The STAD Model Assisted by Audio Visual Media Increases Student Motivation and Learning Achievement

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Abstract

The low learning motivation of students in the learning process. The initial motivation of students is 69% (less), namely out of 14 students, only four students meet the indicators of success. It is because teachers still dominate teaching and learning activities so that learning is teacher-centered. In the learning process, some students did not pay attention to the lessons given by the teacher. This study aims to determine the increase in motivation and learning achievement of students through the cooperative model of the Student Teams Achievement Divisions type assisted by audio-visual media. This type of research is classroom action research. The research procedure was carried out in two cycles. The source of the data taken is the entire class and the data analysis technique used is quantitative and descriptive qualitative analysis. The results showed an increase in student motivation and learning achievement.

Keywords: Motivation, STAD, audio visual

Introduction

Science is constantly developing and progressing according to the times and the development of human thinking (Huang et al., 2020; Montoya et al., 2021). The nation's quality of life can improve if an established education supports it. A good education will enable a person to develop critical, creative, and productive thinking skills (Hussin, 2018; Muhtar & Dallyono, 2020; Stone et al., 2013). The curriculum is critical in learning. The curriculum must pay attention to several essential things, including the development of students, advances in science and technology, and the needs in society (Chien, 2017; Polizzi, 2020; Thoyyibah et al., 2019).
Since implementing the 2013 curriculum, all learning has been taught thematically using an integrated scientific and thematic approach (Kurniasari, 2017; Mega et al., 2015). The 2013 curriculum aims to prepare Indonesian people to have the ability to live as individuals and citizens who are faithful, productive, creative, innovative, and practical and able to contribute to the life of society, nation, state, and world civilization (Sutrisno et al., 2021; Wulandari, 2020). Learning in the 2013 Elementary School Curriculum is student-centered. Students are the center of learning, while the teacher acts more as a facilitator who facilitates students to carry out learning activities (Montoya et al., 2021; Selviana Resa & Prabawanto, 2017).

The researcher made observations in the fifth grade of SD N Luwung 02, implementing the 2013 curriculum. The problem from the observations was the motivation of students in the learning process. The students' learning motivation is 71% (enough). That is, out of 14 students, only four students meet the indicators of success. The 2013 curriculum requires students to be active in the learning process. However, what happened in the classroom was that only a few students were active. In the learning process, some students do not pay attention to the lessons given by the teacher and do not take the lessons seriously. When working in groups, only a few students participate in doing the assignments, while other students do not participate in doing the assignments. They only rely on intelligent students. It is because the motivation of students to participate in learning activities is still low.

Motivation is essential in learning activities because someone who does not have motivation in learning will not be able to carry out learning activities (Rahmat & Akbar, 2019; Saito et al., 2018). Motivation is a psychological symptom in the form of an impulse that arises in a person consciously or unconsciously to take any action with a specific purpose (Abdelrahman, 2020; Leona et al., 2021). A person performs a learning activity because someone is pushing it. Motivation is the driving force that drives a person to learn (Guswara, 2020; Veselova et al., 2021). The success of learning is determined by learning outcomes and is also determined by the learning process. In the learning process, the teacher can assess students' motivation towards the subject matter provided by the teacher (Ardhaoui et al., 2021; Parker et al., 2021). Students' interest in learning depends on the motivation of students to study the subject matter (Abdelrahman, 2020; Sumantri & Whardani, 2017).

The solution offered to overcome these problems is by using innovative learning models that can increase student motivation in learning (Aprilianingrum & Wardani, 2021; Fadli et al., 2020). One of the innovative learning models that teachers can use is the Student Teams Achievement Divisions type cooperative learning model. The cooperative learning model is a series of learning activities carried out by students in specific groups to achieve learning objectives (Nurhusain, 2017; Qusyairi & Sakila, 2018). Implementing the cooperative learning model will show learning activities to be effective (Dupri et al., 2020; Monica et al., 2017). In the cooperative learning model, there are five elements, namely: positive interdependence, individual responsibility, face to face, communication between members, and evaluation of group processes (Alfiani & Sopyiani, 2014; Diartini & Ratnawuri, 2017). Learning activities emphasize positive interdependence between individual students, individual responsibility, face-to-face, intensive communication between students, and evaluation of group processes (Nugraha et al., 2016; Rjabg, 2018).

