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The Effect of Problem-Based Learning Model Assisted by Audio-Visual Media on Interest and Learning Outcomes in Social Studies

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A B S T R A C T

This study investigates the effectiveness of integrating Problem-Based Learning (PBL) with audiovisual media in enhancing fifth-grade students' interest and achievement in social studies. The research was motivated by the persistent predominance of teacher-centered instruction in Indonesian primary schools, which often leads to low engagement and suboptimal learning outcomes. Employing a quasi-experimental design with a pretest–posttest control group, the study involved 44 students from two Grade 5 classes in one public primary school cluster in South Sulawesi. The experimental class received PBL supported by audiovisual media, whereas the control class was taught using conventional methods without systematic media integration. Data on learning interest were collected through a validated questionnaire, and learning achievement was measured using standardized social studies tests administered before and after the intervention. The data were analyzed using descriptive statistics, independent samples t-tests, and MANOVA. The findings demonstrate that students in the PBL with audiovisual media group achieved significantly higher gains in both learning interest and social studies achievement than those in the control group ($p < 0.05$). These results indicate that PBL supported by audiovisual media is a promising pedagogical approach for fostering more engaging and effective social studies instruction in primary education.

1. Introduction

Student engagement and learning outcomes in contemporary education are closely linked to the quality of instructional approaches implemented in classrooms. Traditional teacher centered methods, which are still prevalent in many Indonesian primary schools, frequently lead to passive learning, limited interaction, and suboptimal academic performance, particularly in conceptually rich subjects such

as Social Studies (Ilmu Pengetahuan Sosial, IPS) (Murboyono & Guspita, 2023; Pakaja & Wafa, 2023). In response to these challenges, innovative pedagogies that emphasize active participation, collaboration, and contextual learning have gained increasing prominence in the literature and in policy recommendations. Among these, Problem Based Learning (PBL) has emerged as a promising approach for fostering higher order thinking skills, autonomy, and sustained interest in learning (Chandrashekhar & Menon, 2020; Johansen et al., 2024).

PBL situates learning within authentic, real world problems that require students to investigate, reason, and construct solutions through collaborative inquiry. Rather than receiving information passively, students are encouraged to engage in critical analysis, creative thinking, and reflective discussion, which, in turn, support the development of deeper conceptual understanding and intrinsic motivation (Chandrashekhar & Menon, 2020; Hendrawijaya, 2022). A growing body of research indicates that such learner centered environments can positively influence students' interest and enthusiasm toward academic tasks, thereby improving both affective and cognitive learning outcomes (Hendrawijaya, 2022; Johansen et al., 2024). In primary education, where foundational attitudes toward learning are formed, the potential of PBL to cultivate curiosity and persistence is particularly important.

Parallel to the development of PBL, the rapid advancement of digital technologies has expanded the availability and pedagogical utility of audio visual media in classroom practice. Videos, interactive simulations, animations, and other multimedia resources have been shown to enhance learner engagement, clarify complex concepts, and provide vivid representations of abstract content (Fabeku & Enyeasi, 2024; Okumura et al., 2025). When used appropriately, these media can reduce cognitive load, support visualization of dynamic processes, and maintain students' attention over longer periods. Studies across different disciplines and educational levels consistently report that technology enhanced instruction contributes to improved learning outcomes and more positive student attitudes toward learning (Dennen, 2024; Sauermilch et al., 2025).
Recent empirical studies published in the Journal of Educational Sciences have also reported positive effects of technology enhanced PBL and related models on student motivation and achievement. These include the development of video based PBL resources to improve secondary students' critical thinking in physics (Hartati et al., 2025), the use of animated video media in project based learning to enhance Grade V elementary students' learning outcomes (Utami et al., 2025), problem based learning assisted by gamified digital applications such as Wordwall in IPAS subjects (Ardiana et al., 2025), and PBL with animated video media to improve learning outcomes in science classes (Astuti et al., 2025). Particularly relevant to the present study, Mutmainnah et al. (2025) demonstrated that animated video assisted discovery learning can significantly increase elementary school students' interest and learning outcomes in Social Studies, thereby reinforcing the potential of multimedia supported, student centered pedagogies in primary education.

