students. The research variables of this study included students' activeness and learning outcomes in Indonesian language learning through the use of Wordwall media. Data were collected using several techniques: (1) observation, to determine students' activeness during the learning process; (2) learning achievement tests, to measure improvements in students' understanding of Indonesian language materials; (3) interviews, conducted with the classroom teacher to obtain responses regarding the implementation of Wordwall media; and (4) documentation, used to collect supporting data such as photographs of learning activities, score lists, and samples of students' work.

The collected data were analyzed qualitatively by describing changes in students' activeness from the pre-cycle to Cycle II, and quantitatively by calculating improvements in learning outcomes through comparisons of average scores across cycles. Improvements in learning outcomes were also determined based on the percentage of classical mastery, calculated using the following formula:

$$\text{Learning Mastery Percentage} = \frac{\text{Number of Students Achieving the MMC}}{\text{Total Number of Students}} \times 100\%$$

This study was considered successful if there was an increase in students' activeness of at least 80% of the total observed indicators and if the average student learning outcome reached a score of ≥ 75 , in accordance with the Minimum Mastery Criterion (MMC) applied at SD Saraswati Tabanan. Therefore, through the implementation of Wordwall media, Indonesian language learning was expected to become more engaging, interactive, and effective in improving students' activeness and learning outcomes.

The instrument for observing students' activeness was an observation checklist developed based on indicators of active learning behavior, including: (1) participation in asking and answering questions, (2) engagement in Wordwall activities, (3) attention to the lesson, (4) cooperation with peers, and (5) enthusiasm during learning. Each indicator was assessed using a four-point rating scale (1 = very low, 2 = low, 3 = high, 4 = very high). The instrument was validated by an expert in Indonesian language education and the classroom teacher to ensure content validity before being used in the study.

Table 1. Observation Results of Student Activeness

| No. | Student Name | Participation | Engagement | Attention | Cooperation | Enthusiasm | Total Score | Category |
|-----|--------------|---------------|------------|-----------|-------------|------------|-------------|-------------|
| 1 | AR | 4 | 3 | 4 | 4 | 3 | 18 | Very Active |
| 2 | NPP | 3 | 4 | 3 | 3 | 4 | 17 | Very Active |
| 3 | IMAP | 2 | 3 | 3 | 2 | 3 | 13 | Active |
| 4 | AZ | 3 | 3 | 4 | 3 | 3 | 16 | Active |
| 5 | IKBS | 4 | 4 | 4 | 3 | 4 | 19 | Very Active |
| 6 | BR | 2 | 2 | 3 | 2 | 2 | 11 | Less Active |
| 7 | DR | 3 | 3 | 2 | 3 | 3 | 14 | Active |
| 8 | NKDA | 4 | 3 | 4 | 4 | 4 | 19 | Very Active |
| 9 | IMY | 3 | 2 | 3 | 3 | 2 | 13 | Active |
| 10 | EA | 4 | 4 | 3 | 4 | 4 | 19 | Very Active |
| 11 | IMGM | 2 | 3 | 2 | 2 | 3 | 12 | Less Active |
| 12 | NML | 3 | 3 | 4 | 3 | 3 | 16 | Active |
| 13 | IWA | 4 | 3 | 4 | 4 | 4 | 19 | Very Active |
| 14 | PAA | 2 | 2 | 3 | 2 | 2 | 11 | Less Active |
| 15 | PEL | 3 | 4 | 3 | 3 | 4 | 17 | Very Active |
| 16 | NLW | 3 | 3 | 3 | 3 | 3 | 15 | Active |