One type of cooperative learning is the Student Teams Achievement Divisions model. The Student Teams Achievement Divisions model can motivate students to support each other and help group members in mastering the abilities taught by the teacher (Anjani, 2017; Wardani, 2015). If students want their team to get team awards, then students must teach their group members and at the same time learn the material for themselves (Alman, 2017; Zahro et al., 2018). In cooperative learning, students learn to help each other master teaching materials and increase interaction between students (Anggraini et al., 2018; Widowati, 2011).
Students in groups will learn to hear other people's ideas, discuss agree or disagree, offer or accept constructive criticism.

In addition to innovative learning models, other factors that support successful learning are learning media (Heo & Toomey, 2020; Purwanita et al., 2019). The use of learning media can make it easier for teachers to convey information so that it will increase students' understanding of learning (Manurung & Panggabean, 2020; Rubini et al., 2018). Media is anything that can channel messages from people who give messages to people who receive good messages (Price et al., 2017; Ran et al., 2016). One of the learning media that can facilitate student learning is audio-visual media. Audio-visual media, namely media which is a combination of audio and visual or commonly called viewing-hearing media. Audio-visual media is media that can display images and sound elements. The combination of these two elements makes audio-visual media have better capabilities. This learning media can facilitate student learning styles so that it is seen as making it easier for students to learn.

Previous research stated that audio-visual media could make it easier for students to understand learning materials (Fauzi et al., 2017; Michelsanti et al., 2019; Setiawan & Ari Oka, 2020). The findings of previous studies also stated that cooperative learning could increase students' enthusiasm and motivation to learn (Dupri et al., 2020; Gjems, 2013; Nurhusain, 2017). It can be concluded that cooperative learning with the aid of media will facilitate students in learning. There is no study on the Student Teams Achievement Divisions model with the aid of audio-visual media. The purpose of this study is to analyze the STAD model assisted by audio-visual media. The STAD model assisted by audio-visual media is expected to increase students' motivation and learning achievement.

**Methods**

This type of research is classroom action research. This research was conducted at SD N Luwung 02. This study took fifth-grade students as the object of research. The subjects of this study were the fifth-grade students of SD N Luwung 02, with 14 students consisting of 8 female students and six male students. The data used in this study are qualitative and quantitative. Qualitative data describes the process and learning outcomes obtained through observation in words and actions, written data sources, and photos. Quantitative data is statistical data in the form of numbers such as the average results from questionnaires and quiz scores in each cycle which gives an idea of the tendency to increase or decrease learning motivation.

**Data collection techniques** are methods that researchers can use to collect data. Data collection techniques used in the research are documentation, questionnaires, and interviews. Documentation in this study is in the form of field note data, a written record of everything that happens during the learning process in class. This study uses a questionnaire in the form of a learning motivation questionnaire consisting of statements that students will fill out to measure learning motivation. Indicators of learning motivation include (a) persevering in facing tasks, (b) being tenacious in facing difficulties, (c) showing interest in various problems, (d) preferring to work independently, (e) getting bored quickly on routine tasks, (f) can defend his opinion, (g) it is not easy to let go of what he believes in, and (h) Happy to find and solve problems. The technique used to analyze the data is descriptive qualitative and quantitative analysis. The score in this research instrument consists of a range of 4-1, namely the statements of good SL (4), SR (3), KD (2), and TP (1). Unfavorable statements TP (1), KD (2), SR (3), and SL (4).
Results and Discussion

Results

The data obtained when making observations in class V is students' low motivation and achievement in the learning process. Students' learning motivation is 69% (enough). That is, out of 14 students, only four students meet the indicators of success. The 2013 curriculum requires students to be active in the learning process, but what happens in the classroom is that only a few students are active. In the learning process, some students do not pay attention to the lessons given by the teacher and do not take the lessons seriously. When working in groups, only a few students participate in doing the assignments, while other students do not participate in doing the assignments. Students only rely on smart students. It is because the motivation of students to participate in learning activities is still low.

