

The Utilization of Digital Media to Increase Understanding of Historical Elements in the Merdeka Curriculum

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Abstrak

Penelitian ini bertujuan untuk meningkatkan pemahaman unsur sejarah pada siswa kelas VI SD Negeri 4 Mogolaing melalui pemanfaatan media digital dalam kerangka Kurikulum Merdeka. Latar belakang penelitian ini didasarkan pada rendahnya pemahaman siswa terhadap materi sejarah yang bersifat abstrak, sementara pendekatan pembelajaran yang digunakan masih bersifat konvensional. Metode penelitian yang digunakan adalah Penelitian Tindakan Kelas (PTK) dengan dua siklus, masing-masing terdiri dari tahap perencanaan, pelaksanaan, observasi, dan refleksi. Media digital yang diterapkan meliputi video animasi sejarah dan kuis interaktif berbasis game. Subjek penelitian adalah 25 siswa kelas VI SD Negeri 4 Mogolaing pada semester genap tahun ajaran 2025/2026. Instrumen pengumpulan data menggunakan lembar observasi, tes hasil belajar (pretest dan posttest), serta dokumentasi. Hasil penelitian menunjukkan peningkatan rata-rata nilai siswa dari 58,4 pada prasiklus menjadi 71,6 pada Siklus I dan 83,2 pada Siklus II, dengan ketuntasan klasikal mencapai 88% pada akhir Siklus II. Media digital terbukti mampu meningkatkan motivasi, partisipasi aktif, dan pemahaman siswa terhadap unsur-unsur sejarah sesuai capaian pembelajaran Kurikulum Merdeka.

Kata kunci: media digital, pemahaman sejarah, kurikulum merdeka.

Abstract

This study aims to improve students' understanding of historical elements in Grade VI of SD Negeri 4 Mogolaing through the use of digital media within the framework of the Merdeka Curriculum. The background of this research is based on the low level of students' understanding of abstract historical content, while the learning approaches used are still conventional. The research method employed was Classroom Action Research (CAR) conducted in two cycles, each consisting of planning, implementation, observation, and reflection stages. The digital media applied included animated historical videos and game-based interactive quizzes. The research subjects were 25 students of grade VI at SD Negeri 4 Mogolaing in the even semester of the 2025/2026 academic year. Data collection instruments included observation sheets, learning outcome tests (pretest and posttest), and documentation. The results showed an increase in the average student score from 58.4 in the pre-cycle to 71.6 in Cycle I and 83.2 in Cycle II, with classical completeness reaching 88% at the end of Cycle II. Digital media has been proven to enhance students' motivation, active participation, and understanding of historical elements in accordance with the learning outcomes of the Merdeka Curriculum.

Keywords: digital media, historical understanding, merdeka curriculum.

INTRODUCTION

The development of digital technology has brought significant changes in the world of education, especially in terms of the use of more innovative, interactive, and digital-based learning media. The Alpha

Generation Era, which is in the midst of technological currents, requires teachers to be able to adapt learning approaches to the characteristics of students who tend to be visual, interactive, and respond positively to digital stimuli (Aminah,

2026). On the other hand, the Merdeka Curriculum as the latest education policy emphasizes meaningful, project-based learning, and encourages students' freedom of thinking in understanding every subject matter, including history.

Subjects that contain elements of history at the elementary school level, especially in the content of Natural and Social Sciences (IPAS) and Pancasila Education, have a crucial role in shaping students' national identity and national insight from an early age. As expressed by Syamsuridhawati and Bahri (2025), history learning in the Merdeka Curriculum presents a more flexible approach and is based on critical understanding, not just memorizing facts and dates. But in reality, history learning in many elementary schools is still dominated by conventional lecture methods that make students passive and less motivated.

A similar condition was found at SD Negeri 4 Mogolaing. Based on initial observations made by researchers, data was obtained that out of 25 grade VI students, only 10 students (40%) achieved the Minimum Completeness Criteria (KKM) in the assessment of historical materials. The average class score only reached 58.4, far below the KKM set at 70. Students seem to have difficulty understanding the concept of historical elements such as chronology of events, local and national historical figures, and causality between events. Teachers still rely on textbooks

and lecture methods without adequate supporting media.

