Improving Student Learning Outcomes in Geography Subjects by Applying a STAD Type Cooperative Learning Model Based on Animation in Class XI Social Studies SHS 4 Bengkalis

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ABSTRACT

Teachers utilizing a contextual approach are expected to integrate the material taught with real-world situations relevant to students' lives. Despite limitations in their abilities, teachers are still tasked with optimizing the learning process. The animation-based Student Teams Achievement Divisions (STAD) model facilitates an engaging and enjoyable learning environment. This approach allows students to naturally interact with the material, promoting direct practice in group settings. Contextual learning fosters a deeper understanding of the essence, meaning, and benefits of education, motivating students to persistently seek knowledge and develop a genuine enthusiasm for learning. Such conditions emerge when students comprehend their life needs and devise strategies to fulfill them. The study concludes that implementing the STAD cooperative learning model for Class XI IPS students at SHS 4 Bengkalis during the 2022/2023 academic year significantly enhanced learning outcomes. The pre-cycle completion rate was 50% (13 students), increasing to 73% (19 students) in Cycle I, and reaching 88% (23 students) in Cycle II. In terms of absorption rates, the initial figure was 67%, which rose to 73% in Cycle I and improved further to 86% in Cycle II. These results demonstrate the effectiveness of STAD in improving student engagement and achievement.

Keywords: Contextual, STAD, Cooperative learning, Student engagement, Animation-based learning.

INTRODUCTION

Learning development refers to a series of activities aimed at designing educational experiences, which must be carried out by teachers as part of their professional responsibilities to society, peers, and students. In this process, educators are required to translate pedagogical and learning principles into actionable plans, subsequently transforming these plans into meaningful learning experiences for students through various learning activities (Anderson & McCormick, 2005). These activities may align with a predefined learning model stipulated in the relevant Regulation of the Minister of Education and Culture (Permendikbud) or may incorporate alternative models or approaches consistent with scientific methodologies.

The learning models implemented should foster the development of students' attitudes, knowledge, and skills (De La Torre *et al*., 2022). Such models serve as structured frameworks for instruction, providing a clear outline of learning processes from start to finish, typically facilitated by teachers. In essence, a learning model acts as a framework

that integrates approaches, strategies, methods, and techniques to achieve educational objectives. Adherence to curriculum principles throughout the planning, implementation, and assessment phases ensures that students' learning outcomes align with curricular expectations. As such, teachers are encouraged to adopt specific models or tailor their teaching strategies to accommodate the unique circumstances and needs of their students. However, evidence suggests that many teachers encounter difficulties in designing and applying effective learning models. For instance, numerous students express challenges with Geography lessons, viewing the subject as either overly complex, unengaging, or impractical, resulting in suboptimal learning outcomes.

Given these challenges, the author proposes shifting students' perceptions by optimizing Geography instruction through the Student Teams Achievement Divisions (STAD) learning model (Tiantong & Teemuangsai, 2013). This approach aims to enhance students' understanding of the "Cultural Monday" theme, foster active participation during lessons, and transform Geography into an engaging and enjoyable subject. In the current era of globalization, a wide variety of learning methods, models, and media are available to suit different educational contexts. Among these, the animation-based STAD learning model offers a promising solution to improve the teaching and learning process.

Teachers employing a contextual approach are encouraged to link the material with real-world situations that resonate with their students. Even with limited resources, educators must strive to optimize learning. The animation-based STAD model facilitates a quiet yet enjoyable learning environment, enabling students to learn naturally while practicing collaboratively in groups (Ghavami, 2023). This contextual approach motivates students to grasp the essence, significance, and utility of learning, fostering a genuine interest and enthusiasm for lifelong education. This aligns with the perspective of Mulyasa (2003), who asserts that students possess a natural curiosity and a strong potential to satisfy it. Thus, a teacher's primary role is to create a stimulating learning environment that fosters curiosity, ultimately encouraging students to develop a love for learning.

By implementing the animation-based STAD learning model at Senior High School (SHS) 4 Bengkalis, the Geography learning process is expected to become more effective. Students will be more motivated to participate actively in learning activities, thereby achieving improved academic outcomes.

THEORETICAL STUDIES

Learning is a fundamental activity for everyone, enabling the development of knowledge, skills, habits, hobbies, and attitudes. However, the learning process and its outcomes cannot be directly observed unless the individual engages in activities that demonstrate the results of their learning. According to Sudjana (1990), "learning outcomes refer to the abilities acquired by students as a result of their learning experiences." These outcomes represent the achievements students gain after engaging with specific learning materials and are reflected through both quantitative and qualitative measures. To evaluate these outcomes, assessments are conducted to determine whether students have successfully mastered the material.

