

THE EFFECT OF WORDWALL ON STUDENTS LEARNING MOTIVATION AT SMP NEGERI 1 KUALA BATEE

Hiyana Roshi¹, Nuzulul Isna²

^{1,2}STKIP Muhammadiyah Aceh Barat Daya

Email: nuzulul.isna@stkipmuabdaya.ac.id

ABSTRACT

This study aims to explore the effect of using Wordwall on student learning motivation at SMP Negeri 1 Kuala Batee. To find out the effect of using Wordwall interactive learning media on the learning motivation of seventh-grade students. This research was conducted at SMP Negeri 1 Kuala Batee. This type of research is a quantitative descriptive study. The subjects of this research are students in grade VII (90 students). The researcher used a sampling method as the sample for this study. To collect the data, the researcher distributed a questionnaire. It is used to measure students' motivation for learning through the Wordwall teaching method, using a Likert scale. The data in this study were processed using statistical analysis procedures in IBM SPSS Statistics (version 27.0.1). The findings of this study resulted in a Mann-Whitney U value of U 000, with $p < 0.001$ (two-tailed). This result indicates a statistically significant difference in motivation levels between the two groups.

Keywords: wordwall, students learning, motivation

Introduction

individual's potential through teaching, learning, and training that shapes character, as well as improves skills, and provides useful knowledge to individuals in social, economic, and cultural life. Education is a conscious effort made by humans in order to develop their potential through the learning process. Similarly, in law No. 20 of 2003 concerning the national education system. It is stated that education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble morals, skills needed by themselves, society, by develop all the potentials that students have through the learning process.

To produce quality learning, teachers must also create a quality learning atmosphere, considering that many factors cause students' motivation to learn to decrease during the learning process such as students consider lessons not very important, the nature of the teacher's influence, the learning style/system applied, the influence of limited use of tools, learning facilities, family/classmates problems, and classroom conditions that make students uncomfortable (Vebrianto, 2024).

Conventional teaching methods, such as lectures and memorization, tend to make students feel bored and less interested in learning, and are also often one of the reasons students lose interest

in learning. In this situation, learning motivation is one of the important factors that increases students' interest in independent learning. Therefore, increasing student motivation is expected to have an effect on the achievement of academic achievement, because motivation and learning have a significant relationship (Tokan & Imakulata, 2019).

The study focused on two main variables, which are wordwall as the independent variable and students' learning motivation as the dependent variable. In this case, following the learning material can grow and develop if the activity is interesting, satisfying, and can meet its needs as the goal to be achieved. There are several important aspects of student motivation: Self-efficacy, active learning strategies, learning of science values, performance goals, achievement goals, and a stimulating learning environment (Cicuto & Torres, 2016).

According to Nisa (2017), interest is the tendency of individuals to be interested in an object or like an object, therefore to cultivate student

interest is the responsibility of teachers to arouse and strengthen students' interest by building a learning environment that stimulates students' interest to participate in the teaching and learning process, especially motivation plays an important role in the learning process of each student.

Motivation is not something inherent in humans but is an effort that can be achieved by anyone who wants to be involved in achieving what they find interesting (Raharjo, 2019). Hence, an adjusted procedure is required, such as presenting innovation as an intelligent learning instrument and giving illustrations of how to utilize innovation for profitable things. Since spurred under studies will be able to extend their intrigued in learning and not squander time. Students can use their time effectively, have a clear outlook on life, and have a strong desire to achieve their goals (Untari, 2021). Additionally, using undifferentiated media can make kids less enthusiastic for understanding learning, and a lack of interaction in learning that does not actively involve students, so they are not stimulated to participate. Limited interaction between teachers and students can cause students to have difficulty in exploring the subjects studied.

Effective learning media can attract students' attention and stimulate their motivation and interest in learning (Puspitarini & Hanif, 2019). Learning media has undergone many changes along with the times. One of them is Wordwall, a learning medium that includes various games to assess online learning. Wordwall is a game learning medium that is fun, entertaining, and attracts students' attention. According to Setiyanto & Yasin (2024), Wordwall is a learning platform that allows users to create different types of game-based activities that can be used for teaching purposes. A key feature of the platform is its ability to generate a variety of activity formats, such as quizzes, word matching, puzzles, etc, which makes the learning preparation more intuitive and pleasant.

The results of information investigation within the past considered that the Wordwall advanced amusement media had a positive effect on student learning motivation. Past inquire about moreover shown that students experienced an increase in learning motivation since, with this advanced media, understudies got to be more spurred to pursue and acquire the learning material provided. The reason of this ponder is to determine whether the utilize of Wordwall as a learning medium will be better. Also, this research aims to find solutions.