This problem encourages researchers to look for innovative solutions through the use of digital media. Digital media such as animated videos and game-based quizzes (Game-based learning) has been empirically proven to be able to increase students' understanding, motivation, and active participation in a variety of learning contexts (Damayanti & Wibawa, 2023; Maura et al., 2025; Pradana, 2025). Interesting visualization through animation allows abstract concepts in history such as the flow of independence events or the lives of heroes to become more concrete and easy to understand by elementary school students who are cognitively at the concrete operational stage according to Piaget's theory (Marinda, 2020).

Research on classroom actions with digital media in the context of history in elementary schools has been conducted by several researchers before. Syarifah et al. (2024) found that the use of animated videos and games Educaplay able to significantly improve student learning outcomes in Pancasila history material. Rahmawati and Rachmadyanti (2020) also proved that the visual timeline media developed for historical event material received a very good response from elementary school students. However, these studies have not fully contextualized the use of digital media within the

framework of the Merdeka Curriculum with a focus on historical elements in grade VI.

Starting from the above background, this study formulates the following problems: Can the use of digital media increase the understanding of historical elements in the Merdeka Curriculum in grade VI students of SD Negeri 4 Mogolaing? The purpose of this research is to describe and prove the improvement of understanding of historical elements through the use of digital media in grade VI students of SD Negeri 4 Mogolaing within the framework of the Merdeka Curriculum.

METHODS

This study uses the Classroom Action Research (CAR) approach. CAR is a research that actively involves the role of teachers and students in various actions to solve real learning problems in the classroom (Elan et al., 2022; Maura et al., 2025). The CAR model used adopts the Kemmis and Taggart spiral models (2014) which consists of four stages in each cycle, namely: (1) planning, (2) implementation of actions, (3) observation, and (4) reflection.

The research was carried out at SD Negeri 4 Mogolaing, Kotamobagu City, North Sulawesi, in the even semester of the 2025/2026 school year. The subjects of the study were all 25 students of grade VI, consisting of 13 male students and 12

female students. The selection of subjects was based on the identification of problems with low understanding of historical elements found through initial observation and diagnostic test results.

Research Procedure

The research was carried out in two cycles. Each cycle consists of 3 meetings with a time allocation of 2x35 minutes per meeting. In cycle I, the digital media used is a 5-7 minute historical animation video that displays historical figures and events visually and chronologically. In Cycle II, digital media is combined with interactive quizzes based on digital platforms (Wayground and Wordwall) to strengthen understanding through an approach Game-based learning. Wayground is a web-based gamification platform that has been proven to significantly increase students' active participation, motivation, and academic achievement compared to conventional methods (Ilyas et al., 2025). The selection of a 5-7 minute video duration is based on the findings of Yulizar et al. (2024) in Pradana (2025) that this duration is the optimal duration to maintain the focus of elementary school students.

Data Collection Techniques

Data collection is carried out through three main instruments. First, learning outcome tests in the form of pretest and posttest to measure the improvement of

students' understanding of historical elements in each cycle. The test is designed in the form of multiple-choice questions and a brief description that refers to the Learning Outcomes of the Merdeka Curriculum (BSKAP, 2025). Second, observation sheets are used to observe student activities and participation during learning. The observation instruments in CAR are designed so that teachers can play a dual role as teachers as well as researchers without interfering with the learning process (Elan et al., 2022). Third, documentation in the form of photos and field notes to record the overall learning process.

Data Analysis Techniques

The data analysis in this study uses quantitative and qualitative approaches. Quantitative analysis was carried out to measure the improvement of student learning outcomes through the calculation of average scores and the percentage of classical completeness. Students are declared complete if they reach a score of ≥ 70 (KKM). Classical completeness is considered to be achieved if $\geq 80\%$ of students achieve KKM. Qualitative analysis is used to describe the improvement of the learning process based on the results of observation and reflection in each cycle, with stages of data reduction, data presentation, and conclusion drawing (Nurnaningsih & Malik, 2024). The

indicator of the success of the action is set when the average class score reaches ≥ 75 and the classical completeness $\geq 80\%$.

