

## APPLICATION OF COOPERATIVE LEARNING MODEL, ANIMATED AUDIOVISUAL MEDIA, AND DISCOVERY LEARNING ON STUDENT LEARNING MOTIVATION

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### ABSTRACT

This study aims to analyze the effect of the Student Teams-Achievement Divisions (STAD) cooperative learning model, animated audiovisual media, and discovery learning on elementary school students' motivation to learn Social Studies. The background of this study is based on the low enthusiasm of students due to teacher-centered learning. This study used a quantitative ex post facto design approach involving 64 students in grades IV, V, and VI. Data were collected through questionnaires that had been tested for validity and reliability and were supported by observations, interviews, and documentation. Data analysis showed that the three learning variables had a significant effect on students' learning motivation, evidenced by the F test of 113.402 with a Sig. level of 0.000. This finding indicates that the integration of the cooperative learning model, audiovisual media, and the discovery approach simultaneously provides a positive contribution to increasing motivation to learn Social Studies. This study emphasizes the importance of implementing innovative learning strategies to create a more active and meaningful learning process.

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### INTRODUCTION

Education plays a crucial role in developing high-quality, character-based human resources capable of adapting to social dynamics (Samsuri et al., 2024). In this context, Social Studies plays a strategic role in fostering insight, values, and social skills, enabling students to become active and responsible citizens (Dwi & El, 2019). In the 21st-century learning era, the learning process is no longer one-way but demands active student involvement in constructing knowledge (Zayyinah et al., 2022). However, the implementation of Social Studies learning in elementary schools still faces challenges in increasing student participation due to the material being perceived as abstract and broad, including at SDN Racek 1 (Uge & Neolaka, 2019).

Initial observations indicate that some students exhibit low enthusiasm for learning Social Studies. This is evident in their tendency to simply listen to teacher explanations, be less active in answering questions, and lack initiative in group assignments. Interviews with teachers also corroborate these findings, indicating that learning is still dominated by lecture-based and teacher-centered methods.

This condition shows that Social Studies learning at SDN Racek 1 still faces challenges in creating an active, meaningful, and enjoyable learning process. Low student engagement is closely related to the selection of learning strategies and media that do not fully consider student characteristics and learning needs (Matsuyama et al., 2019). As a result, students tend to be passive and less able to understand the material in depth, resulting in suboptimal learning interactions and achievement of learning objectives.

To address these issues, it is necessary to update learning strategies that are more innovative, contextual, and appropriate to the characteristics of elementary school students. One relevant alternative is the implementation of the Student Teams-Achievement Divisions (STAD) cooperative learning model, the use of animation-based audiovisual media, and the Discovery Learning model. Research by (Yang, 2023) shows that the combination of innovative learning models and media can increase learning motivation because it provides space for students to collaborate, ask questions, and discover concepts independently. This interactive strategy also has the potential to shift learning from teacher-centered to student-centered (Ho & Tang, 2023), allowing students to play an active role in the learning process.

According to research (Senen & Tianusa, 2025) shows that STAD type Cooperative Learning can increase students' motivation and social interaction through group cooperation mechanisms, mutual assistance between members, and group awards that encourage active student participation. Research (Pikoli, 2021) explains that animation-based audiovisual media is able to simplify abstract material concepts through dynamic, colorful visualizations and interesting narratives, while Discovery Learning is effective in fostering students' curiosity and learning independence, thus having a positive impact on motivation and learning outcomes (Novantri & Aftriyati, 2020). The Discovery Learning model can be implemented through environmental observation, interviews, and social simulations, which encourage critical and analytical thinking skills while fostering students' curiosity and intrinsic motivation. The integration of these three approaches is considered aligned with the demands of 21st-century learning, which emphasizes collaboration, creativity, and contextual understanding.