Activities carried out in this pre-cycle include conducting interviews with fifth-grade teachers about the motivation and methods used by teachers. To find out the initial data on motivation, a questionnaire was given to students. Data from the results of filling out a questionnaire about students' motivation before the action, namely the achievement of students' learning motivation in the first cycle on the indicator of diligently facing the task, reached 73% included in the excellent category. The tenacity indicator facing difficulties reaches 73%, which is included in the excellent category. The indicator shows interest in various problems reaching 66%, which is included in the excellent category. Fast indicators prefer to work independently, reaching 73% included in the excellent category. Indicators of getting bored quickly on routine tasks 63% are included in the excellent category. The indicator can maintain its opinion reaching 63%, which is included in the excellent category. It is not easy to let go of what is believed to reach 70%, which is included in the excellent category. The indicator of happy to find and solve problems the questions reach 75% is included in the excellent category.

Cycle 1 was carried out in two meetings which were carried out according to the thematic lesson schedule at the school. The first meeting was held with a time allocation of 7 x 35 minutes. The Student Teams Achievement Divisions learning model was implemented in the first cycle in two meetings. The implementation procedure is as follows. At the first meeting of the first cycle of learning Theme 2 Clean Air for Health, Sub-theme Importance of Clean Air for Breathing, learning 1. Learning activities refer to the Lesson Plan (RPP) that has been prepared. The assessment of the success of the actions in the first cycle was carried out by giving the first cycle questionnaires to the students. In the first cycle of action, there was an increase in each indicator. The results of the student learning motivation questionnaire in cycle I can be seen in Table 1.

Table 1. Analysis of Learning Motivation Questionnaire Results Cycle I

| No | Indicator                                      | Percentage | Category |
|----|-----------------------------------------------|------------|----------|
| 1  | Persevere in the face of the task             | 79%        | Good     |
| 2  | Tenacious in the face of adversity           | 76%        | Good     |
| 3  | Shows interest in various issues              | 69%        | Enough   |
| 4  | Prefer to work independently                  | 80%        | Good     |
| 5  | Get bored quickly on routine tasks           | 70%        | Enough   |
| 6  | Can defend his opinion                        | 70%        | Enough   |
| 7  | It's not easy to let go of what you believe in| 75%        | Enough   |
| 8  | Enjoy finding and solving problems           | 77%        | Good     |
|    | **Average**                                   | **74%**    | **Good** |
Based on the data in the table above, it can be seen that the achievement of students' learning motivation in the first cycle on the indicator of being diligent in facing the task reached 79%, which was included in the excellent category. The tenacity indicator facing difficulties reaches 76%, which is included in the good category. The indicator shows interest in various problems reaching 69%, which is included in the excellent category. Fast indicators prefer to work independently, reaching 80% included in the excellent category. Indicators of getting bored quickly on routine tasks 70% are included in the good category. The indicator can maintain its opinion reaching 70%, which is included in the good category. It is not easy to let go of what is believed to reach 75%, which is included in the good category. The indicator of happy to find and solve problems the questions reached 77% included in the good category. The average learning motivation of students in the first cycle reached 74%, which was included in the good category.

Cycle II was carried out in two meetings which were carried out according to the thematic lesson schedule at the school. The first meeting was held with a time allocation of 7 x 35 minutes. The Student Teams Achievement Divisions learning model was implemented in the first cycle in two meetings. The implementation procedure is as follows. At the 1st meeting of the first cycle, it was carried out with learning Theme 3 Clean Air for Health, Sub-theme of Maintaining the Health of Human Respiratory Organs, learning 2. Learning activities refer to the Learning Implementation Plan (RPP) that has been prepared. The second meeting of the second cycle was carried out by learning Theme 3, Clean Air for Health, Sub-theme of Maintaining the Health of Human Respiratory Organs, learning 3. Learning activities refer to the Learning Implementation Plan (RPP) that has been prepared.

The assessment of the success of the actions in the second cycle is carried out by giving the second cycle questionnaires to the students. In the second cycle of action, there was an increase in each indicator. The results of the student learning motivation questionnaire in cycle II can be seen in Table 2.