Previous research by Ali and Asrori (2008) revealed that interpersonal interest significantly influences prosocial behavior in the school environment, creating a conducive learning climate

and facilitating cooperation among students. Rahman and Gibran (2025) in their study showed that shared interests and social closeness among students increase interest, which triggers active participation and learning motivation among students. Lestari (2023) highlighted that emotional closeness and positive relationships between teachers and students are important factors in influencing students' learning interest, thereby positively impacting academic achievement. Previous research by Islam, Nasir, and Andriani (2019) shows that interpersonal interest supports self-expression and positive learning intentions, which in turn contribute to improved academic achievement among students. Interest in learning has a significant positive impact on students, particularly in terms of increasing motivation, attention, active engagement, and learning outcomes. Students who are interested in the subject matter or learning environment tend to be more enthusiastic, focused, and engaged in the learning process, thereby improving their academic performance. This interest also makes students feel comfortable and prevents boredom, which helps maintain their continuity in learning.

This research provides enlightenment on the effect of the utilization of Wordwall on students' learning interests at SMP Negeri 1 Kuala Batee. This school is the target of research because it has been used by KM (*kampus mengajar*), and in the school, it has never been researched about does Wordwall affects students' learning motivation. It is hoped that they can rediscover the spirit to learn, develop, and explore their potential. Low motivation is not a permanent condition. With the right support, every child has a great chance to get up, overcome obstacles, and achieve a brighter future. Therefore, the research questions employed in this study are: 1. Does Wordwall effect on students learning motivation at SMP Negeri 1 Kuala Batee?, 2. Which aspect of learning motivation is affected by using Wordwall the most?

Method

In this research, the researchers used descriptive quantitative research. According to Creswell (2014), a quantitative approach is a study into a social or human issue that is based on evaluating a theory made up of variables, quantified with statistics, and examined with statistical techniques to see if the theory's prediction generalizations are true. In this study, the researchers gathered data from the students who learned vocabulary by using Wordwall in their class.

The research was carried out at SMP Negeri 1 Kuala Batee, located in Pasar, Kota Bahagia, Kuala Batee District, Southwest Aceh Regency, Aceh

23764. The population consisted of 140 first-year junior high school students (7th graders). Out of this population, a total of 90 students were selected using a random sampling technique. The sample was drawn from four classes and divided into two groups, where 45 students served as the control group from classes VII.3 and VII.4, and 45 students served as the experiment group from classes VII.1 and VII.5.

The collection of data was achieved through the implementation of a questionnaire, which was adapted from Chamuah and Sankar (2018) was distributed to the participants. As defined by Sugiyono (2012), a questionnaire is a data collection technique in which participants respond to a series of written questions or statements. The gathered data were examined by using descriptive quantitative analysis (descriptive statistics).

Statistical analysis was performed using IBM SPSS Statistics (Version 27.0.1) to ensure accuracy and efficiency in the data interpretation process. The primary data source for this research consisted of the responses from Grade VII students of SMP Negeri 1 Kuala Batee who participated in the study.

The questionnaire utilized a four-point Likert scale (1=totally disagree, 2=disagree, 3=agree, 4= totally agree). The instrument consisted of 30 items, with the time to fill out the questionnaire being 30 minutes, which measured students' learning motivation across three dimensions: interest, happiness, and optimism, as developed by Chamuah & Sankar (2018). The indicator and question item can be seen in the following table.

Table 1
Students' Indicators and question item

No	Factor	Indicator	Question Items
1	interest	a. Interest in technological developments b. Interest in the learning media used c. Interest in the learning model used	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14.
2	happiness	a. Happy to learn English subject b. Happy with the learning media used	15, 16, 17, 18, 19, 20, 21.
3	Optimism	a. Optimism about language knowledge b. Optimism about the learning media used c. Optimism for the learning model used d. Desire to change yourself for the better	22, 23, 24, 25, 26, 27, 28, 29, 30.

Findings and Discussion

The effect of Wordwall on students' learning motivation at SMP Negeri 1 Kuala Batee

After doing the analysis on data, the researcher figured out that word walls have a significant effect

on students' motivation. In addition to that, the control group did not give a significant motivation during learning processes with the conventional way. The comparison between both (experimental and control) can be seen in the following table.

Table 2
Descriptive Statistics

	N	Range	Min	Max	Sum	Mean	SD
Experiment	45	86	297	383	15023	333.8	25.315
Control	45	43	190	233	9853	219.0	10.460

The collected data were analyzed by using descriptive statistical analysis and appropriate inferential tests after meeting normality and homogeneity assumptions.

The Shapiro-Wilk test of normality indicated that the data or not normally distributed ($W = .896$, $p < .001$ for the control group, and $W = .937$, $p = .017$ for the experimental group). Also, the result of Levene's test indicated non-homogeneous data ($p < .001$), hence the test result indicated that the assumption of homogeneity of variance was not met.