Although various studies have proven the effectiveness of each approach, studies that simultaneously integrate the STAD model, animated audiovisual media, and Discovery Learning in Social Studies learning in elementary schools are still limited. Thus, the research gap in this study lies in the lack of studies that examine the effect of the combination of these three approaches in an integrated manner to increase student learning motivation in the context of teacher-centered Social Studies learning. Therefore, this study aims to analyze the effect of the application of the STAD model, animated audiovisual media, and Discovery Learning on student learning motivation in Social Studies learning at SDN Racek 1.

## METHOD

This study employed a quantitative method with an ex post facto research design. Through this design, the researcher did not administer a treatment but collected data from variables already present in the field. The study aimed to analyze the effect of the STAD cooperative learning model (X1), animation-based audiovisual media (X2), and discovery learning (X3) on improving student learning motivation in social studies (Y).

This study was conducted at SDN Racek 1, Tiris District, Probolinggo Regency, and involved 64 students in grades IV, V, and VI. Data collection methods included questionnaires, observation, interviews, and documentation. The questionnaire was used to measure all study variables, and was tested for validity and reliability to ensure its effectiveness as a data collection tool. The questionnaire was measured using a 5-point Likert scale, categorized according to specific intervals, as shown in Table 1 below.

**Table 1. Likert Scale Value Intervals**

| Score | Value Interval | Category |
|-------|----------------|----------|
|-------|----------------|----------|

|   |             |            |
|---|-------------|------------|
| 5 | 4,21 – 5,00 | Very good  |
| 4 | 3,41 – 4,20 | Good       |
| 3 | 2,61 – 3,40 | Enough     |
| 2 | 1,81 – 2,60 | Not enough |
| 1 | 1,00 – 1,80 | Very less  |

Data analysis used descriptive and inferential statistics assisted by SPSS 22. Hypothesis testing was conducted through the F test to determine the simultaneous influence of independent variables on the dependent variable. The decision-making criteria Sig. < 0.05 indicates a significant influence.

## RESULT AND DISCUSION

### RESULTS

The results of this study present empirical findings based on observations, teacher interviews, and questionnaires regarding the influence of the STAD model, animated audiovisual media, and Discovery Learning on students' social studies learning motivation at SDN Racek 1, Tiris District, Probolinggo Regency. The findings show a significant increase in students' enthusiasm, understanding, and average learning outcomes after the implementation of these three learning components.

**Table 2. Average Value of Student Learning Outcomes**

| Variabel                         | N  | Mean  | Median | Min | Max |
|----------------------------------|----|-------|--------|-----|-----|
| Cooperative learning STAD (X1)   | 64 | 39.84 | 40.00  | 35  | 43  |
| Animated audio visual media (X2) |    | 40.19 | 40.50  | 36  | 43  |
| Discovery learning (X3)          |    | 39.84 | 40.00  | 36  | 43  |
| Learning motivation IPS (Y)      |    | 40.02 | 41.00  | 35  | 44  |

Based on the descriptive statistics above, it shows that all research variables have a relatively high average value. The STAD type cooperative learning variable (X1) obtained a mean value of 39.84, animated audiovisual media (X2) of 40.19, and discovery learning (X3) of 39.84, which indicates that the three learning models and media were implemented well. Meanwhile, the social studies learning motivation variable (Y) had a mean value of 40.02, which indicates that the level of student learning motivation is in the high category.

The analysis revealed that social studies learning at SDN Racek 1 Tiris, which integrated the three models, had a positive impact on improving average student learning outcomes. This demonstrates that the implementation of innovative learning strategies can stimulate students in abstract learning (Haryana et al., 2022). Increased student enthusiasm and engagement contributed to this research. Students were more confident in expressing their opinions, actively engaged in group discussions, and were able to independently discover learning concepts through exploration activities.

Hypothesis testing was conducted to determine the effect of the STAD cooperative learning model, animated audiovisual media, and Discovery Learning on learning motivation.  $H_0$  states there is no effect, while  $H_1$  states there is an effect on learning motivation. The results of the hypothesis testing are presented as follow.

