



THE EFFECTIVENESS OF USING WORDWALL MEDIA IN TEACHING ISLAMIC CULTURAL HISTORY AT MTs YAPDI MEDAN

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ABSTRACT

This study aims to determine the effectiveness of Wordwall media in improving students' learning outcomes in the subject of Islamic Cultural History (SKI) at MTs YAPDI Medan. Using a mixed-methods approach combining quantitative and qualitative analysis, the research involved pretest and posttest assessments as well as student questionnaires. The results show a significant increase in student learning outcomes, with an average N-Gain score of 0.75, categorized as high. In addition, students responded positively to the use of Wordwall, showing increased motivation, engagement, social interaction, and creativity in the learning process. Wordwall proved to be an effective and engaging digital learning tool, helping students better understand historical material through interactive activities. The study concludes that Wordwall is a highly effective medium for teaching SKI and is recommended for broader application in Islamic education.

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1. INTRODUCTION

In the era of globalization and the current development of information technology, the world of education is required to innovate in its teaching methods. Digital transformation has given rise to various technology-based learning media, one of which is Wordwall, which offers a learning model in the form of quizzes, games, and interactive exercises. This media is considered effective in increasing active participation and student motivation, especially among the generation familiar with the use of digital technology (Aeni et al., 2022). Amidst this wave of development, educational institutions, including madrasahs, need to adopt innovative media to support a more engaging and effective teaching and learning process.

The development of digital technology in the last decade has had a significant impact on the world of education. Conventional learning that relied solely on lectures is beginning to shift towards interactive technology-based learning models. One form of this innovation is the use of Wordwall media, a digital platform that allows teachers to create quizzes, games, and interactive activities based on the subject matter. The use of this interactive media is considered capable of increasing student motivation and active participation in the learning process (Ummi et al., 2023).

In the context of Islamic Cultural History (SKI) learning at the Madrasah Tsanawiyah (MTs) level, particularly at MTs YAPDI Medan, several obstacles are still found, including the low interest of students in this subject and the dominance of lecture-based teaching methods that tend to be monotonous. This condition results in low student learning outcomes and a less than optimal understanding of historical material, which is actually

very important for shaping Islamic character and identity. This phenomenon demands the innovation of more engaging and effective teaching methods and media (A'YUN & Kusumawardhani, 2023).

Educators can also enhance their mastery of technology use in developing creative and innovative learning media. Thus, learning will be more meaningful. Meaningful learning is a learning process that is expected by students because they can be directly involved in the learning process. In this case, educators must be able to develop students' reasoning, thinking skills, and self-concept. Educators also need to have a positive mindset, which will lead to creative solutions for developing learning materials and media in a creative, innovative, and engaging manner for students. With this, the learning outcomes achieved will be delivered effectively and of high quality. The quality of education in Indonesia is partly influenced by the use of media. The use of media becomes an important element in achieving learning objectives. This is in line with the opinion of experts (N. M. Putri & Hamimah, 2023) who state that the development of media in the learning process is inseparable from technological advancements. This is intended so that the learning process continues to run according to the needs of the students. The use of creative and innovative learning media needs to be implemented so that the learning objectives can be achieved (Ningsih, 2022).

Learning media is a teaching aid that can serve as a support tool for educators to convey teaching materials, enhance students' creativity, and increase students' attention in the learning process. This is in line with the opinion of (Salsabila et al., 2023) that media enhances students' learning motivation. Students are encouraged to write, speak, and receive more stimulation. As we know, students face many problems. One of them is the low interest and motivation among students, which will greatly affect their academic performance. Therefore, it is necessary for teachers to innovate in the creation of learning media, so that the problems and difficulties currently experienced can be promptly addressed (Rindiantika, 2022).

The results of the observation conducted at MTs Yapdi Medan revealed a problem in the form of a decline in students' interest in learning. This is caused by the influence of the use of learning media by educators. The teaching of Islamic Cultural History (SKI) still largely uses conventional methods, such as lectures and memorization, which impact students' low interest and academic performance. Printed media such as LKPD and PowerPoint without variation have often been used during the learning activities by educators. Things like this make students feel bored during lessons. This boredom causes students to lose interest in participating well in the lessons, so they do not listen to the teacher when explaining the learning material. The problem is caused by the educators' lack of understanding in using technology-based learning media. In practice, educators still lack proficiency in operating IT-based learning media, so they continue to rely on printed media (books or worksheets) and PowerPoint alone. Thus, the implementation of learning remains monotonous and boring for the students.

