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Effect of Using Augmented Reality-Assisted Learning Media on Elementary School Students' Learning Motivation in Social Studies Learning

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Abstract: Despite the rapid integration of immersive technologies in STEM disciplines, the pedagogical potential of Augmented Reality (AR) in primary humanities education, particularly social studies, remains significantly under-researched. Social studies concepts are frequently perceived by young learners as abstract and monotonous, leading to a critical decline in academic engagement. This study aims to address this gap by examining the empirical effect of AR-assisted learning media on the learning motivation of elementary school students during social studies instruction. Employing a quantitative approach with a quasi-experimental design, this research involved 76 third-grade students from SD Negeri Anyar 1, purposively divided into an experimental class (n = 38, utilizing AR-integrated media) and a control class (n = 38, utilizing conventional instructional methods). Data on student motivation were rigorously collected through structured observation techniques and analyzed using both descriptive statistics and inferential parametric tests, including independent and paired-sample t-tests. The findings demonstrated that the integration of AR-assisted learning media exerts a highly positive and statistically significant effect on students' learning motivation. Descriptive analysis indicated that the experimental group achieved an exceptional post-test motivation score (M = 89.46, falling into the very high category), whereas the control group remained substantially lower (M = 60.15, categorized as low). Inferential statistical testing confirmed this disparity to be highly significant ($p < 0.001$). These results suggest that AR effectively bridges the gap between abstract historical or geographical concepts and the cognitive processing of young learners by providing interactive, three-dimensional visualizations. Consequently, this study underscores that AR-assisted media serves as a powerful pedagogical intervention to overcome low student engagement, offering valuable insights for educators and curriculum designers aiming to modernize primary education.

Keywords: Augmented reality, learning motivation, social studies learning, elementary school, pedagogical technology.

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INTRODUCTION

Learning motivation has long been recognized as one of the most influential factors affecting students' academic engagement, persistence, and achievement across educational settings. In elementary education, motivation plays an even more critical role because students are still developing their attitudes toward learning and building foundational cognitive and social competencies. Students who demonstrate high learning motivation tend to participate actively in classroom activities, show greater curiosity toward learning materials, and persist when facing academic challenges. Conversely, low motivation often results in passive learning behaviors, reduced participation, and weaker academic outcomes (Schunk & DiBenedetto, 2020).

Within the context of elementary social studies education, maintaining students' learning motivation remains a persistent challenge. Social studies subjects frequently involve abstract concepts related to society, culture, geography, history, and citizenship that may be difficult for young learners to understand through conventional teaching approaches. When instructional practices rely heavily on lectures and textbook-based explanations, students often perceive the learning process as monotonous and disconnected from their everyday experiences. Such conditions may reduce students' interest and willingness to engage actively in learning activities (Fitriani et al., 2022).

Educational researchers have consistently emphasized that meaningful learning occurs when students are actively involved in constructing knowledge through interactions with learning materials and their environment. According to constructivist learning theory, students learn more effectively when they are provided with opportunities to explore, investigate, and visualize concepts directly rather than merely receiving information passively (Piaget, 1972; Vygotsky, 1978). Therefore, the selection of appropriate learning media becomes an essential component in fostering students' motivation and engagement during the learning process.

The rapid development of digital technology has transformed educational practices worldwide and created opportunities for innovative learning experiences. Schools are increasingly encouraged to integrate technology into classroom instruction to improve learning quality and respond to the demands of twenty-first-century education. Digital learning media are considered capable of enhancing students' interest, supporting interactive learning environments, and facilitating deeper understanding of instructional content (Bond et al., 2020). Consequently, technology integration has become a strategic approach to addressing motivational issues among elementary school students.

Among various educational technologies, Augmented Reality (AR) has attracted considerable attention from researchers and practitioners due to its ability to combine virtual objects with real-world environments in real time. Augmented Reality enables learners to interact with three-dimensional digital content while maintaining awareness of their physical surroundings. This unique characteristic creates immersive learning experiences that can make abstract concepts more concrete and understandable for young learners (Azuma, 1997; Ibáñez & Delgado-Kloos, 2018).

The educational potential of Augmented Reality is particularly relevant to elementary education because children at this developmental stage tend to learn more effectively through visual, concrete, and interactive experiences. According to cognitive development theory, elementary school students are generally in the concrete operational stage, where learning is facilitated by tangible representations and direct experiences (Piaget, 1972). Augmented Reality provides opportunities to visualize concepts that are otherwise difficult to observe directly, thereby supporting students' cognitive development and learning engagement.