According to Sudjana (2005), learning refers to a systematic and intentional effort by educators to establish conditions that facilitate student learning activities. This process

involves educational interactions, either among students or between students and educators. Therefore, learning activities are characterized by deliberate, planned, and structured efforts from educators aimed at guiding students in their learning journey.

The STAD cooperative learning model is a widely recognized type of cooperative learning, characterized by features, steps, phases, principles, benefits, and limitations that are largely similar to those of other cooperative learning models (Masoabi, 2015). STAD is a strategy in which students work in small groups comprising members with varying levels of ability to complete tasks collaboratively (Slavin, 1987). Each group member is responsible for working together and supporting one another to understand the subject matter. In cooperative learning, the process is considered incomplete if any group member has not mastered the material. Therefore, the success of this model relies on collective understanding, ensuring that all group members achieve the intended learning objectives.

METHODS

This research adopts a Classroom Action Research (CAR) approach. According to the Ministry of Education and Culture (1999), action research is defined as "a problem-solving strategy that involves concrete actions and the development of skills to detect and address issues. In this process, the parties involved collaborate, share factual information, and enhance their analytical abilities" (Thamrin, 2011). CAR is particularly focused on addressing practical problems in a specific setting and is often employed by educators to improve the quality of learning in their classrooms.

The research utilizes a qualitative descriptive approach to observe, describe, and analyze the implementation and outcomes of learning interventions (Nastasi & Schensul, 2005). The scope of this study is confined to classroom-based activities, where the researcher, who also serves as the teacher, conducts the study within their teaching environment. The primary goal is to enhance the quality of teaching and learning practices by applying the STAD cooperative learning model. This method allows for direct observation and iterative improvements to the teaching process, ensuring that changes are both practical and impactful in fostering better learning outcomes among students.

RESULT

The learning activities were conducted over multiple meetings, following the same learning process to observe student development and progress. Observations included group-based learning activities and individual student outcomes. Results showed significant improvement from the first meeting to subsequent sessions. The learning activities also involved quizzes to measure students' knowledge during the learning process. The data indicated that many students achieved higher developmental scores over time. Based on the observations, the following conclusions were drawn: 1) Students demonstrated the ability to engage in learning activities effectively; 2) Many students showed confidence in expressing their opinions; 3) Students followed the learning procedures well; and 4) A significant number of students participated actively in the learning activities, achieving results that were categorized as very good.

3.1 STAD Team Scores and Awards

The following Table 1 summarizes the scores and awards for each team across the four meetings.

Analysis of Meeting Scores

– Meeting 1: Group I scored 16, Group II scored 18, Group III scored 15, Group IV scored 16, and Group V scored 15. All groups received a Good Enough award.
– Meeting 2: Group I scored 22, Group II scored 21, Group III scored 19, Group IV scored 15, and Group V scored 22. Groups I, II, and V received a Good award, while Groups III and IV maintained a Good Enough award.
– Meeting 3: Group I scored 24, Group II scored 23, Group III scored 21, Group IV scored 22, and Group V scored 21. Group I received a Very Good award, while the other groups achieved a Good award.
– Meeting 4: Group I scored 27, Group II scored 25, Group III scored 22, Group IV scored 23, and Group V scored 23. Groups I and II received a Very Good award, while Groups III, IV, and V maintained a Good award.

Interpretation of Results

The data indicate a clear progression in team performance throughout the meetings. By the final session, Groups I and II achieved the highest scores and received Very Good awards. The steady improvement in scores reflects the effectiveness of the STAD learning model in fostering collaboration and enhancing student outcomes. Moreover, the consistent rise in team performance suggests that the learning process became more engaging and effective as students gained familiarity with the cooperative learning structure. This can be seen more clearly in Figure 1 below.
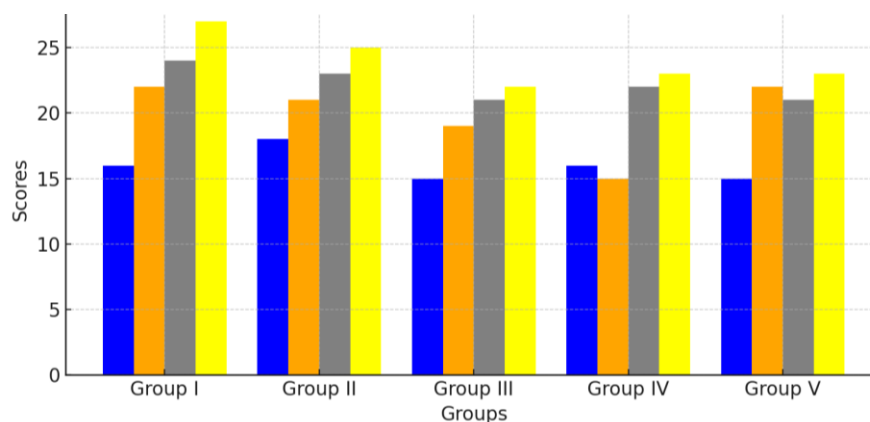