Given the violations of both the normality and homogeneity assumptions, a non-parametric Mann-Whitney U test was used to compare the motivation scores between the control and experimental

groups. The test yielded a Mann-Whitney U value of $U = 0.000$, with $p < .001$ (two-tailed). This result indicates a statistically significant difference in motivation levels between the two groups.

The statistically significant result from the Mann-Whitney U test suggests that the use of Wordwall media had a positive and significant effect on students' motivation. The experimental group, which was exposed to the Wordwall intervention, demonstrated a substantially higher level of motivation compared to the control group. *Aspect of learning motivation is affected by using Wordwall the most*

The results also show that of the three aspects, Wordwall has the most influence on interest, with a score of 2065 with an average of most respondents

answering with a Likert scale value of 4 (totally agree), while happiness has a score of 1071 with an average answer of 4 (totally agree) and optimism has a score of 1371 with an average answer of 4 (totally agree).

Interest in the context of learning is a feeling of curiosity or strong interest in the subject matter, teacher, or learning environment that triggers students' attention and active involvement in the learning process. This interest is important because it can increase students' overall motivation and learning effectiveness. Interest not only involves cognitive aspects but also affective factors that make students feel comfortable and inspired to explore the subject matter more deeply (StfekoM, 2025).

According to Crow and Crow (2023), interest is the ability to provide stimulation that encourages individuals to pay attention to a particular object, in this case the subject matter (Sukardi, 2011). Meanwhile, Slameto (2010) explains that interest is a feeling of liking that arises without coercion, which is essential in creating a pleasant and effective learning atmosphere.

Several factors that influence student interest in learning include similarity with the material being studied, emotional closeness to the teacher or classmates, the appeal of the method of presenting the material (e.g., the use of interactive media), and positive feedback from the teacher on the students' efforts (StfekoM, 2025). This developed interest helps students increase their learning motivation and active involvement, thereby contributing to optimal learning outcomes (Rahman & Gibran, 2025).

The aspect of enjoyment is closely related to interest in learning. Students who find the subject matter or the teacher's teaching style enjoyable are more likely to be interested and active in learning. This sense of enjoyment eliminates feelings of obligation and creates a positive learning environment that fosters a higher interest in learning.

Meanwhile, optimism is related to interest because students who are optimistic about their ability to learn and the results they can achieve tend to show stronger interest. Optimism increases students' expectations that their efforts will bear fruit, motivating them to continue learning with high enthusiasm. Interest based on enjoyment and optimism is an important driver in the success of the holistic learning process of students.

In short, interest in learning increases student motivation and engagement, with enjoyment being one of the strongest motivating factors, while optimism reinforces that interest by providing positive expectations for learning outcomes. These

three aspects support each other in creating an effective and meaningful learning experience for students.

Discussion

The outcomes of this study show that the utilization of Wordwall as a learning medium had a statistically significant influence on students' learning motivation. Based on the results of the Mann-Whitney U test ($U = .000, p < .001$), there was a marked variance in motivation scores between the experimental group (which used Wordwall) then the control group (which did not). These results suggest that Wordwall can be an effective instructional tool for increasing students' engagement and inspiration within the learning environment.

This finding aligns with the theory of constructivist learning proposed by Vygotsky (1978), which emphasizes that learning is most effective when learners are actively engaged in constructing their own understanding through interaction with tools and media. Wordwall, with its interactive and game-based learning features, offers such opportunities for engagement, allowing students to participate actively and enjoyably in the learning process.

Moreover, according to Keller's ARCS Model of Motivation (Keller, 1987), motivation in learning can be increased when the learning environment is Attention-grabbing, Relevant, provides Confidence, and gives Satisfaction. Wordwall, as a digital gamification tool, naturally draws attention through visual and interactive elements, ensures relevance by allowing customization aligned with curriculum objectives, builds confidence by providing immediate feedback, and offers satisfaction through its engaging and competitive nature.

The significant difference found in this study is also supported by research from previous scholars. For instance, Ibad et al. (2023) found that the integration of digital gamified platforms like Wordwall and Kahoot! significantly increased students' motivation and learning outcomes in science education.

Similarly, Purwitasari (2022) reported that the use of Wordwall games in English learning contexts not only improved students' vocabulary mastery but also made them more motivated and enthusiastic during lessons.

However, this study also encountered limitations related to the assumptions of normality and homogeneity. The results of the Shapiro-Wilk test indicated that the information was not regularly conveyed in both the control and experimental groups. Additionally, Levene's test showed that the variance between the groups was not

homogeneous. These violations justified the use of a non-parametric test (Mann-Whitney U), which is reasonable when data do not meet the assumptions required for parametric testing.

Despite these limitations, the strong statistical significance found in the Mann-Whitney U test confirms that Wordwall had a measurable and positive effect on understudy inspiration.

This bolsters the integration of gamified learning media in classroom settings, particularly in junior high school contexts, where students are in critical stages of cognitive and emotional development and require stimulating and engaging educational methods.