The urgency to integrate interactive media into SKI learning becomes increasingly important in line with the changing characteristics of Generation Z students who are more responsive to technology. Several studies show that the use of digital-based media, such as Wordwall, can enhance the effectiveness of learning, especially in subjects that involve memorization and conceptual understanding like history (A. E. Putri, 2024). Therefore, research is needed that specifically examines the extent to which Wordwall is effective in improving SKI learning outcomes, especially in madrasahs with unique Islamic curriculum characteristics.

Previous research has proven the effectiveness of Wordwall in enhancing motivation and learning outcomes in various subjects, such as Indonesian Language and Mathematics. Research by (Firmansyah, 2024) found that the use of Wordwall increased students' learning interest by up to 93% compared to 65% in the control group that used conventional methods. However, research on the use of Wordwall in the context of Islamic Cultural History learning, especially at the Madrasah Tsanawiyah level, is still very limited. Until now, studies on the effectiveness of using Wordwall to enhance the understanding of Islamic history material in MTs environments, especially in areas like Medan, have not been extensively conducted. Most research still focuses on general subjects and lacks emphasis on value-based and cultural Islamic education taught in SKI (Khuzaifah, n.d.). Thus, this research is important to fill the gap in the literature while also making a tangible contribution to the innovation of SKI learning in MTs.

Based on that background, this study aims to analyze the effectiveness of using Wordwall media in the learning of Islamic Cultural History at MTs YAPDI Medan. In addition, this study aims to identify the extent to which the use of Wordwall media can improve students' learning outcomes compared to conventional teaching methods. Therefore, the research aims to answer the following question: 1. How effective is the use of WordWall in the learning of Islamic Cultural History? What is the students' perspective on the use of WordWall in SKI learning?

2. RESEARCH METHODS

This research uses a quantitative and qualitative approach (mixed method). Mixed method, which is the combination of quantitative and qualitative methods in one study. The qualitative approach is used to explore and obtain a clear picture of the phenomena observed during the learning process. In this case, the phenomenon is related to the classroom situation and the behavior of students during the learning process (Utami & Mulyani, 2019).

Several experts provide various definitions of mixed-method research. According to Creswell and Clark (2007: 5), mixed-method research is a research design with philosophical assumptions in addition to being an inquiry method. As a methodology, mixed-method research involves philosophical assumptions that guide the direction of data collection and analysis, as well as the integration of qualitative and quantitative research approaches at various phases of the research process (Creswell, 2012).

This research was conducted at MTs Yapdi Medan from April to May, during the even semester of the 2024/2025 academic year. The instruments used in this study include tests, observations, and questionnaires. The observation instrument was used during the learning process, and the test instruments included pretests and posttests. Furthermore, to complement the data obtained from the pretests and posttests, the researcher provided questionnaires to the students.

Data analysis techniques from pretest and posttest in the eighth-grade class at MTs Yapdi Medan, in the learning activities, there are terms pretest and posttest. In this case, according to Purwanto, a pretest is a test given before teaching begins, aimed at determining the extent of students' mastery of the teaching materials to be taught. In this context, the function of the pretest is to see the effectiveness of the teaching. Meanwhile, a posttest is a test given at the end of each teaching unit program. The purpose of the posttest is to determine the extent of students' achievement in relation to the teaching material (knowledge and skills) after undergoing a learning activity.

Meanwhile, according to Syah & Pertwi (2024), pretest activities are routinely conducted by teachers before starting the presentation of new material. The purpose is to identify the students' level of knowledge regarding the material to be presented. Evaluations like this are brief. Meanwhile, the posttest is the opposite of the pretest, which is an evaluation activity conducted by the teacher at the end of each material presentation. The goal is to determine the level of student mastery over the material that has been taught and described in the form of the percentage of total scores for each respondent and the average percentage of pretest and posttest scores. The calculation of the N-gain score uses the normalized N-gain. According to Meltzer in (Utami & Mulyani, 2019), the formula for calculating the normalized N-Gain score is as follows.

$$N - Gain = \frac{Posttest score - pretest score}{total score - pretest score}$$

Table 1. Category N-Gain

Value N-Gain	Category
$G > 0,7$	Hight
$0,3 \leq G \leq 0,7$	Currently
$G < 0,3$	Low

Next, to determine the average score of the questionnaire on the effectiveness of Wordwall media learning on student learning outcomes as follows.

$$P = \frac{F}{A} \times 100\%$$

Note: P = Effectiveness Questionnaire
F = Number of Student Perspectives
A = Total Number of Students

3. RESULT AND ANALYSIS

Based on the data analysis that has been conducted, the results of this study indicate that the use of Wordwall media in the learning of Islamic Cultural History (SKI) at MTs YAPDI Medan has a significant and positive impact on students' learning outcomes. This is evidenced by an average N-Gain score of 0.75, which falls into the high category. These findings indicate that learning with Wordwall media not only significantly enhances material comprehension but also provides a more engaging and interactive learning experience compared to conventional methods such as lectures and rote memorization.