Figure 1. Graph of STAD Type Team Scores and Awards

3.2 Individual Development

The following observations highlight the progression in individual development scores throughout the study. This can be seen more clearly in Table 1 and Figure 2 below.

Table 1. Summary of Individual Development Scores Across Stages

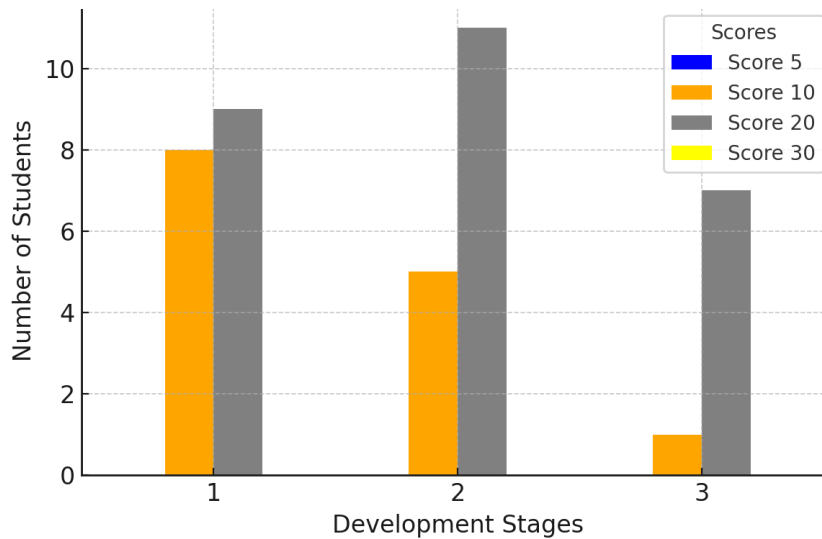| Development Stage	Score 5	Score 10	Score 20	Score 30
Development 1 and 2	0 students (0%)	8 students (31%)	9 students (35%)	0 students (0%)
Development 2 and 3	0 students (0%)	5 students (19%)	11 students (42%)	0 students (0%)
Development 3 and 4	0 students (0%)	1 student (4%)	7 students (27%)	0 students (0%)

Figure 2. Individual Development

3.3 Completeness of Student Learning Outcomes

– Students Who Completed: In the pre-cycle phase, 13 students, or 50%, achieved completeness in their learning outcomes. In Cycle I, the number of students who completed increased to 19 students or 73%. This trend continued in Cycle II, where 23 students, or 88%, successfully achieved completeness.

– Students Who Did Not Complete: For students who did not complete their learning outcomes, the Precycle phase recorded 13 students or 50%. In Cycle I, this number decreased to 7 students, or 27%. By Cycle II, the number of students who did not complete further declined to 3 students or 12%.

The explanation above is visually represented in the graph in Figure 3, Figure 4, and Figure 5 below:
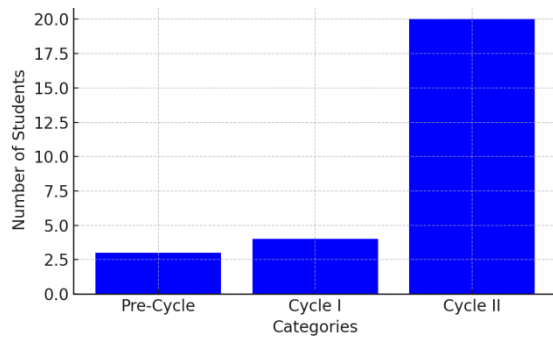

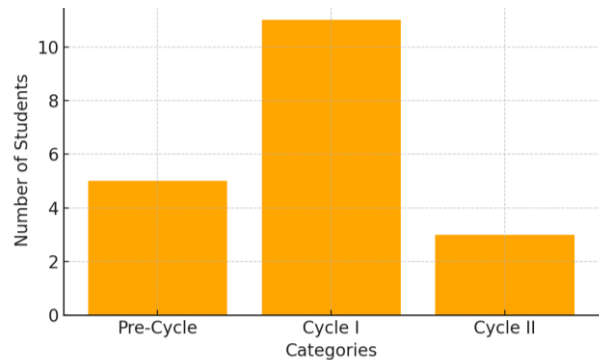Figure 3. Results on the range 85 – 100 on each cycle