**Table 3. F Test Results**

| Model        | Sum of Squares | df | Mean Square | F       | Sig.              |
|--------------|----------------|----|-------------|---------|-------------------|
| 1 Regression | 235.458        | 3  | 78.486      | 113.402 | .000 <sup>b</sup> |
| Residual     | 41.526         | 60 | .692        |         |                   |
| Total        | 276.984        | 63 |             |         |                   |

Based on Table 3 above, the calculated F value was 113.402 with a significance level of  $0.000 < 0.05$ . These results indicate that  $H_0$  is rejected, thus indicating that the cooperative learning model (X1), animated audiovisual

media (X2), and discovery learning (X3) variables together have a significant effect on learning motivation in Social Sciences (Y). These results confirm that the combination of the application of learning models and media is able to significantly increase student learning motivation ( $H_0$  is rejected).

**Table 4. Results of the Determination Coefficient**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1     | .922 <sup>a</sup> | .850     | .843              | .832                       | 1.320         |

Based on Table 4 above, the R Square value is 0.850. This result indicates that 85% of the variation in students' social studies learning motivation can be explained by the independent variable, while the remaining 15.7% is influenced by other factors outside the research model. The R value of 0.922 indicates a very strong relationship between the independent and dependent variables.

Overall, these statistical findings align with previous research, which found that the implementation of cooperative learning and discovery learning models supported by audiovisual media can create active, contextual, and student-centered learning (Kadek et al., 2024). Implementation of these learning models encourages students' cognitive and affective engagement, thus positively impacting learning motivation. Meanwhile, the use of animated audiovisual media has been shown to be effective in strengthening conceptual understanding and increasing student interest and attention during the learning process (Sari et al., 2022). Thus, the integration of appropriate learning models and media not only increases learning motivation but also supports the development of 21st-century skills, such as critical thinking, collaboration, and digital literacy.

## DISCUSSION

Based on the data analysis, this study concluded that the STAD Cooperative Learning model, animated audiovisual media, and the Discovery Learning model significantly influenced elementary school students' motivation to learn Social Studies (IPS). Hypothesis testing results indicated that each independent variable individually made a strong contribution to increasing student motivation. Therefore, these three variables can be viewed as important factors in supporting the success of IPS learning in elementary schools. In line with the research results of (Syuhada et al., 2025), which stated that the application of the STAD type Cooperative Learning model is effective in increasing motivation to learn social studies because it emphasizes intensive group interaction, individual responsibility, and healthy competition. Through the application of this model, students are actively involved in the learning process and have a sense of responsibility for the success of their group, thus forming goal interdependence that encourages participation and commitment to learning (Zhang & Tan, 2025). Classroom findings also indicated that students became more active in group discussions, exchanged information more frequently, and demonstrated greater initiative in completing assignments. Students who were previously passive began to participate by expressing their opinions and assisting peers in understanding the learning material.

In addition, the use of animated audiovisual media has a very important role in increasing motivation to learn social studies because it is able to visualize abstract material so that it is easier for students to understand (Barut Tugtekin & Dursun, 2022). Audiovisual media can also accommodate the diversity of student learning styles, particularly visual and auditory, making the learning process more engaging, contextual, and less monotonous (Nicolaou et al., 2019). This finding aligns with research by (Olagbaju & Popoola, 2020), which states that the use of audiovisual media can increase student attention, interest, and motivation to learn by providing a more concrete and interactive learning experience.

Classroom research findings indicate that the use of animated audiovisual media in social studies increased student enthusiasm compared to conventional instruction. Students demonstrated greater focus on visual content, asked more questions, and responded more promptly to the teacher. Even previously passive students became more engaged in discussions, as the animations helped them relate the material to familiar social realities.

Interviews with one of the classroom teachers revealed that the use of animated audiovisual media stimulated students' curiosity. This was evident in students' requests to replay certain sections of the material to confirm their understanding of the events or social processes depicted. The teacher also stated that verbal explanations were shorter because the animations helped bridge gaps in students' understanding, particularly for abstract concepts. This made learning activities more efficient and meaningful.