Recent studies have demonstrated that Augmented Reality can improve various educational outcomes, including academic achievement, conceptual understanding, learning engagement, and student motivation. The immersive and interactive features of AR allow students to explore learning materials in ways that traditional instructional

media cannot provide. As a result, students often exhibit higher levels of curiosity, attention, and enthusiasm during learning activities involving AR technology (Akçayır & Akçayır, 2017).

The relationship between instructional media and learning motivation can also be explained through the ARCS Motivation Model proposed by Keller (2010). According to this framework, effective instructional design should attract learners' attention, establish relevance, build confidence, and provide satisfaction. Augmented Reality possesses characteristics that align closely with these motivational dimensions because it introduces novelty, encourages active participation, and provides engaging visual experiences. Consequently, AR-based learning environments may contribute significantly to enhancing students' motivation.

In social studies education, visualization is particularly important because many learning topics involve places, historical events, social phenomena, and cultural elements that cannot be directly observed by students. Traditional instructional methods often fail to provide meaningful representations of these concepts, resulting in reduced student interest and engagement. Augmented Reality offers a promising solution by enabling students to visualize and interact with learning content in three-dimensional formats, thereby making learning experiences more authentic and meaningful (Bacca et al., 2014).

Several empirical studies have reported positive effects of Augmented Reality on students' motivation and learning outcomes. For example, Akçayır and Akçayır (2017) found that AR-based learning environments increase students' attention and motivation while supporting deeper conceptual understanding. Similarly, Garzón et al. (2019) concluded that Augmented Reality contributes positively to affective learning outcomes, particularly motivation and engagement. These findings suggest that AR has considerable potential to improve learning experiences across educational levels and subject areas.

The integration of Augmented Reality into elementary social studies instruction is also aligned with contemporary educational paradigms emphasizing student-centered learning. Student-centered approaches encourage active participation, exploration, and meaningful interaction with learning materials. Through AR technology, students become active participants in the learning process rather than passive recipients of information. This shift may contribute to increased intrinsic motivation and greater ownership of learning activities (Ryan & Deci, 2020).

Motivation is widely recognized as a multidimensional construct encompassing students' interest, attention, persistence, confidence, and willingness to engage in learning tasks. According to Self-Determination Theory, students are more motivated when learning experiences satisfy their needs for competence, autonomy, and relatedness (Ryan & Deci, 2020). Augmented Reality may support these psychological needs by providing interactive learning experiences that allow students to explore content independently while experiencing a sense of achievement.

The growing interest in Augmented Reality within educational research has generated substantial evidence regarding its effectiveness. However, much of the existing literature focuses on science, mathematics, and language learning contexts. Comparatively fewer studies have investigated the application of AR in elementary social studies education, particularly in developing countries where technology integration remains uneven across schools (Garzón et al., 2020). This situation indicates the need for further empirical investigation.

In Indonesia, efforts to integrate digital technology into elementary education have increased significantly in recent years. Government policies and educational reforms encourage teachers to utilize innovative learning technologies to improve instructional quality and student outcomes. Nevertheless, classroom implementation often remains limited due to insufficient technological resources, inadequate teacher training, and a lack of empirical evidence regarding effective instructional practices (Mulyani et al., 2023). Consequently, research examining the effectiveness of specific technologies such as Augmented Reality remains highly relevant.

Observations conducted in elementary school classrooms indicate that many students still exhibit low learning motivation during social studies lessons. Students frequently demonstrate limited participation, low enthusiasm, and reduced attention when learning activities rely predominantly on conventional instructional approaches. These challenges highlight the necessity of identifying innovative learning strategies capable of creating more engaging and motivating learning environments.

Augmented Reality has the potential to address these challenges by transforming passive learning experiences into interactive and immersive educational activities. Through AR-assisted learning media, students can visualize social studies content in dynamic and meaningful ways, enabling them to connect classroom learning with real-world contexts. Such experiences may foster curiosity, increase engagement, and ultimately improve learning motivation.

The theoretical foundation supporting the use of Augmented Reality in education is further reinforced by multimedia learning theory. Mayer (2021) argues that learning is enhanced when information is presented through multiple channels, including verbal and visual representations. Augmented Reality integrates text, images, animations, and interactive elements into a unified learning experience, potentially facilitating more effective cognitive processing and higher learner engagement.