**Table 2. Analysis of the Results of the Cycle II Learning Motivation Questionnaire**

| No | Indicator                                      | Percentage | Category |
|----|-----------------------------------------------|------------|----------|
| 1  | Persevere in the face of the task              | 83%        | Good     |
| 2  | Tenacious in the face of adversity            | 78%        | Good     |
| 3  | Shows interest in various issues               | 80%        | Good     |
| 4  | Prefer to work independently                   | 83%        | Good     |
| 5  | Get bored quickly on routine tasks            | 80%        | Good     |
| 6  | Can defend his opinion                         | 80%        | Good     |
| 7  | It's not easy to let go of what you believe in | 82%        | Good     |
| 8  | Enjoy finding and solving problems            | 82%        | Good     |
|    | Average                                       | 81%        | Good     |

Based on the table data above, it can be seen that the achievement of students' learning motivation in cycle II on the indicators of being diligent in facing the task reaches 83%, including in the excellent category. The tenacity indicator facing difficulties reaches 78%, which is included in the excellent category. Indicators showing interest in various problems reached 80% included in the excellent category. Fast indicators prefer to work independently, reaching 83% included in the excellent category. Indicators of getting bored quickly on routine tasks 80% are included in the excellent category. The indicator can maintain its opinion reaching 80%, which is included in the excellent category. It is not easy to let go of what is believed to reach 82%, which is included in the excellent category. The indicator of happy to find and solve problems the questions reached 82% included in the excellent category.
excellent category. The average learning motivation of students in the second cycle reached 81%, including in the excellent category.

**Discussion**

The researcher and the teacher carried out the reflection in cycle II to conduct an assessment during the learning process using the Student Teams Achievement Divisions type cooperative model. Based on the discussion, it is known that the implementation of learning using the cooperative model of the Student Teams Achievement Divisions type has been running according to the design prepared previously. It can be concluded that the cooperative model is effectively used in learning (Fu et al., 2012; Khan & Masood, 2015). This learning model makes students work together in small groups consisting of various levels of achievement, gender, and ethnic backgrounds to help each other learn the subject matter (Afinda et al., 2019; Foldnes, 2016; Liebech-Lien, 2021). It allows students to help each other, discuss and argue with each other to hone their current knowledge and close the gaps in their understanding (Haryono, 2020; Ruengtam, 2013; Stone et al., 2013).

In addition, the use of learning media during the learning process is also very helpful in improving the learning atmosphere (Alfiah et al., 2018; Fauzi et al., 2017). One of the developments in education is the creation of more varied and exciting learning media, thus making the learning atmosphere more conducive and focused (Amali et al., 2020; Indrianto & Kurniawati, 2020). The primary function of learning media is to realize more effective learning (Boyd, 2019; Ismara et al., 2021). It will affect the quality of better learning outcomes if the use of the media is appropriate. The audiovisual media used can improve students' understanding of learning (Michelsanti et al., 2019; Setiawan & Ari Oka, 2020). Audiovisual media is a combination of audio and visual media to complete the presentation of learning materials (Kkese, 2020; Virgiana & Wasitohadi, 2016). Audiovisual media is a tool used to help written and spoken words convey knowledge, attitudes, and ideas in learning (Michelsanti et al., 2019; Xu & Wu, 2021). The audiovisual media used are images, videos, and sounds to make it easier for students to receive learning materials (Anjarsari et al., 2020; Larue & Watling, 2021). Thus, audiovisual media enrich the learning environment, nurture exploration, experimentation, and discovery, and encourage students to develop speech and express their thoughts (Wang et al., 2020; Widiatmika et al., 2017).

The findings of previous studies also stated that audio-visual media could increase student motivation, so it impacts student learning outcomes (Michelsanti et al., 2019; Pattemore & Muñoz, 2020; Xu & Wu, 2021). Other research findings also state that the STAD type cooperative learning model creates a pleasant learning atmosphere to improve student learning outcomes (Alfiani & Soiptiani, 2014; Laksono et al., 2016; Widowati, 2011). It can be concluded that the STAD type cooperative learning model with audio-visual media can help students learn. This research implies that teachers in the learning process can apply the STAD type cooperative learning model with audio-visual media to increase students' motivation and learning achievement.

**Conclusion**

The achievement of students' learning motivation in cycle I to Cycle II with the cooperative model of the Student Teams Achievement Divisions type increased. It can be concluded that the application of the Student Teams Achievement Divisions type cooperative model with the aid of audio-visual media can increase students' motivation and learning achievement.
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