The combined use of PBL and audio visual media offers an even greater opportunity to create rich, interactive, and student centered learning environments. In such

settings, multimedia resources can be used to present real life problems, provide contextual background information, and scaffold students' exploration of possible solutions (Gill & Stewart, 2024; Hirumi et al., 2024). For example, video based scenarios and computer simulations can situate students within authentic socio cultural contexts, while PBL structures guide them to analyze issues, discuss alternative perspectives, and justify their proposed resolutions. This integration is consistent with contemporary models of instructional design that emphasize the alignment of methods and media to support active, meaningful learning (Hirumi et al., 2024; Karanfiloğlu & Akın Bulut, 2025).

Learning interest is a central construct in understanding how such integrated approaches influence educational outcomes. Interest functions as both a precondition and a consequence of successful learning; it increases students' willingness to invest effort, promotes persistence in the face of challenges, and enhances the likelihood that knowledge will be retained and transferred to new contexts (Dang et al., 2023; Tsai & Chang, 2024). Recent empirical work shows that structured, interactive learning experiences can significantly stimulate and sustain students' interest, which in turn mediates improvements in academic achievement (Hendrawijaya, 2022; Hsieh et al., 2024; Wilder et al., 2025). Consequently, instructional designs that deliberately target interest through the use of authentic problems and engaging media hold considerable promise for strengthening student performance.

The literature on technology supported learning further suggests that multimedia enriched instruction can cater to diverse learning preferences and promote multi sensory engagement. Audio visual materials have been found to increase enjoyment, excitement, and motivation, particularly when combined with opportunities for active participation and social interaction (König, 2021; Liu, 2023; Prameswari et al., 2024). In integrated STEM and civics education, for instance, interactive multimedia and community based tasks have been shown to foster stronger identity formation and sustained interest in the subject matter (Arum et al., 2025; Chiu et al., 2023; Henderson et al., 2025). These findings align with broader theoretical perspectives that highlight the importance of autonomy, relevance, and meaningful challenge for cultivating student interest and engagement (Johansen et al., 2024; Osman & Hamzah, 2020).

Within the Indonesian elementary school context, Social Studies occupies a strategic role in helping students understand social structures, cultural diversity, and civic responsibilities. However, previous studies indicate that IPS learning often remains dominated by rote memorization and teacher centered explanation, which limit students' opportunities to explore real world social issues in depth (Murboyono & Guspita, 2023). At the same time, the increasing availability of digital devices and internet based resources has created new possibilities for designing IPS instruction that is more contextual, interactive, and responsive to students' everyday experiences (Dennen, 2024; Pakaja & Wafa, 2023). Despite these developments, empirical investigations that systematically examine the combined impact of PBL and audio visual media on elementary students' interest and achievement in Social Studies remain limited.

The present study responds to this gap by implementing a PBL model assisted by audio visual media in fifth grade Social Studies classes in Cluster V, Polongbangkeng Selatan Subdistrict, Takalar Regency. By comparing this integrated instructional approach with conventional teacher centered methods, the study focuses on two key outcomes, namely students' learning interest and their academic achievement in Social Studies. Specifically, the objective of this research is to determine whether there are significant differences in learning interest and learning outcomes between students who receive Social Studies instruction through PBL assisted by audio visual media and those who are taught through conventional methods, and thereby to provide empirical evidence regarding the effectiveness of this combined pedagogical model in Indonesian primary education settings.