Conclusion

This study provides empirical evidence that Wordwall is an effective medium for enhancing student motivation and engagement, particularly among Year 8 students at SMP Negeri 1 Kuala Batee. The outcomes of the Mann-Whitney U test ($U = .000$, $p < .001$) show that motivation scores increased significantly among students who used Wordwall compared to those who received traditional instruction. These findings confirm that gamified digital platforms can significantly boost students' motivation and participation in learning activities.

Furthermore, the study identified positive and significant relationships among the three core variables: interest, happiness, and optimism. These findings reinforce the hypothesis that emotional states strongly influence a student's interest and that fostering happiness and optimism can lead to an increased interest in learning, which in turn correlates positively with academic achievement and learning resilience.

A key suggestion of these discoveries is the important role that teachers play in preparing students emotionally before delivering academic content. When teachers create a joyful and optimistic learning environment, students become more engaged and motivated to learn. Increased interest in learning enhances not only educational outcomes but also students' persistence and resilience when facing challenges. From an educational perspective, several implications emerge:

For teachers: Educators are encouraged to use digital, gamified platforms such as Wordwall to enhance the learning experience. These tools are aligned with constructivist learning theories, in which knowledge is actively constructed through interaction and experience.

For schools: Institutions should provide the necessary digital infrastructure and ongoing professional development to support the effective integration of technology into the classroom.

For curriculum developers: Curriculum design should allow for the incorporation of educational technology and gamification to address the evolving needs and characteristics of 21st-century learners.

These conclusions align with those of Huang and Hew (2018), who demonstrated that incorporating game-based elements into learning environments can significantly boost student motivation and performance by offering immediate feedback and enhancing engagement.

Future research is encouraged to employ more robust experimental designs, such as pretest-posttest control group or mixed-methods approaches, and to expand the participant base to gain more generalisable insights. Furthermore, researchers should explore the application of Wordwall in diverse learning settings, including outdoor or informal learning environments.

In conclusion, Wordwall is an effective and innovative educational tool that boosts motivation and supports students' emotional development and resilience. Teachers, educators and policymakers are therefore encouraged to use such tools to create more interactive, inclusive and student-centred learning environments.

References

- Ali, M., & Asrori, M. (2008). Psikologi remaja: Perkembangan peserta didik. Jakarta: PT Bumi Aksara.
- Baron, R. A., & Byrne, D. (2005). Psikologi sosial (Edisi ke-10, jilid 1). Jakarta: Erlangga.
- Chamuah, A., & Sankar, R. (2018). Achievement motivation and learned optimism as determinants of happiness in students. *Journal of Multidisciplinary Subjects*, 12(2), 9–15.
- Cicuto, C. A. T., & Torres, B. B. (2016). Implementing an active learning environment to influence students' motivation in biochemistry. *Journal of Chemical Education*, 93(6), 1020–1026.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed method approaches* (4th ed.). SAGE Publications.
- Ibad, W., Sabat, Y., & Musyarofah, L. (2023). Comparing Kahoot, Quizizz, and Wordwall in EFL reading class. *Eduvest: Journal of Universal Studies*, 3(11).
- Islam, N., Nasir, M., & Andriani, D. (2019). Interpersonal attraction dalam psikologi sosial. *Jurnal Ilmiah Psikologi*, 12(3), 45–58.
- Keller, J. M. (1987). Development and use of the ARCS model of instructional design. *Journal of Instructional Development*, 10(3), 2–10.
- Nisa, A. (2017). Pengaruh perhatian orang tua dan minat belajar siswa terhadap prestasi belajar ilmu pengetahuan sosial. *Faktor: Jurnal Ilmiah Kependidikan*, 2(1), 1–9.
- Purwitasari, P. (2022). *The effectiveness of Wordwall application in improving students' vocabulary mastery* (Doctoral dissertation, IAIN Ponorogo).

- Puspitarini, Y. D., & Hanif, M.** (2019). Using learning media to increase learning motivation in elementary school. *Anatolian Journal of Education*, 4(2), 53–60.
- Raharjo, F. S.** (2019). *The master book of personal branding: Seni membangun merek diri dengan teknik berbicara*. Anak Hebat Indonesia.
- Rahman, D. R., & Gibran, F.** (2025). Ketertarikan interpersonal dalam konteks psikologi sosial pembelajaran. *Jurnal Psikologi Pendidikan*, 10(2), 123-135.
- Setiyanto, S., & Yasin, I. F.** (2024). Workshop pembuatan media pembelajaran interaktif di SMA Negeri 1 Pabelan Kabupaten Semarang menggunakan Wordwall. *Jurnal Gembira: Pengabdian Kepada Masyarakat*, 2(1), 308–316.
- Slameto.** (2010). Belajar dan faktor-faktor yang