Furthermore, experiential learning theory suggests that students learn more effectively when they actively interact with learning materials and reflect on their experiences (Kolb, 2015). AR-assisted learning environments provide opportunities for experiential learning by enabling students to manipulate virtual objects, observe dynamic phenomena, and engage directly with instructional content. These experiences may contribute positively to both cognitive and motivational outcomes.

Despite the promising potential of Augmented Reality, empirical evidence regarding its effectiveness in enhancing elementary school students' motivation in social studies learning remains limited. Existing studies often focus on academic achievement or conceptual understanding, while motivation receives comparatively less attention. Given the crucial role of motivation in determining learning success, further research is needed to investigate how AR-assisted learning media influence students' motivational development.

Moreover, contextual factors such as educational level, subject matter, classroom characteristics, and cultural environments may affect the effectiveness of technology-based learning interventions. Therefore, findings from previous studies cannot be generalized automatically across different educational contexts. Research conducted in Indonesian elementary schools can contribute valuable insights regarding the applicability and effectiveness of Augmented Reality in local educational settings.

Based on the aforementioned considerations, investigating the effect of Augmented Reality-assisted learning media on elementary school students' learning motivation in social studies learning is both theoretically and practically significant. Theoretically, this study contributes to the growing body of literature on educational technology and student motivation. Practically, the findings may provide teachers, school administrators, and policymakers with empirical evidence regarding the potential of Augmented Reality as an instructional innovation capable of enhancing students' motivation and improving the quality of social studies learning in elementary schools.

METHODS

Research Design

This study employed a quantitative approach with a quasi-experimental design. The aim was to determine the effect of using Augmented Reality (AR)-assisted learning media on elementary school students' learning motivation in social studies learning. A quasi-experimental design was chosen because intact classes were used in the school setting, and it was not possible to randomly assign individual students to experimental and

control groups (Campbell & Stanley, 2015; Fraenkel, Wallen, & Hyun, 2019). The design used in this study was the Nonequivalent Control Group Design, which is one of the most common quasi-experimental designs (Creswell, 2014). The research design is illustrated in Figure 1.

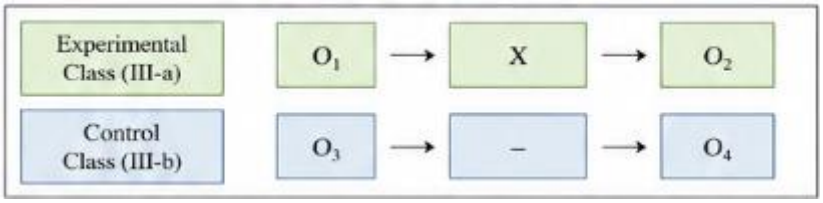

Figure 1. Nonequivalent Control Group Design

Note.
O1 : Pretest of learning motivation in the experimental class
X : Treatment (learning using AR-assisted media)
O2 : Posttest of learning motivation in the experimental class
O3 : Pretest of learning motivation in the control class
— : Learning using conventional media
O4 : Posttest of learning motivation in the control class

In this design, both groups were given a pretest to measure the initial level of learning motivation. The experimental group then received treatment in the form of learning using AR-assisted media, while the control group received conventional learning media commonly used by the teacher. After the learning activities were completed, both groups were given a posttest to measure the level of learning motivation after the treatment. The difference between the posttest scores of the two groups was analyzed to determine the effect of the treatment (Creswell, 2014; Fraenkel et al., 2019).

Research Setting and Participants

The research was conducted at SD Negeri Anyar 1, Kecamatan Anyar, Kabupaten Serang, Banten, Indonesia. The population of this study consisted of all third-grade students in the academic year 2023/2024. Two intact classes were selected as research samples using the purposive sampling technique based on the consideration that both classes had relatively similar characteristics in terms of academic ability, age, and learning environment.
Class III-a was assigned as the experimental class consisting of 38 students (20 boys and 18 girls), while Class III-b was assigned as the control class consisting of 38 students (19 boys and 19 girls). The demographic characteristics of the research participants are presented in Table 1.

Table 1. Demographic Characteristics of Research Participants

Group	Number of Students	Gender		Mean Age (years)	Range of Age (years)	Previous Semester Social Studies Score (M ± SD)
		Male (n)	Female (n)			
Experimental Class (III-a)	38	20	18	8.65	8–9	75.18 ± 6.32
Control Class (III-b)	38	19	19	8.58	8–9	74.21 ± 6.58

Note. M = mean; SD = standard deviation.

Based on Table 1, the two classes had relatively similar characteristics in terms of age and previous social studies achievement, indicating that both groups were comparable prior to the treatment.