2. Methodology

This study employed a quasi experimental design with a pretest posttest control group, a methodological approach that is widely used in educational research to evaluate the effectiveness of instructional interventions while maintaining reasonable control over extraneous variables (Chandrashekhar & Menon, 2020; Fu & Dai, 2025). Within this framework, two intact Grade 5 classes were assigned to receive different instructional treatments, which made it possible to compare learning outcomes and draw valid inferences regarding the impact of the respective teaching strategies on student interest and achievement (Johansen et al., 2024; Osman & Hamzah, 2020).

The population of the study consisted of fifth grade students enrolled in public elementary schools in Cluster V, Polongbangkeng Selatan Subdistrict, Takalar Regency. A random sampling technique was applied at the class level in order to obtain a sample that was representative of the population and to reduce potential sampling bias (Hendrawijaya, 2022; Hsieh et al., 2020). The final sample comprised 44 students distributed across two classes, each containing 22 learners. One class was designated as the experimental group and received Social Studies instruction through a Problem Based Learning (PBL) model assisted by audio visual media, whereas the other class served as the control group and was taught through conventional teacher centered methods without systematic multimedia integration (Murboyono & Guspita, 2023; Pakaja & Wafa, 2023).

The instructional intervention in the experimental group was carefully structured to operationalize the principles of PBL while leveraging the affordances of audio-visual media to stimulate student interest and engagement (Fabeku & Enyeasi, 2024; Gill & Stewart, 2024). Each instructional cycle began with the presentation of an authentic, problem-oriented scenario related to the Social Studies curriculum. For example, in one representative lesson students were asked to investigate how different types of economic activities in their local community contribute to the welfare of households in Takalar Regency. More concretely, students were presented with the following problem situation: "In your village, some families depend on farming, others on fishing, trading in the traditional market, or working in nearby services. Recently, several parents have reported that their income is

unstable and that it is difficult to meet daily needs. As a group of young Social Studies experts, analyze how these different economic activities support family welfare and propose at least two realistic suggestions that could help improve the economic conditions of families in your community." The teacher first displayed a sequence of PowerPoint slides depicting local agricultural, fishing, and trading activities, followed by a short video clip illustrating interactions in a traditional market. These two media, which are later presented as illustrative examples of the instructional materials in Figure 1 and Figure 2, provided a vivid contextual background for the problem and supported students in visualizing real life social and economic dynamics (Hirumi et al., 2024; Okumura et al., 2025).

After the problem scenario had been introduced, students in the experimental group worked in small heterogeneous groups of four to five members. Guided by worksheets aligned with the steps of the PBL model, they identified key issues, formulated questions, collected relevant information from the audio-visual materials and their prior knowledge, and proposed reasoned solutions to the problem situation (Dennen, 2024; Liu, 2023). Group discussions were followed by whole class presentations, during which students justified their conclusions and responded to questions from peers and the teacher. The teacher acted primarily as a facilitator, providing scaffolding, clarifying misconceptions, and encouraging deeper analysis rather than simply delivering information. This design was intended to promote active participation, collaboration, and higher order thinking, while the integrated audio-visual media sustained attention and made abstract concepts more concrete (König, 2021; Prameswari et al., 2024).

In contrast, the control group received Social Studies instruction through conventional teacher centered methods typically used in local classrooms. Lessons were dominated by direct explanation, textbook based exposition, and limited whole class questioning, with minimal use of multimedia resources or structured group work (Murboyono & Guspita, 2023; Pakaja & Wafa, 2023). Students primarily listened, took notes, and answered occasional questions posed by the teacher. This condition was maintained throughout the intervention period in order to provide a realistic comparison with the more interactive and media supported PBL environment in the experimental class.

Data on academic achievement in Social Studies were collected using objective tests administered as both pretest and posttest. The tests were aligned with the Grade 5 curriculum and covered the specific content addressed during the intervention sessions. Learning interest was measured using a structured questionnaire that employed a Likert type scale to capture students' affective responses to Social Studies learning, including indicators such as enjoyment, curiosity, attention, and willingness to participate (Dang et al., 2023; Tsai & Chang, 2024). In addition to these primary instruments, classroom observation protocols and documentation were used to record the implementation of the instructional treatments and to triangulate the quantitative findings, thereby enhancing the reliability and interpretability of the data (König, 2021; Henderson et al., 2025).