| No. | Student Name | Participation | Engagement | Attention | Cooperation | Enthusiasm | Total Score | Category |
|-----|--------------|---------------|------------|-----------|-------------|------------|-------------|-------------|
| 17 | IMB | 4 | 4 | 4 | 4 | 4 | 20 | Very Active |
| 18 | NKANP | 3 | 3 | 3 | 3 | 3 | 15 | Active |
| 19 | IKD | 2 | 3 | 2 | 2 | 3 | 12 | Less Active |
| 20 | NI | 4 | 3 | 4 | 4 | 3 | 18 | Very Active |
| 21 | SW | 3 | 3 | 3 | 3 | 3 | 15 | Active |
| 22 | NKI | 2 | 2 | 2 | 2 | 2 | 10 | Less Active |
| 23 | IKPA | 3 | 3 | 4 | 3 | 3 | 16 | Active |
| 24 | NLC | 4 | 4 | 3 | 4 | 4 | 19 | Very Active |
| 25 | IMP | 3 | 3 | 3 | 3 | 3 | 15 | Active |
| 26 | NPS | 2 | 3 | 2 | 2 | 3 | 12 | Less Active |
| 27 | IKG | 4 | 4 | 4 | 3 | 4 | 19 | Very Active |
| 28 | NMA | 3 | 3 | 3 | 3 | 3 | 15 | Active |
| 29 | IWK | 4 | 3 | 4 | 4 | 4 | 19 | Very Active |
| 30 | NNS | 2 | 2 | 3 | 2 | 2 | 11 | Less Active |
| 31 | IKJ | 3 | 4 | 3 | 3 | 4 | 17 | Very Active |
| 32 | DNIP | 3 | 3 | 4 | 3 | 3 | 16 | Active |

RESULTS AND DISCUSSION

Results

This study was conducted at SD Saraswati Tabanan during the first semester of the 2025/2026 academic year. The research subjects consisted of 32 fifth-grade students. The purpose of this study was to improve students' activeness and learning outcomes in Indonesian language learning through the use of Wordwall media. This classroom action research was carried out in two cycles, with each cycle consisting of four stages: (1) planning, (2) action implementation, (3) observation, and (4) reflection. Data were collected through student activity observations, teacher interviews, learning outcome tests, and documentation of learning activities. The results of the study at each stage are described as follows:

1. Initial Condition (Pre-Cycle)

Based on the results of the initial observation, it was found that the Indonesian language learning process in the fifth grade at SD Saraswati Tabanan was still dominated by lecture-based instruction and written exercises. Although the teacher delivered the material adequately, student involvement in the learning process remained low. Most students only listened without actively participating, and some appeared unfocused during the learning activities. Interviews with the classroom teacher indicated that students often felt bored due to the lack of variation in teaching methods. In addition, students' abilities to understand text content and sentence structure were relatively low. The learning process tended to be one-directional, resulting in only a few students actively responding to questions. The pre-cycle test results showed that the average student score was 65, and only 11 out of 32 students (36.6%) achieved the Minimum Mastery Criterion (MMC) of 75. Based on the observation sheet, students' activeness was approximately 60%, categorized as moderately active. These conditions indicated the need for improvement through the implementation of more engaging and student-centered learning media.

2. Cycle I

a. Planning

At this stage, the researcher and the classroom teacher prepared the lesson plan by integrating Wordwall media as an interactive learning tool. The selected material focused on identifying elements of descriptive texts. Wordwall was utilized in the form of matching pairs and group sort games containing questions related to the learning material. The research instruments included

student activeness observation sheets, teacher activity observation sheets, teacher reflection sheets, evaluation tests, and documentation of learning activities. The purpose of this action was to increase student engagement during the learning process and motivate students to understand the material in an enjoyable way.

b. Action Implementation

The action was implemented over two meetings. At the beginning of the lesson, the teacher conducted an apperception activity and explained the learning objectives. The teacher then introduced Wordwall media and explained how to use it. At this stage, students appeared interested and eager to try the games. Subsequently, students were divided into small groups. Each group took turns answering questions displayed on the projector screen. The classroom atmosphere became more lively as students supported and encouraged their group members. However, some students remained passive and waited for instructions from the teacher.

c. Observation

Observation was conducted by the researcher to assess students' activeness during the learning process. The observed aspects included attention to the teacher's explanation, ability to ask questions, confidence in expressing opinions, activeness in discussions, and participation in Wordwall games. The observation results indicated an improvement compared to the pre-cycle stage. Many students began to actively ask questions and respond to their peers' answers. Based on the observation, students' activeness increased to 75%, categorized as active.

d. Reflection

Based on the observation and evaluation results, it was concluded that the implementation of the action in Cycle I was generally successful; however, several challenges remained. Some students were not yet familiar with using digital media, and others still experienced difficulties in understanding the instructions for the Wordwall games. The test results showed that the average score increased to 74.3, with 21 students (70%) achieving the MMC. The teacher and the researcher agreed to improve the implementation in Cycle II by adding variations of Wordwall games, clarifying instructions, and providing guidance to students who experienced difficulties in using the media.