Student responses through the questionnaire also support these findings. The majority of students feel they understand the material better, are more motivated, and are more active during the learning process. Moreover, the social and creativity aspects of the students have also improved, as evidenced by the increased desire of

students to engage in discussions, collaborate, and even create their own quizzes. This is in line with constructivist learning theory, which emphasizes the importance of active engagement and collaboration in the learning process. Wordwall, as an interactive medium, provides a broader space for exploration and participation for students, making learning more meaningful.

From a practical standpoint, the results of this research provide strong recommendations for educators, particularly Islamic Education teachers, to integrate interactive technology into the learning process. The use of Wordwall has proven to be not just a visual aid, but also a pedagogical approach capable of creating a fun, challenging, and meaningful learning atmosphere. Teachers are required not only to master the material but also to be competent in using digital media as part of professionalism and a form of implementing the value of *itqan* (diligence) in education, as recommended in Islamic teachings.

Overall, this research proves that Wordwall is an effective learning medium in improving the quality of SKI learning, both cognitively, affectively, and psychomotorically. Thus, the integration of technology such as Wordwall needs to be part of a sustainable and innovative learning strategy in this digital era. Attached are images that show the steps in creating quizzes using the Wordwall platform. This tutorial is designed to assist educators in integrating technology into the learning process, particularly in the subject of Islamic Cultural History:



Figure 1. Wordwall feature

Figure 2. The process of creating/editing SKI questions



Figure 3. Starting the SKI quiz



Figure 4. SKI Question



Figure 5. Choosing the quiz answer



Figure 6. Total score

Pretest and posttest data analysis is conducted to evaluate the effectiveness of a learning intervention on the improvement of participants' learning outcomes. The measurement of this improvement was conducted using the normalized gain (N-Gain) formula developed by Hake (2002) as a method to assess the efficiency of score improvement from the pretest to the posttest. This formula considers the distance between the initial score and the maximum score, thereby illustrating the relative achievement level of each participant. Data were obtained from 16 respondents with pretest scores ranging from 40 to 80, while the majority of posttest scores were around 90, and one participant achieved the maximum score of 100. These results indicate a consistency in the participants' final achievements, allowing for a focused analysis of the improvements.

From the N-Gain calculations, the highest value obtained was 1.00 and the lowest was 0.50. The highest value was achieved by a participant with a pretest score of 60 and a posttest score of 100, indicating that this participant was able to achieve maximum improvement after the learning process. Conversely, participants with high pretest scores, such as 80, tend to show lower N-Gain values because the available room for improvement is relatively smaller. Most participants showed N-Gain values in the range of 0.66 to 0.83, indicating a significant increase in understanding. These values also indicate that the majority of participants gained substantial benefits from the learning process that was conducted. This can be interpreted as evidence that the interventions or teaching methods applied are fairly effective in improving the academic performance of the participants.

Overall, the average N-Gain value obtained from all respondents is 0.75. Based on the classification proposed by Hake (2002), the average score falls into the "high" category, which means that the learning process has a positive and significant impact on the participants' learning outcomes. These results reflect the success of the learning approach or strategy used, both in terms of content, delivery methods, and participant engagement in the learning process. Thus, it can be concluded that the implementation of this learning has successfully encouraged an optimal increase in participants' cognitive competencies. These findings also imply that a similar approach is worth applying in the context of similar learning or even expanding it to other areas of learning that require intensive understanding enhancement (A.E Putri, 2024).

The use of Wordwall media in SKI learning shows a very strong positive influence on students' cognitive aspects. This is reflected in the statement "I feel I understand the SKI material better after using Wordwall," which was agreed upon by all respondents, with details of 43.75% strongly agreeing and 56.25% agreeing. Meanwhile, only 25% of students found it difficult to understand the material even after using Wordwall, and 75% disagreed with that statement. Other positive statements, such as "Wordwall media makes it easier for me to remember historical events," also showed a 100% agreement rate (25% strongly agree and 75% agree). Additionally, as many as 93.75% of students disagreed that Wordwall did not help them understand the lessons, reinforcing the evidence that this media greatly supports material comprehension. Even in terms of relating the material to personal experiences, 56.25% strongly agreed and 62.5% agreed that they could relate the SKI material to their experiences after playing Wordwall.