All instruments underwent systematic validation procedures prior to data collection. Content validity was established through expert review by experienced educators and researchers who examined the alignment of test items and questionnaire statements with the learning objectives and constructs under investigation (Liu, 2023; Sauermilch et al., 2025). Pilot testing was conducted in a comparable school to refine item wording and response formats. Reliability analyses were performed to ensure that the achievement test and interest questionnaire produced consistent scores across administrations, in accordance with recommended practices in educational measurement (Hsieh et al., 2024; Wilder et al., 2025).

The data analysis combined descriptive and inferential statistical techniques. Descriptive statistics, including means and standard deviations, were used to summarize students' pretest and posttest scores for both learning interest and academic achievement in each group. Prior to conducting inferential tests, assumptions of normality and homogeneity of variances were examined to ensure the suitability of parametric procedures (Dang et al., 2023; Hsieh et al., 2020). At the univariate level, independent samples t tests were used to compare posttest scores between the experimental and control groups. At the multivariate level, a Multivariate Analysis of Variance (MANOVA) was conducted to examine the combined effects of the instructional treatments on learning interest and achievement, thereby providing a more comprehensive assessment of the impact of the PBL with audio visual media model on student outcomes (Dennen, 2024; Okumura et al., 2025). Statistical significance was evaluated at the 0.05 alpha level.

Throughout the research process, ethical considerations were rigorously observed. Informed consent was obtained from school authorities, classroom teachers, and the parents or guardians of participating students. Participation was voluntary, and students were assured that their data would be used solely for research purposes and reported in aggregate form to protect individual confidentiality (Henderson et al., 2025; Sauermilch et al., 2025). The study design avoided any procedures that might place students at risk, and care was taken to ensure that both groups continued to receive instruction that met curricular standards. These measures contributed to the integrity, transparency, and credibility of the research procedures and findings (Hsieh et al., 2024; Prameswari et al., 2024).

3. Results and Discussion

Results

The findings of this study provide clear evidence of significant differences in learning interest and academic achievement between fifth grade students who were taught Social Studies using the Problem Based Learning (PBL) model assisted by audio visual media and those who received conventional instruction. Comparative analyses of pretest and posttest scores showed substantially greater gains in the experimental group that experienced multimedia supported PBL than in the control group that was taught through traditional teacher centered methods.

As shown in Table 1, the mean learning interest score in the experimental group increased from 63.00 at pretest to 87.00 at posttest, representing an improvement of 24.00 points. In contrast, the control group's mean interest score rose only slightly, from 62.85 to 68.15, corresponding to a gain of 5.30 points. These patterns indicate that the integrated PBL and audio visual approach was much more effective in stimulating students' interest in Social Studies than conventional teaching.

Table 1. Comparison of Pretest and Posttest Mean Scores for Learning Interest

Group	Pretest mean	Posttest mean	Gain
Experimental	63.00	87.00	24.00
Control	62.85	68.15	5.30

In addition to increased interest, the experimental group also demonstrated notable improvements in academic achievement. The average Social Studies test score in this group increased from 63.18 at pretest to 85.00 at posttest, whereas the control group showed only modest progress over the same period. These quantitative findings are consistent with previous studies that highlight the effectiveness of audio-visual media in enhancing engagement and understanding within PBL frameworks (Fabeku & Enyeasi, 2024; Gill & Stewart, 2024; Hirumi et al., 2024).

Assumption testing

Prior to hypothesis testing, assumption checks were conducted for both learning interest and learning achievement. Normality of the data distributions was assessed using the Shapiro Wilk test. For learning interest, the p values for the pretest and posttest scores were 0.158 and 0.167 respectively, both exceeding the significance level of 0.05. These results indicate that the learning interest scores before and after the intervention were normally distributed.