Meanwhile, the Discovery Learning model based on constructivism theory is considered relevant and effective in social studies learning (Mohammed & Kinyo, 2020). This model positions students as active participants in the learning process through independent investigation, exploration, and concept discovery. Through these learning experiences, students gain a deeper and more contextual understanding. These discovery activities also foster intrinsic motivation, as students gain intellectual satisfaction from analyzing social problems, drawing conclusions, and constructing knowledge independently (Ginting, 2021).

Research findings in the classroom indicate that the implementation of Discovery Learning significantly improved student learning activities. When researchers provided stimuli in the form of audiovisual displays and prompting questions, students appeared motivated to explore the data through observing images, reading additional sources, and discussing in groups to draw initial conclusions. This phenomenon indicates that students were no longer relying on one-way explanations but were beginning to demonstrate academic initiative in independently searching for and organizing information.

Theoretically, the findings of this study further strengthen theories related to increasing student learning motivation in the context of social studies learning. The influence of the STAD type Cooperative Learning model (X1) on student learning motivation is in line with the theory of social motivation which emphasizes the importance of interaction, positive interdependence, and individual responsibility in the learning process (Akram & Li, 2024). A structured cooperative learning environment has been shown to encourage students to achieve group and individual goals, thereby triggering achievement motivation through mutual support, knowledge sharing, and providing feedback between students (Rosita Mubadillah, 2025). In the context of social studies learning, this approach is in line with the characteristics of the subject which demands discussion, perspective representation, and social argumentation as part of knowledge construction.

The findings related to the significant influence of animated audiovisual media (X2) provide strong empirical evidence for multisensory learning theory and dual coding theory. The use of animation-based media encourages simultaneous activation of visual and auditory channels, making the information presented easier to process, understand, and store in long-term memory (Dwijayanti et al., 2024). Audiovisual media also plays a role in increasing students' attention, interest, and emotional involvement, which are important prerequisites for developing learning motivation. In social studies learning, animated media is able to represent abstract concepts more concretely and contextually (Putu et al., 2022).

The influence of Discovery Learning (X3) consistently strengthens the theoretical foundation of constructivism, which views learning as an active process, where students engage in exploration, questioning, experimenting, and discovering concepts through direct experience. This method encourages the development of intrinsic motivation because students feel in control of their learning process, find meaning in the material, and build knowledge structures independently (Sunarso et al., 2023). This process of independent discovery also fosters a sense of competence and cognitive satisfaction, which play a vital role in maintaining student learning motivation (Made et al., 2024).

Thus, the results of this study indicate that the integration of the STAD type Cooperative Learning model, animated audiovisual media, and Discovery Learning provides a strong theoretical and empirical foundation in efforts to increase student learning motivation, especially in social studies learning. The practical implications of this study with an influence contribution of 85%, the learning model that combines three components (STAD, Audiovisual, and Discovery) is an effective formula that is recommended to be used consistently by social studies teachers in elementary schools, especially regarding topics or materials that require visualization and group discussion. These findings encourage important contributions to the design of social studies learning that is oriented towards the development of

21st-century competencies, where motivation, collaboration, and learning independence are fundamental elements in the educational process.

## CONCLUSION

This study demonstrates that the implementation of the STAD cooperative learning model, animated audiovisual media, and Discovery Learning has a positive and significant impact on elementary school students' motivation to learn social studies. The integration of these three components shifts learning from teacher-centered to more active, collaborative, and student-oriented learning. The analysis shows that the combination of these three approaches contributes 85% to the variation in student learning motivation, as reflected in increased participation in discussions, increased confidence in expressing opinions, and increased persistence in completing assignments.

These findings confirm that the integration of learning models and media is an effective and relevant pedagogical approach for increasing motivation to learn social studies in elementary schools. Practically, this learning model is worth recommending as an alternative learning strategy that adapts to student characteristics and curriculum demands. Future research is recommended to test the effectiveness of this model at different educational levels or school contexts to broaden the generalizability of the findings.

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