Research Instrument

The instrument used in this study was a learning motivation observation sheet. This instrument was developed based on indicators of learning motivation adapted from Keller's ARCS model (2010) and Self-Determination Theory (Ryan & Deci, 2020), which were operationalized into observable behaviors in the classroom. The indicators consisted of attention, relevance, confidence, satisfaction, interest, persistence, active participation, and task completion.

The instrument consisted of 32 statement items with a four-point Likert scale, namely: 4 = Always, 3 = Often, 2 = Sometimes, and 1 = Never. The higher the score, the higher the level of students' learning motivation.

Before being used in the study, the instrument was validated by three experts in the fields of elementary education, instructional technology, and educational measurement. Content validity was analyzed using the Aiken's V formula (Aiken, 1985):

$$V = \frac{\sum s}{n(c-1)}$$

where:
s = r – lo
r = rating given by the validator
lo = the lowest rating score (1)
n = number of validators
c = highest score on the rating scale (4)

The instrument is considered valid if the Aiken's V value is ≥ 0.70 (Polit & Beck, 2017). The reliability test was conducted using Cronbach's Alpha formula:

$$\alpha = \left(\frac{k}{k-1}\right)\left(1 - \frac{\sum \sigma_i^2}{\sigma_t^2}\right)$$

where:
k = number of items
σi^2 = variance of each item
σt^2 = total variance of the test scores

Table 2. Interpretation of Reliability Coefficient (Cronbach's Alpha)

Cronbach's Alpha (α)	Category
α ≥ 0.90	Excellent
0.80 ≤ α < 0.90	Good
0.70 ≤ α < 0.80	Acceptable
0.60 ≤ α < 0.70	Questionable
α < 0.60	Poor

Procedure

The research was carried out in several stages: (1) preparation stage (development and validation of instruments and learning media), (2) implementation stage (pretest, treatment, and posttest), and (3) data analysis stage. The treatment was carried out in four meetings over two weeks. The experimental class learned social studies using AR-assisted learning media designed through the Assemblr EDU application, which presented 3D objects related to social studies topics such as cultural heritage, maps, and community activities. In contrast, the control class received learning using conventional media in the form of textbooks, pictures, and teacher explanations without AR. Both classes were taught by the same teacher to minimize teacher effect bias.

RESULTS

The results of this study are presented in two major stages. The first stage involves descriptive statistical analysis to examine changes in students' learning motivation before and after the implementation of Augmented Reality-assisted learning media. The second stage involves inferential statistical analysis, including prerequisite testing and hypothesis testing, to determine whether the observed differences are statistically significant.

Prior to treatment, both the experimental and control groups were administered a pretest to identify their initial level of learning motivation in social studies learning. Following the intervention, a posttest was conducted to measure students' learning motivation after participation in the learning process. The experimental class received instruction using Augmented Reality-assisted learning media, whereas the control class received conventional instruction using textbooks, pictures, and teacher explanations.

The descriptive statistical analysis was conducted to provide an overview of the distribution of learning motivation scores obtained by students in both groups. The results are presented in Table 3.

Table 3. Descriptive Statistics of Students' Learning Motivation Scores

Group	N	Pretest Mean	Category	Posttest Mean	Category	Gain
Experimental Class	38	58.42	Low	89.46	Very High	31.04
Control Class	38	57.89	Low	60.15	Low	2.26

The data presented in Table 3 indicate that both groups initially demonstrated relatively similar levels of learning motivation. The average pretest score of the experimental class was 58.42, while the control class obtained an average score of 57.89. Based on the predetermined categorization criteria, both scores were classified within the low motivation category.

The similarity of pretest scores suggests that the two groups possessed comparable motivational characteristics prior to the implementation of the treatment. This condition is important because it indicates that the groups began the experiment from relatively equivalent baseline conditions.

Following the intervention, substantial differences emerged between the two groups. The experimental class achieved a posttest mean score of 89.46, whereas the control class obtained a mean score of 60.15.

The posttest score of 89.46 places the experimental class within the very high motivation category. This finding indicates that students who participated in social studies learning using Augmented Reality-assisted learning media demonstrated exceptionally strong motivation toward learning activities.

In contrast, the control class remained within the low motivation category despite experiencing a slight increase in the average score. The increase from 57.89 to 60.15 suggests that conventional learning methods provided only limited improvement in students' motivation.