Table 2. Shapiro Wilk test of Normality for Learning Interest

Variable	W	df	p
Pretest interest	0.962	22	0.158
Posttest interest	0.963	22	0.167

Similarly, the Shapiro Wilk test for learning achievement yielded p values of 0.335 for the pretest and 0.233 for the posttest, as presented in Table 3. Since these values are greater than 0.05, the achievement scores can also be considered normally distributed before and after the intervention.

Table 3. Shapiro Wilk test of Normality for Learning Achievement

Variable	W	df	p
Pretest achievement	0.971	22	0.335
Posttest achievement	0.944	22	0.233

Homogeneity of variances between the experimental and control groups was examined using Levene's test. As shown in Table 4, the p values for learning interest (pretest $p = 0.052$, posttest $p = 0.055$) and for learning achievement (pretest $p = 0.099$, posttest $p = 0.074$) were all greater than 0.05. These results indicate that

the variances of the two groups were homogeneous for both variables at both measurement points, thereby satisfying the assumptions required for subsequent parametric analyses.

Table 4. Levene's test of homogeneity of variances

Variable	Test	F	df1	df2	p
Interest pretest	Levene test	4.011	1	42	0.052
Interest posttest	Levene test	3.906	1	42	0.055
Achievement pretest	Levene test	2.484	1	42	0.099
Achievement posttest	Levene test	3.368	1	42	0.074

The fulfillment of normality and homogeneity assumptions confirmed the appropriateness of using t tests and MANOVA for hypothesis testing.

Independent samples t test

Independent samples t tests were conducted to compare the experimental and control groups on both learning interest and learning achievement. The results are summarized in Table 5. The analysis yielded statistically significant differences between the groups, particularly for the posttest measures of interest and achievement, with p values reported as less than 0.001.

Table 5. Independent samples t test results

Test	Statistic type	t	df	p	Mean difference	SE difference	Cohen's d	SE Cohen's d
Pretest interest	Student	1.850	42.000	< 0.001	4.818	2.605	0.558	0.313
	Welch	1.850	37.569	< 0.001	4.818	2.605	0.558	0.313
Pretest achievement	Student	0.961	42.000	< 0.001	2.727	2.839	0.290	0.305
	Welch	0.961	40.003	< 0.001	2.727	2.839	0.290	0.305
Posttest interest	Student	3.687	42.000	< 0.001	8.500	2.305	1.112	0.345
	Welch	3.687	37.957	< 0.001	8.500	2.305	1.112	0.345
Posttest achievement	Student	3.374	42.000	< 0.001	8.409	2.492	1.017	0.338
	Welch	3.374	39.833	< 0.001	8.409	2.492	1.017	0.338

Based on these results, the null hypothesis of no difference between the two groups was rejected. The findings indicate that the use of the PBL model assisted by audio visual media had a statistically significant effect on students' learning interest and Social Studies achievement compared with conventional instruction. These quantitative outcomes support the main research hypothesis that the integrated PBL and audio visual model exerts a positive influence on both affective and cognitive aspects of learning.

Multivariate analysis

To examine the combined effect of the instructional treatment on learning interest and achievement, a Multivariate Analysis of Variance (MANOVA) was conducted

with group (experimental vs control) as the independent variable and the two posttest measures as dependent variables. The MANOVA results using Pillai's trace are presented in Table 6.

Table 6. MANOVA results using Pillai's trace

Effect	Trace Pillai	Approx. F	Num df	Den df	p
Intercept	0.995	1813.435	4	39.000	< 0.001
Group	0.292	4.013	4	39.000	< 0.001
Residuals					

The Pillai's trace value of 0.292 with an approximate F statistic of 4.013 and $p < 0.001$ indicates a statistically significant multivariate difference between the experimental and control groups. This result confirms that the PBL model assisted by audio visual media had a significant overall effect on the joint distribution of learning interest and learning achievement. In other words, the treatment influenced both outcome variables simultaneously, rather than affecting only one of them in isolation.