3. Cycle II

a. Planning

At this stage, the researcher and the teacher refined the lesson plan based on the results of the previous reflection. Additional variations of Wordwall games were incorporated, such as wheel spin, anagram games, and open the box, which were linked to the material on arranging sentences into coherent paragraphs. Furthermore, the teacher prepared learning activities that emphasized greater student collaboration. Some passive students were assigned specific responsibilities, such as recording group scores or assisting in operating the media.

b. Action Implementation

The learning activities began with a warm-up session using the wheel spin game to stimulate students' enthusiasm. The teacher then guided students in completing the main Wordwall activities. Students discussed possible answers within their groups, and one representative operated the media at the front of the class. The classroom atmosphere became highly active and competitive. Nearly all students participated in answering the questions. The teacher provided praise and additional points to enhance motivation. Students appeared enthusiastic as Wordwall displayed scores in real time on the screen, allowing them to monitor their group achievements.

c. Observation

Based on the observation results in Cycle II, a significant improvement in students' activeness was observed. Most students actively participated in the activities, confidently expressed their opinions, and demonstrated effective collaboration within their groups. Students' activeness increased to 88%, categorized as very active.

d. Reflection

The reflection results indicated that Wordwall media had a positive impact on improving students' activeness and learning outcomes. Students appeared more enthusiastic, understood the material more quickly, and were able to recall lesson content more easily. The evaluation results showed that the average student score increased to 83.5, with 28 students (93%) achieving the MMC. Only two students had not yet achieved mastery due to difficulties in sentence structure; however, they still demonstrated improvement compared to the previous cycle.

4. Recapitulation of Results at Each Stage

The following section presents a summary of improvements in students' activeness and learning outcomes from the pre-cycle stage to Cycle II.

Table 1. Improvement of Students' Activeness and Learning Outcomes

| No | Observed Aspect | Pre-Cycle | Cycle I | Cycle II | Total Improvement |
|---------------------------------------|---|------------|------------|------------|-------------------|
| A. Students' Activeness | | | | | |
| 1 | Paying attention to the teacher's explanation | 65% | 78% | 90% | +25% |
| 2 | Asking or responding to questions | 55% | 70% | 85% | +30% |
| 3 | Expressing opinions | 50% | 68% | 86% | +36% |
| 4 | Participating in group discussions | 60% | 76% | 89% | +29% |
| 5 | Enthusiasm in using Wordwall media | 0% | 80% | 92% | +92% |
| Average Activeness | | 60% | 75% | 88% | +28% |
| B. Students' Learning Outcomes | | | | | |
| 1 | Highest score | 85 | 90 | 96 | +11 |
| 2 | Lowest score | 45 | 60 | 72 | +27 |
| 3 | Average score | 65.0 | 74.3 | 83.5 | +18.5 |
| 4 | Number of students achieving mastery | 11 | 21 | 28 | +17 |
| 5 | Percentage of classical mastery | 36.6% | 70% | 93% | +56.4% |

Note: The indicator "Enthusiasm in using Wordwall media" scored 0% in the pre-cycle because Wordwall had not yet been introduced at that stage. The media was first implemented in Cycle I.

5. Analysis of the Development of Students' Activeness and Learning Outcomes

Based on the table above, it can be concluded that the use of Wordwall media resulted in a significant improvement in students' activeness and learning outcomes. Students' activeness increased from 60% in the pre-cycle stage to 88% in Cycle II, while the average learning outcome improved from 65.0 to 83.5. These changes indicate that Wordwall is effective in creating an enjoyable learning environment, encouraging collaboration among students, and strengthening their understanding of the learning material. Digital game-based activities motivated students to actively participate, making the learning process less monotonous. In addition, observational results revealed improvements in students' learning motivation, group cooperation, and self-confidence. Teachers also benefited from the use of Wordwall, as the platform facilitated quick and interactive assessment of students' learning outcomes.