The gain score analysis further reinforces these findings. The experimental class achieved a gain of 31.04 points, while the control class experienced a gain of only 2.26 points. The substantial difference in gain scores demonstrates that the intervention contributed meaningfully to the enhancement of students' learning motivation. To verify the assumptions required for parametric statistical testing, prerequisite analyses were conducted, including normality and homogeneity tests. The normality test was performed using the Shapiro–Wilk procedure because the sample size of each group was fewer than fifty participants. The results are presented in Table 4.

Table 4. Normality Test Results (Shapiro–Wilk)

Data	Sig. Value	α	Decision
Experimental Pretest	0.176	0.05	Normal
Experimental Posttest	0.081	0.05	Normal
Control Pretest	0.214	0.05	Normal
Control Posttest	0.097	0.05	Normal

The results indicate that all significance values exceeded the alpha level of 0.05. Therefore, all datasets were normally distributed. The normal distribution of the data indicates that the motivational scores obtained from both classes satisfy one of the primary assumptions required for the application of parametric statistical tests.

Since the normality assumption was fulfilled, the analysis proceeded to the homogeneity test. The homogeneity test was conducted using Levene's Test to determine whether the variances of the two groups were statistically equal. The results are presented in Table 5.

Table 5. Homogeneity Test Results

Variable	Levene Statistic	Sig. Value	α	Decision
Learning Motivation	1.247	0.268	0.05	Homogeneous

The significance value obtained from Levene's Test was 0.268, which is greater than the alpha value of 0.05. These findings indicate that the variances of the experimental and control groups were homogeneous.

The fulfillment of both normality and homogeneity assumptions confirms that parametric statistical testing can be performed appropriately. After satisfying the prerequisite assumptions, hypothesis testing was conducted using independent-samples t-test and paired-samples t-test procedures.

The independent-samples t-test was employed to compare posttest motivation scores between the experimental and control groups. The results are presented in Table 6.

Table 6. Independent Samples t-Test Results

Variable	t-value	df	Sig. (2-tailed)	α	Decision
Posttest Motivation Score	14.872	74	0.000	0.05	Significant

The significance value obtained from the independent-samples t-test was 0.000, which is lower than the alpha level of 0.05. This result indicates a statistically significant difference between the posttest motivation scores of the experimental and control groups. The significantly higher posttest mean score obtained by the experimental class confirms that Augmented Reality-assisted learning media produced stronger motivational outcomes than conventional learning approaches.

To examine changes in motivation within each group, paired-samples t-tests were subsequently conducted. The results of the paired-samples t-test for the experimental class are presented in Table 7.

Table 7. Paired Samples t-Test Results for Experimental Class

Comparison	t-value	df	Sig. (2-tailed)	α	Decision
Pretest–Posttest	-18.563	37	0.000	0.05	Significant

The significance value of 0.000 indicates a significant improvement in students' learning motivation after exposure to Augmented Reality-assisted learning media. The magnitude of the observed difference suggests that the intervention generated substantial motivational benefits. The paired-samples t-test results for the control class are presented in Table 8.

Table 8. Paired Samples t-Test Results for Control Class

Comparison	t-value	df	Sig. (2-tailed)	α	Decision
Pretest–Posttest	-1.924	37	0.062	0.05	Not Significant

The significance value of 0.062 exceeds the alpha level of 0.05, indicating that the increase in motivation observed in the control class was not statistically significant. Therefore, conventional learning approaches did not produce meaningful improvements in students' learning motivation. The results demonstrate that Augmented Reality-assisted learning media significantly improved elementary school students' learning motivation in social studies learning. The findings support the research hypothesis stating that the use of Augmented Reality-assisted learning media positively influences students' motivation.

DISCUSSION

The findings of this study demonstrate that Augmented Reality-assisted learning media significantly enhance elementary school students' learning motivation in social studies learning. The substantial increase in motivation scores observed among students in the experimental group indicates that integrating immersive technology into classroom instruction can create more engaging and meaningful learning experiences. One of the most important findings is the dramatic increase in the average motivation score of the experimental class from 58.42 to 89.46. This improvement suggests that AR technology successfully transformed students from passive recipients of information into active participants in the learning process.

The results support the fundamental assumptions of constructivist learning theory, which emphasizes that learners construct knowledge through active interaction with learning environments (Piaget, 1972; Vygotsky, 1978). Through Augmented Reality, students were able to interact directly with virtual representations of social studies content, thereby strengthening their engagement and motivation.