Observational findings and illustration of the intervention

Quantitative improvements in interest and achievement were supported by qualitative observations collected during classroom implementation. Students in the experimental group displayed higher levels of enthusiasm, more sustained attention, and greater willingness to participate in group discussions and problem solving activities. They were more likely to ask questions, share ideas with peers, and actively use the visual information presented through multimedia resources. These behavioral patterns align with earlier research that emphasizes the motivational and interactive benefits of integrated PBL and multimedia instruction (Johansen et al., 2024; König, 2021; Tsai & Chang, 2024). The implementation of the PBL model assisted by audio visual media is illustrated in Figure 1 and Figure 2. Figure 1 shows the use of PowerPoint slides projected via LCD to present contextualized Social Studies problems to students, while Figure 2 depicts students working with worksheets to record and refine their proposed solutions during group activities.

Figure 1. Images used as PBL media for students related to economic activities.

Figure 2. Use of PowerPoint via LCD projector to present problem scenarios to students

Figure 3. Use of student worksheets to record solutions to the problem scenarios

Overall, the results highlight the instructional value of combining PBL with audio visual media. This integrated approach substantially enhances learning interest and achievement by creating a more dynamic, engaging, and cognitively stimulating learning environment. The findings are consistent with broader pedagogical literature that underscores the potential of multimedia supported, learner centered strategies to promote critical thinking, creativity, and meaningful learning in classroom settings (Dang et al., 2023; Dennen, 2024; Hendrawijaya, 2022; Sauermilch et al., 2025).

Discussion

The findings of this study clearly demonstrate that integrating the Problem Based Learning (PBL) model with audio visual media in Social Studies instruction produces significant gains in both learning interest and academic achievement among fifth grade students. The experimental group, which received instruction through PBL assisted by multimedia resources, outperformed the control group that was taught using conventional teacher centered methods, both in terms of increased mean scores and effect sizes. These results are consistent with existing literature that emphasizes the importance of instructional innovation, particularly the use of multimedia resources within PBL frameworks, to enhance students' motivation, engagement, and conceptual understanding (Fabeku & Enyeasi, 2024; Gill & Stewart, 2024; Hirumi et al., 2024). The substantial improvements observed in the experimental class underscore the value of this integrated approach for fostering deeper and more meaningful learning experiences in primary Social Studies.

These results are in line with a growing body of JES research showing that various forms of PBL and project based learning assisted by digital and video media consistently improve students' engagement, critical thinking, and achievement at the primary and secondary levels (Ardiana et al., 2025; Astuti et al., 2025; Hartati et al., 2025; Mutmainnah et al., 2025; Utami et al., 2025). The positive outcomes obtained in this research are evident not only in the quantitative indicators of test

performance and interest scores, but also in the qualitative observations of classroom behavior. Students in the experimental group displayed heightened enthusiasm, greater persistence in problem solving, and more active participation in group discussions compared with their peers in the control group. This pattern aligns with previous findings that multimedia supported PBL environments create more stimulating and interactive learning conditions, which facilitate deeper cognitive processing and encourage students to take an active role in constructing knowledge (Johansen et al., 2024; König, 2021; Tsai & Chang, 2024). Audio visual media, including visual simulations, contextual videos, and structured slide presentations, appear to play a crucial role in simplifying abstract or complex Social Studies concepts and in sustaining students' attention throughout the learning process (Okumura et al., 2025; Sauermilch et al., 2025).