Discussion

The results of this study indicate that the utilization of Wordwall media in Indonesian language learning for fifth-grade students at SD Saraswati Tabanan significantly improved students' activeness and learning outcomes. This improvement can be explained through an analysis of the relationship between learning theories, the characteristics of Wordwall media, and the empirical results obtained in the classroom.

1. The role of interactive media in engagement according to [Yulia et al. \(2025\)](#), instructional media function as intermediaries that effectively convey learning messages. This finding is supported by [Siregar et al. \(2026\)](#), who posits in the *Cognitive Theory of Multimedia Learning* that people learn more deeply from words and pictures than from words alone. In this study, Wordwall successfully

created a participatory atmosphere. This aligns with [Ahmed et al. \(2025\)](#), who found that educational gamification outperforms traditional learning in fostering student interaction. Similarly, [Tsay et al. \(2018\)](#) emphasized that gamified e-learning plays a pivotal role in boosting student engagement by providing immediate feedback and rewards.

2. The effectiveness of Wordwall can also be explained through the perspectives of Human-Computer Interaction (HCI) and User Experience (UX). From an HCI standpoint, Wordwall provides an intuitive interface, clear navigation, immediate feedback, and interactive elements that reduce cognitive load and make it easier for elementary students to interact with digital learning content. These design features support usability and accessibility, which are essential principles in effective educational technology.
3. From a UX perspective, Wordwall offers a positive and enjoyable learning experience by presenting instructional content in a game-like format that is visually appealing, emotionally engaging, and age-appropriate. This positive user experience increases students' motivation, satisfaction, and willingness to participate actively in learning activities. Therefore, the improvement in students' activeness and learning outcomes observed in this study can be partly attributed to the alignment of Wordwall with fundamental HCI and UX principles.
4. Impact on Student Activeness, This study found that student activeness increased significantly. [Carreno et al. \(2025\)](#) stated that learning becomes meaningful when students are involved directly. [Kerimbayev et al. \(2023\)](#) describe this as a shift towards student-centered learning through digital media, where students become active subjects. The increase in activeness from 60% to 88% in this study corroborates the findings of [Prasetya et al. \(2025\)](#), who reported that interactive digital media is a key factor in stimulating students' learning activeness. Furthermore, [Thi \(2025\)](#) and [Saputra et al. \(2025\)](#) also proved that game-based learning strategies significantly improve student engagement in classroom activities.
5. Improvement in Learning Outcomes In terms of learning outcomes, the increase in the average score to 83.5 indicates a substantial improvement. According to [Bay et al. \(2022\)](#), learning outcomes represent changes in behavior. This result is consistent with [Saputri et al. \(2025\)](#), who concluded that interactive learning media has a direct positive correlation with learning outcomes. Specifically regarding the platform used, [Zunidar & Suwandi \(2025\)](#) confirmed in their respective studies that the Wordwall application significantly improves Indonesian language learning outcomes by making abstract linguistic concepts more concrete and enjoyable.
6. Motivation and Psychological Aspects Through the use of Wordwall, students developed greater enthusiasm. [Rahmawati & Saepuloh \(2025\)](#) explain this phenomenon through social cognitive theory, stating that digital game-based learning enhances learning motivation and performance. [Ragni et al. \(2023\)](#) also highlight that technology integration triggers intrinsic motivation. The competitive yet fun nature of Wordwall aligns with [Purnamasari & Purwandari \(2025\)](#), who found that Wordwall-based learning specifically boosts student motivation due to its game-like appeal. This psychological engagement is crucial, as noted by [Pasqualotto et al. \(2022\)](#), who argue that the emotional design of games facilitates cognitive processing.
7. Relevance to Elementary Education Context the success of this study reinforces the importance of digital adaptation in elementary schools. [Çelik et al. \(2025\)](#) argue that digital game-based learning is highly compatible with the characteristics of elementary students who enjoy playing. [Oktaviana et al. \(2025\)](#) further support that the implementation of interactive media in Indonesian language learning specifically helps in overcoming boredom in reading and writing tasks. Moreover, a meta-analysis by [Riopel et al. \(2019\)](#) confirms that globally, game-based learning consistently yields better learning achievements compared to non-gaming instruction.