The superiority of the experimental class over the control class indicates that motivational improvements were not merely the result of classroom instruction itself but were specifically associated with the use of AR-assisted media. These findings are consistent with the conclusions of Akçayır and Akçayır (2017), who reported that Augmented Reality enhances learners' attention, interest, and willingness to participate in educational activities. The novelty and interactivity embedded in AR applications can capture students' attention more effectively than traditional instructional media.

The significant motivational gains observed in this study can also be interpreted through Keller's (2010) ARCS Motivation Model. AR technology appears particularly effective in satisfying the attention component of motivation because it introduces visual novelty and interactive experiences that differ substantially from conventional classroom practices. Furthermore, the relevance dimension of the ARCS model may explain the positive outcomes observed in the experimental group. Through three-dimensional

visualization, students could connect social studies concepts to real-world contexts more effectively, making learning activities more meaningful and personally relevant.

The confidence component of motivation was also likely strengthened through the use of AR-assisted media. Interactive learning environments often provide immediate feedback and opportunities for exploration, allowing students to develop a stronger sense of competence and achievement. Similarly, the satisfaction dimension may have contributed to the motivational improvements observed in the study. Students often experience enjoyment and fulfillment when engaging with technologically enriched learning activities, which in turn encourages continued participation in learning tasks.

The findings also align with Self-Determination Theory, which emphasizes the importance of autonomy, competence, and relatedness in promoting intrinsic motivation (Ryan & Deci, 2020). AR-assisted learning provides opportunities for students to explore educational content independently, thereby fostering a greater sense of autonomy. The substantial difference between experimental and control groups further suggests that technological innovation can play a crucial role in addressing motivational challenges frequently encountered in elementary social studies classrooms.

Social studies subjects often involve historical events, cultural artifacts, geographical locations, and social phenomena that are difficult for young learners to visualize. Augmented Reality addresses this challenge by transforming abstract concepts into concrete visual experiences. The ability to observe three-dimensional objects likely facilitated deeper cognitive engagement among students. According to multimedia learning theory, combining verbal explanations with visual representations promotes more effective information processing (Mayer, 2021).

The present findings are also consistent with previous meta-analytic evidence indicating positive relationships between Augmented Reality and motivational outcomes (Garzón et al., 2019; Garzón et al., 2020). The insignificant motivational improvement observed in the control class provides additional evidence supporting the effectiveness of AR-assisted learning. Conventional instruction produced only marginal changes in motivation despite covering similar learning content. This finding suggests that instructional media may be as important as instructional content in determining students' motivational responses.

The results also support the argument that elementary school students particularly benefit from visual and interactive learning experiences because they are still developing abstract reasoning abilities (Piaget, 1972). From a pedagogical perspective, the findings indicate that teachers should consider integrating immersive digital technologies into social studies instruction to foster greater student engagement and enthusiasm.

The positive outcomes observed in this study also demonstrate that educational technology should not merely serve as a supplementary tool but can function as a central component of instructional design when implemented appropriately. Another important implication concerns educational policy. Schools seeking to improve learning quality may benefit from investing in AR-based instructional resources and professional development programs that enable teachers to utilize emerging technologies effectively.

Although the findings are promising, they should be interpreted within the context of the study's limitations. The research involved students from a single elementary school and focused specifically on social studies learning. Future studies may investigate the effectiveness of AR-assisted learning across different grade levels, subjects, and educational contexts. Future research may also explore additional outcomes such as academic achievement, critical thinking skills, learning engagement, creativity, and long-term knowledge retention to provide a more comprehensive understanding of the educational impact of Augmented Reality.

The present study contributes empirical evidence supporting the effectiveness of Augmented Reality-assisted learning media in enhancing elementary school students' learning motivation. The significant improvements observed in the experimental group reinforce the growing consensus that immersive educational technologies can serve as

powerful tools for creating motivating, engaging, and meaningful learning experiences in elementary education.

CONCLUSION

This study concludes that the use of Augmented Reality-assisted learning media contributes positively to improving elementary school students' learning motivation in social studies learning. The findings indicate that students who participated in learning activities supported by Augmented Reality achieved higher motivation scores than those who learned through conventional instructional methods. The descriptive analysis showed a substantial increase in the experimental group's motivation level, while inferential statistical tests confirmed that the observed differences were statistically significant. These results suggest that Augmented Reality-assisted learning media can serve as a promising instructional alternative for creating more engaging and motivating social studies learning experiences in elementary schools. Nevertheless, considering that this study was conducted within a limited research setting, further studies involving broader samples, different educational contexts, and additional learning outcomes are recommended to strengthen the generalizability of the findings.

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