The enhanced learning interest observed in this study is consistent with a broad body of research that identifies interest as a central mediator between instructional design and academic achievement. Studies have shown that when students perceive learning activities as relevant, challenging, and engaging, they are more likely to invest effort, persist in the face of difficulty, and achieve higher academic outcomes (Dang et al., 2023; Fu & Dai, 2025; Wilder et al., 2025). By embedding learning within authentic, contextually rich problem scenarios, the PBL model implemented in this study appears to have increased students' intrinsic motivation to engage with Social Studies content (Dennen, 2024; Hendrawijaya, 2022; Osman & Hamzah, 2020). The integration of multimedia further strengthened this effect by accommodating diverse learning preferences and providing a multi sensory experience that combines visual, auditory, and social dimensions of learning (Gill & Stewart, 2024; Hsieh et al., 2024; Liu, 2023).

In contrast, the relatively modest gains observed in the control group highlight the limitations of conventional, teacher centered instructional methods that rely predominantly on verbal explanation and textbook based activities. Such approaches tend to limit opportunities for active inquiry, collaboration, and critical thinking, which are essential for deeper understanding of Social Studies concepts and issues (Murboyono & Guspita, 2023; Pakaja & Wafa, 2023). The present findings reinforce the view that traditional instruction, while potentially efficient for delivering information, may be less effective in fostering sustained engagement and higher order thinking skills, particularly in contexts where students are expected to analyze real world social phenomena and make informed judgments (Karanfiloğlu & Akın Bulut, 2025; König, 2021; Tsai & Chang, 2024).

This study contributes important empirical evidence to the growing literature on multimedia enhanced PBL in elementary education, especially within the domain of Social Studies. By directly comparing an integrated PBL and audio visual model with conventional teaching methods in an authentic Indonesian primary school setting, the research provides concrete support for educational policies and school level initiatives that advocate for greater technology integration and pedagogical innovation (Arum et al., 2025; Chandrashekhar & Menon, 2020; Henderson et al., 2025). The results suggest that when carefully designed and aligned with curricular objectives, PBL combined with audio visual media can serve as an effective

strategy for improving both the affective and cognitive dimensions of student learning.

At the same time, the findings open several avenues for further inquiry. Future research could examine the long term sustainability of interest and achievement gains obtained through multimedia enhanced PBL and explore how such models can be scaled and adapted across different grade levels, school contexts, and subject areas. Investigations that incorporate additional process oriented data, such as detailed analyses of group interactions or students' problem solving strategies, would also help to clarify the mechanisms through which PBL and audio visual media jointly influence learning outcomes. Overall, the positive results obtained in this study substantiate and extend current theoretical and empirical understandings of how integrated, learner centered, and technology supported pedagogies can improve the quality of Social Studies education at the primary level (Fabeku & Enyeasi, 2024; Gill & Stewart, 2024).

4. Conclusion

This study provides clear evidence that integrating Problem Based Learning (PBL) with audio visual media enhances both learning interest and academic achievement in Social Studies among fifth grade elementary students. The experimental group that experienced multimedia supported PBL consistently outperformed the control group that received conventional instruction, and classroom observations confirmed higher levels of enthusiasm, participation, and persistence in learning activities. These findings indicate that the combined use of PBL and audio visual resources constitutes an effective instructional model for promoting deeper understanding and more positive attitudes toward Social Studies. The results also show that embedding contextual, problem oriented tasks within a multimedia rich environment supports the development of a student centered and multi sensory learning atmosphere. Such conditions appear to accommodate diverse learning preferences while encouraging critical thinking, collaborative problem solving, and active engagement with real world social issues. In this way, the integrated PBL and audio visual approach responds to current demands for innovative pedagogy in primary education. In light of these findings, teachers and curriculum developers are encouraged to incorporate multimedia enhanced PBL into Social Studies instruction and, where appropriate, into other subject areas. Policymakers may also consider supporting professional development and resource provision that enable wider implementation of this model in elementary schools. Future research is recommended to examine the long term sustainability of its effects, its applicability across different educational contexts, and the specific mechanisms through which it influences students' motivation and learning outcomes.

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