RESULTS AND DISCUSSION

Pre-cycle conditions

Before the action was carried out, the researcher conducted initial observations and diagnostic tests to photograph the initial condition of understanding the historical elements of grade VI students of SD Negeri 4 Mogolaing. The results of the pre-cycle test showed an average class score of 58.4 with only 10 students (40%) achieving the KKM. Most students have difficulty understanding the chronology of events, identifying historical figures and their roles, and relating historical events to the present context. Based on the observation results, learning is still dominated by the one-way lecture method, there is no adequate visual media, and students seem less enthusiastic and easily lose attention.

This condition is in line with Aminah's findings (2026) which explains that the generation Alpha tend to have a short attention span if learning does not involve digital and interactive elements. In addition, Febriani et al. (2025) emphasizing that the use of undirected gadgets can actually reduce learning concentration, so a strategy is needed that is able to divert the potential of technology into a productive and focused means of learning.

Cycle I: Application of Historical Animation Video

In Cycle I, the researcher applied historical animation video media that displayed material about national heroes and the events of the proclamation of Indonesian independence visually, narratively, and chronologically. The videos were selected from the educational platform and curated based on their suitability with the Learning Outcomes of the Merdeka Curriculum phase C (grades V-VI SD). The teacher acts as a facilitator who guides students to observe videos, identify historical elements, and discuss in groups.

The results of the final test of Cycle I showed an increase in the average grade of the class from 58.4 to 71.6. The number of students who reached the KKM increased from 10 students (40%) to 17 students (68%). Despite the improvement, 68% of classical completeness has not met the established success indicators ($\geq 80\%$). From the observation results, it appears that students are more enthusiastic and active in asking questions than the pre-normal conditions. However, some students are still passive and do not fully understand the cause-and-effect relationship between historical events.

Table 1. Learning Outcomes of Pre-Cycle and Cycle I Students

Aspects	Precycle	Cycle I
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Average Score	58.4	71.6
Highest Score	75	88
Lowest Score	35	50
Completed Students (≥ 70)	10 (40%)	17 (68%)
Students are not complete	15 (60%)	8 (32%)

This finding is relevant to the results of Maura et al. (2025) who found that the application of animated videos in science subjects in grade VI increased learning interest from 47.9% (pre-cycle) to 70.83% (cycle I). The improvement in Cycle I in this study confirms that animated video media is able to create a more interesting and interactive learning atmosphere, but needs to be combined with advanced strategies to achieve a deeper understanding.

Based on the results of Cycle I reflection, several improvement notes were found for Cycle II, namely: (1) it is necessary to add interactive activities after watching videos to ensure that each student is actively involved; (2) it is necessary to strengthen understanding through practice questions that are packaged in an attractive way; and (3) teachers need to provide more structured scaffolding for students who have not completed it.

Cycle II: Combination of Animated Videos and Game-Based Interactive Quizzes

In Cycle II, digital media was developed by combining animated videos and game-based interactive quizzes through *the* Wayground and Wordwall platforms. A game-based learning approach is applied to strengthen students' understanding in a fun and competitive way. The material studied includes elements of North Sulawesi's local history and regional warrior figures in the national context. Students are divided into small groups (4-5 people) and compete to answer digitally-based questions, which directly encourages the active involvement of each individual.

The results of the final test of Cycle II showed a significant improvement. The grade point average increased from 71.6 (Cycle I) to 83.2 (Cycle II). The number of students who achieved KKM increased from 17 students (68%) to 22 students (88%), so that the classical completeness of 88% has exceeded the set success indicators ($\geq 80\%$). All students seemed active and enthusiastic during the interactive quiz session, with the participation rate reaching almost 100%.

Table 2. Student Learning Outcomes of Cycle I and Cycle II

Aspects	Cycle I	Cycle II
Average Score	71.6	83.2
Highest Score	88	98
Lowest Score	50	62
Completed Students (≥ 70)	17 (68%)	22 (88%)
Students are not complete	8 (32%)	3 (12%)

The results of this study show that the use of digital media consistently improves the understanding of historical elements of grade VI students of SD Negeri 4 Mogolaing in two cycles. This increase can be explained through several mechanisms supported by theories and empirical findings from previous studies.