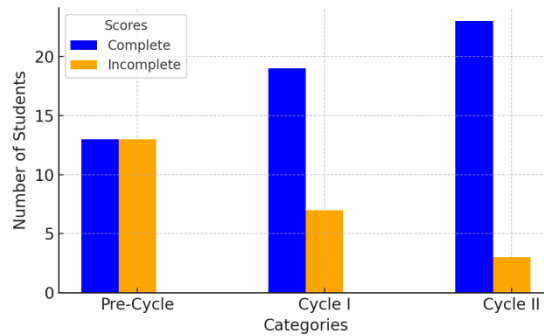Figure 4. Results on the range 75 – 84 on each cycle

Figure 5. Learning Completeness

3.4 Student grade range

– Scores ranging from 85 – 100 for Precycle were obtained by as many as 3 students or 12%, for Cycle obtained as many as 4 students or 15%, and for Cycle II obtained as many as 20 students or 77%.

– Scores ranging from 75 – 84 for Precycle were obtained as many as 5 students or 19%, for Cycle I obtained as many as 11 students or 42% and for Cycle II obtained as many as 3 students or 12%.

– Scores ranging from 65 – 74 for Precycle were obtained by as many as 8 students or 31%, for Cycle I obtained as many as 4 students or 15%, for Cycle II obtained as many as 3 students or 12%.

– Grades ranging from < – 65 for Precycle were obtained by as many as 10 students or 38%, for Cycle I obtained as many as 7 students or 27%, and for Cycle II no students obtained this score or 0%,

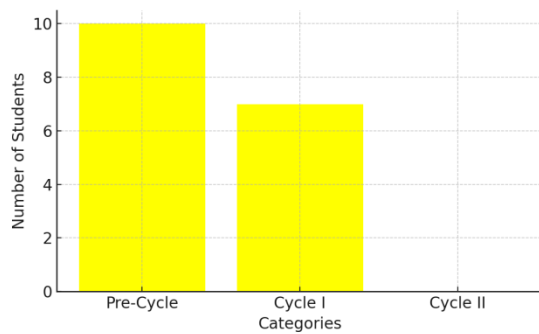From the explanation above can also be described in the graph in Figure 6, Figure 7 and Figure 8 below

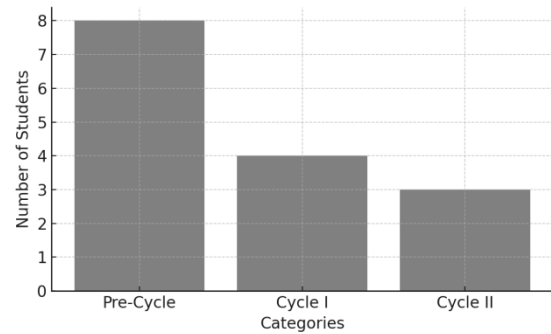
Figure 7. Results in the range of < - 65 on each cycle

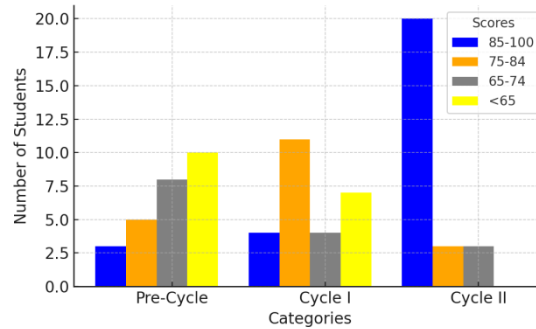Figure 8. Results in the range of 65 – 74 in each cycle

457

Figure 9. Cycle Results

CONCLUSIONS

It can be concluded that implementing the STAD cooperative learning model in the Cultural Arts subject for Class XI students at SHS 4 Bengkalis during the 2022/2023 academic year effectively improved student learning outcomes. This is evidenced by the improvement in the completeness rate, which was 50% (13 students) in the pre-cycle phase. In Cycle I, the completeness rate increased significantly to 73% (19 students). By Cycle II, the completeness level further rose to 88% (23 students). In terms of student absorption rates, the initial absorption rate in the pre-cycle phase was recorded at 67%. After implementing Cycle I, this increased to 73%, and by Cycle II, the absorption rate had improved further to 86%. This demonstrates that the STAD cooperative learning model positively impacted student performance and engagement in the learning process.

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