In the affective aspect, Wordwall has also been proven to increase students' motivation and interest in learning. As many as 43.75% of students strongly agreed and 56.25% agreed that they felt motivated to learn SKI using Wordwall. Only 18.75% of students agreed that Wordwall made them bored, while 81.25% disagreed. The

statement "I am more enthusiastic about following SKI lessons when using Wordwall" was agreed upon by 100% of respondents (37.5% SS and 62.5% S). When asked about interest, 31.25% agreed that they were not interested, but 68.75% disagreed, indicating that most students still showed interest. Furthermore, 43.75% of the students strongly agreed and 56.25% agreed that Wordwall increased their interest in Islamic history.

In the psychomotor aspect that assesses students' active involvement, the results are also very positive. As many as 37.5% strongly agreed and 62.5% agreed that they actively participated when the teacher used Wordwall. Meanwhile, although 43.75% of students agreed that they felt passive, the majority of 56.25% disagreed, indicating that, in general, Wordwall is capable of increasing student engagement. All students (37.5% strongly agreed and 62.5% agreed) stated that Wordwall encouraged them to try answering SKI questions, and 81.25% stated that they participated in Wordwall games in class. In terms of confidence, 100% of the students felt more confident answering questions after playing Wordwall.

From a social aspect, the use of Wordwall also supports interaction and cooperation among students. As many as 31.25% strongly agree and 68.75% agree that they often discuss with friends while using Wordwall. However, there are still 43.75% who agree that they never collaborate with friends, although the majority, 56.25%, disagree with that statement. In the statement "Wordwall helps me understand my friend's material," 25% strongly agree and 75% agree. Regarding social interaction, 37.5% agree that they experience difficulties, but the majority, 62.5%, disagree. In terms of collaborative learning, 43.75% strongly agree and 56.25% agree that Wordwall encourages them to learn with friends.

Lastly, the aspects of creativity and innovation also showed a positive response. As many as 37.5% strongly agreed and 62.5% agreed that they felt more creative when completing Wordwall challenges. Although 41.25% agreed that Wordwall did not provide opportunities for creative thinking, 68.75% disagreed, indicating that this media still encourages creativity. All students (43.75% strongly agree and 56.25% agree) found new ways to understand SKI material through Wordwall. Only 6.25% agreed that Wordwall did not make learning interesting, while 93.75% disagreed. In terms of initiative, 25% strongly agreed and 75% agreed that this media made them want to create their own SKI quizzes, indicating a drive to innovate and create learning materials independently.

Overall, this data shows that Wordwall is a highly effective learning media, supporting student development in various dimensions: academic understanding, motivation, active participation, social interaction, and creativity. This makes Wordwall an appropriate tool for innovative and enjoyable learning, as evidenced by the research conducted by Firmansyah (2024).

4. CONCLUSION

The research findings indicate that the utilization of Wordwall media has effectively enhanced student learning outcomes in Islamic Cultural History (SKI) at MTs YAPDI Medan. The substantial rise in pretest and posttest scores is demonstrated by an average N-Gain of 0.75, categorizing it as high. This enhancement indicates that Wordwall can effectively promote students' comprehensive knowledge of the subject given. Besides enhancing cognitive dimensions, Wordwall media positively influences the affective, psychomotor, social, and creative facets of students. The questionnaire results reveal that most students exhibit increased motivation, enhanced participation, improved collaboration with peers, and greater encouragement to engage in creative thinking and innovation in their learning. Wordwall facilitates an engaging and dynamic educational environment that effectively promotes the attainment of learning objectives. Consequently, Wordwall media is exceptionally valuable as an alternative new educational tool, especially in the area of SKI. Educators are encouraged to include this technology into the educational process to foster a more engaging, significant, and suitable learning experience for pupils in the digital age. This research significantly contributes to enhancing the quality of Islamic education by utilizing pertinent and effective technology-based learning medium.

Suggestion

Based on the results of this study, it is recommended for future researchers to expand the scope of the study by involving a larger and more diverse sample from various madrasahs or educational levels in order to obtain more generalized results. Additionally, it is important to study the effectiveness of Wordwall media in combination with other learning methods, such as collaborative or project-based learning models, to evaluate the synergistic impact on learning outcomes. Future researchers can also delve deeper into the influence of Wordwall on other non-cognitive aspects such as critical thinking skills, communication, and the religious attitudes of students. The development of more varied evaluation instruments and the integration of other technologies can also be the focus of future research to ensure that digital learning innovations remain relevant and contextual to the needs of contemporary Islamic education.

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