First, animated video media is able to transform abstract historical concepts into concrete and easy-to-understand visual representations. This is in line with Jean Piaget's theory of cognitive development which states that elementary school-aged children (7-11 years old) are at a concrete operational stage, where they are more likely to understand information through concrete objects and direct experience than mere verbal explanations (Marinda, 2020). Historical animation videos facilitate this visualization by presenting characters, time settings, and chronologies of events in real life in front of students.

Second, the combination of animated videos with game-based interactive quizzes in Cycle II was proven to optimize students' active engagement. Supu et al. (2025) in his research on Game-based learning with Quizwhiz Cards found that 81.82% of students achieved the high motivation category after the implementation of GBL, compared to only 22.73% in the previous cycle. These results are parallel to the findings of this study where student active participation

increased drastically in Cycle II thanks to gamification elements that created a competitive and fun atmosphere.

Third, the use of digital media is in line with the spirit of the Merdeka Curriculum which emphasizes meaningful, experiential, and student-centered learning. Syamsuridhawati and Bahri (2025) emphasized that the Merdeka Curriculum provides space for teachers to innovate learning methods according to the characteristics of students, including through the integration of digital technology. Learning Outcomes of phase C in the Merdeka Curriculum (BSKAP, 2025) Requires students to be able to identify, analyze, and relate historical elements to current life, a competency that is easier to achieve through visual and interactive rich media.

Fourth, the results of this study strengthen Pradana's findings (2025) which states that animated videos with attractive designs, the use of colors according to children's cognitive preferences, and optimal duration (5-7 minutes) are effective in improving students' understanding of abstract concepts. Damayanti and Wibawa Research (2023) also proves that animated videos are based on Storytelling significantly improve the science literacy of grade V students, which shows similar potential to be applied to the context of history learning.

Nonetheless, the study also identified some limitations. Three students (12%) who have not reached the KKM at the end of Cycle II require additional attention and personal intervention. In addition, reliance on technological infrastructure such as projectors, internet connections, and digital devices can be an obstacle in schools with limited facilities. However, these obstacles can be anticipated with careful technical planning and support from the school.

Fifth, these findings are also reinforced by several relevant comparative studies. Armiyati and Djono (2023) analyzed the comparison of history subjects between the 2013 Curriculum and the Merdeka Curriculum and found that the Merdeka Curriculum gives greater autonomy to teachers in designing learning based on student needs, including through the use of digital media. Meanwhile, Astandra (2023) proving in the context of CAR in elementary school that animated videos are able to increase learning completeness from 30% (cycle I) to 100% (cycle II), confirming the effectiveness of this media even in subjects that are classified as difficult. The use of gamification platforms such as Wordwall applied in Cycle II, this research has also proven to be effective in various elementary learning contexts, as shown by Hadi et al. (2024) in the analysis of usage Wordwall in science learning and Erdiana

et al. (2024) in learning Indonesian. Kurniawan and Muhibbin (2024) also proves that Android-based digital media in grade VI of elementary school is able to significantly improve the learning outcomes of Pancasila Education, strengthening the belief that the integration of digital technology in the upper class of elementary school is a valid and measurable strategy.

CONCLUSION

Based on the results of research that has been carried out in two cycles, it can be concluded that the use of digital media effectively increases the understanding of historical elements in the Merdeka Curriculum in grade VI students of SD Negeri 4 Mogolaing. This is evidenced by the increase in the average grade point average from 58.4 (pre-class) to 71.6 (Cycle I) and 83.2 (Cycle II), as well as classical completeness which increased from 40% to 68% and finally reached 88% in Cycle II. The use of historical animation videos in Cycle I successfully improved students' visualization and learning motivation, while the combination with game-based interactive quizzes in Cycle II further strengthened students' active engagement and deep understanding of historical elements.

Digital media has proven to be able to transform history learning that was originally abstract and monotonous into a concrete, interactive, and fun learning

experience in line with the principles of the Merdeka Curriculum and the cognitive characteristics of elementary school students. Thus, this study recommends elementary school teachers to integrate digital media in a planned and systematic manner in history learning, as well as ensure adequate technological infrastructure support so that the benefits can be optimally felt by all students.

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