Overall, the improvement at SD Saraswati Tabanan demonstrates that Wordwall is pedagogically effective. It supports the *Merdeka Belajar* principle by creating a dynamic environment. Therefore, it can be concluded that the utilization of Wordwall media effectively improves activeness and learning outcomes, serving as a relevant innovation for 21st-century education.

Implications

The findings of this study have several important implications for elementary school learning practices. First, the integration of interactive digital media such as Wordwall can serve as an effective instructional strategy to increase student engagement and participation in Indonesian language learning. Teachers are encouraged to adopt technology-based learning tools to create a more dynamic and student-centered learning environment. Second, the use of Wordwall supports the principles of 21st-century learning and the Merdeka Belajar framework by promoting active learning, collaboration, and the integration of technology into classroom instruction. Schools should therefore facilitate teacher training and provide adequate technological infrastructure to support the sustainable implementation of digital learning media.

Research Contributions

This study contributes to the field of educational research in several ways. Theoretically, it enriches the literature on the effectiveness of game-based digital learning media in improving students' activeness and learning outcomes at the elementary school level, particularly in Indonesian language instruction. Practically, this research provides empirical evidence that Wordwall can be used as an innovative learning medium to enhance classroom interaction and academic achievement. Methodologically, the study demonstrates the applicability of the Classroom Action Research approach in evaluating and improving instructional practices through reflective cycles.

Limitations

Despite its positive findings, this study has several limitations. First, the research was conducted in a single elementary school with a limited number of participants, which may affect the generalizability of the results. Second, the study focused only on fifth-grade students and Indonesian language learning, so the effectiveness of Wordwall in other subjects or grade levels was not examined. Third, the duration of the research was relatively short, covering only two action cycles, which may not fully capture the long-term impact of Wordwall on students' learning activeness and outcomes.

Suggestions

Based on the findings and limitations of this study, several suggestions are proposed. Future researchers are encouraged to conduct similar studies with larger sample sizes, different grade levels, and various subjects to further validate the effectiveness of Wordwall media. Longitudinal studies are also recommended to examine the long-term impact of digital game-based learning on students' academic performance and motivation. For teachers, it is suggested to continuously innovate learning activities by combining Wordwall with other interactive learning strategies to maintain students' engagement and interest. Schools and policymakers are encouraged to support the integration of digital learning media through professional development programs and adequate technological facilities.

CONCLUSION

This study demonstrates that the implementation of Wordwall media in Indonesian language learning effectively improves both students' activeness and learning outcomes among fifth-grade students at SD Saraswati Tabanan. The classroom action research conducted in two cycles showed a consistent increase in students' participation, engagement, and academic achievement throughout the learning process.

The results indicate that students' activeness increased from 60% in the pre-cycle stage to 88% in Cycle II, while the average learning outcome improved from 65.0 to 83.5, with the majority of students achieving the Minimum Mastery Criterion. These findings confirm that Wordwall creates an interactive and enjoyable learning environment that encourages active participation, collaboration, and motivation among students.

Furthermore, the use of the Wordwall as a game-based digital learning medium supports student-centered learning and aligns with the principles of 21st-century education by integrating technology

into classroom instruction. The visual, interactive, and competitive features of the Wordwall help students better understand learning materials, particularly in Indonesian language learning, which requires active engagement in reading, writing, and comprehension activities.

Based on these findings, it can be concluded that Wordwall media is an effective and relevant instructional innovation for elementary school learning. Teachers are encouraged to utilize the Wordwall as an alternative digital learning medium to enhance students' activeness and learning outcomes. Future research is recommended to explore the application of the Wordwall in different subjects, grade levels, and learning contexts to further examine its effectiveness and sustainability in improving educational quality.

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AUTHOR CONTRIBUTION STATEMENT

NKSY conceptualized the study, conducted the classroom action research, and collected the data. NNNK assisted in data validation and analysis. NKACA drafted the manuscript, reviewed the final article, and handled the correspondence. All authors read and approved the final manuscript.

AI DISCLOSURE STATEMENT

The authors declare that this research was prepared, researched, written, and edited without the aid of artificial intelligence (AI) techniques.

CONFLICTS OF INTEREST

The authors confirm the absence of any potential conflicts of interest, whether financial, institutional, or personal, that could influence the conduct of this study, the analysis of data, the preparation of the manuscript, or its publication.

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