



Knowledge Sharing in Groups to Improve Learning Outcomes and Social Skills of Elementary School Students

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ABSTRACT

Cooperative learning is a learner-centered learning process, where students share knowledge in groups. Student Teams Achievement Divisions (STAD) is a type of cooperative learning that is effective in improving students' critical thinking skills. This study aims to describe the use of the STAD type of cooperative learning model in improving student social science learning outcomes and to analyze the impact of the model in increasing student learning participation through technology-assisted audio-visual media. This study used classroom action research with a cycle system consisting of planning, implementation, observation, reflection, and revision. The participants in this study were teachers and second-grade students at a public elementary school located in Banten, Indonesia. The learning outcomes of the first cycle showed that 75.86% of students achieved the learning objectives, while the second cycle learning outcomes showed that 93.10% of the students achieved the learning objectives. The results of this study indicate that STAD-type cooperative learning in collaboration with the use of audio-visual learning media is proven to be able to improve student learning outcomes, can also improve student understanding, and be able to increase student motivation to discuss in small groups, that allow students to quickly understand a concept through visualization.

Keywords: *Critical thinking skills, Knowledge Sharing, Social science learning achievement, STAD cooperative learning.*

1. INTRODUCTION

Cooperative learning has a variety of teaching methods and procedures that can be used to promote learning in various domains (Sharan, 2015). Cooperative learning is an active learning process because students learn more by creating and sharing knowledge in groups (Kim, 2018). Cooperative learning can provide students with discussion opportunities and help students develop important social skills (Khan & Inamullah, 2011). One type of cooperative learning, namely Group Investigation, is proven to be effective in encouraging student involvement in learning, training students' higher-order thinking skills, and encouraging collaborative behavior to complete assignments (Rosfiani et al., 2021). Meanwhile, other types of cooperative learning, namely Jigsaw, have also been shown to be able to increase knowledge of pedagogical

content and verbal communication skills (Sudin Hermawan, Rosfiani, Ristiawati & Hasanah, 2021).

A study by Gambari and Yusuf (2015) investigated the effectiveness of Student Teams Achievement Divisions (STAD) cooperative learning strategies in solving physical problems, student achievement, and retention. Then, in the same year, Gambari, Yusuf, and Thomas (2015) examined the effectiveness of computer-assisted teaching in Student Teams Achievement Divisions (STAD) and cooperative learning strategies Learning Together (LT) on the achievement and motivation of Nigerian secondary schools. Furthermore, the research of Hermawan, Rosfiani, Suheti, and Susanti (2020) showed that the STAD type cooperative learning model was proven to be able to improve students' mathematics learning outcomes, help students gain academic content, and train students to be socially related skills.

Wulandari, Amin, Zubaidah, and IAM (2017) used a survey to assess various combinations of learning methods to improve critical thinking skills, this shows that the strategy of combining PDEODE and STAD can effectively improve students' critical thinking skills in nutrition and health lectures. The Study of Yusuf, Natsir, and Hanum (2015) modified STAD procedures related to how quizzes were given to students, provided printed answer keys, ways to improve student quizzes, provided team introduction forms, and ways to identify student achievement.

Social Studies is a basic subject that can develop students' knowledge and skills in socializing with everyday life. Social studies are a science that has branches in anthropology, economics, history, geography, and so on (Ellis, 1997). Social studies aim to be able to accept applicable norms or regulations, and students get direct feedback from their real experiences from here (Isjoni, 2013).

However, no previous study has investigated the STAD-type cooperative learning model that is supported by the use of audio-visual learning media adopted by teachers on social science subjects, especially in second-grade students at the public elementary school which is the site of this research. This paper will focus on exploring the use of STAD-type cooperative learning models and describe the increase in social learning outcomes achieved by students. The findings of this study will help teachers in considering appropriate learning models and collaborate with the use of appropriate learning media to improve teacher and student performance in the classroom based on empirical evidence.

2. METHOD

This practical action research consisted of four steps: planning, acting, observing, and reflecting (Creswell, 2012). The cycle starts from the pre-cycle to the umpteenth cycle (the cycle is not determined intentionally). This practical action research cycle stops when the learning objectives have been achieved by all students. Participants in this study were 29 second-grade students, consisting of 11 male students, and 18 female students. The subject deliberately chosen in this study is social science. This research took place at a State Elementary School in Pamulang, precisely in the center of South Tangerang City, Banten Province, Indonesia.

This study uses qualitative and quantitative data analysis. According to Creswell (2012), one of the most difficult challenges for classroom action research researchers is how to analyze data collected from qualitative and quantitative research. This is more than just connecting or cutting data and numbers, although this relationship does present several challenges.

Qualitative data were collected from the results of observation notes using an observation protocol, where the observer recorded the performance of the teacher's teaching actions from the STAD-type cooperative learning model adopted by the teacher. Meanwhile, quantitative data were collected from students' social studies learning outcomes tests.

3. FINDINGS AND DISCUSSION

3.1. Pre-cycle

a. Planning

The researcher discusses with colleagues to discuss learning and find problems in the second-grade student. The researcher prepares a Social Science lesson plan on the subject of the position and role of family members using the presenting and explaining model.

b. Acting

The learning steps carried out in the pre-cycle are carrying out initial, core, and closing activities. In the initial activity, the teacher motivates students to be enthusiastic about participating in the learning that will be carried out. The teacher conveys the learning objectives regarding the position and role of family members.

In the initial activity, the teacher motivates students to be enthusiastic about participating in the learning that will be carried out. The teacher conveys the learning objectives and gives an appreciation of "children now we will know the position and role of family members.

The main activity is carried out by the teacher to explain the material on the position and role of family members. The teacher asks students to read the positions and roles of family members, followed by questions and answers about the meaning of the position and role of family members. The teacher gives students the opportunity to mention the role of family members. The teacher allows students to ask questions that they do not understand (the opportunity to ask questions). Next, the teacher distributes worksheets (individual evaluation questions) followed by explaining how to complete the worksheets. The teacher goes around observing students' work, observing and finding various difficulties experienced by students in doing worksheets, and the teacher allows asking questions if there is something they don't understand.

The closing activity is continued by the teacher to discuss the tasks that have been given. Then students and teachers make learning conclusions.

c. Observing

Observation results show that students are less involved in the learning process, and there are disruptive behaviors, both of which have an empirical impact on the low results of student learning tests.

d. Reflecting

Based on the results of the pre-cycle reflection, it was found the weaknesses and strengths of teacher learning. Weaknesses include, the learning carried out by the teacher is not following the lesson plan scenario; students are less involved in the learning process, there is disturbing student behavior, the teacher has not used teaching aids, and the communication built by the teacher is still one-way; the selection of learning methods is not appropriate; the determination of rewards by teachers is still not able to motivate student learning. 11 students have not achieved the learning objectives.

The strengths of teacher teaching include, the teacher has designed a lesson plan according to the learning objectives and the selection of teaching materials is following the applicable curriculum; teachers have learned to teach; mastery of teacher technology is quite good which allows teachers to find references, materials, media, and try other methods. Based on the results of these reflections, it is necessary to take corrective actions in learning through cycle one.

Pre-cycle student learning outcomes data shows that 44.80% of students achieve learning objectives, while 55.20% of other students have not achieved learning objectives. Pre-cycle student learning outcomes data are shown in Figure 1.

3.2. Cycle 1

a. Planning

Researchers identify problems in the pre-cycle. Furthermore, the researchers designed the lesson plans, used cooperative learning models, chose to use the media

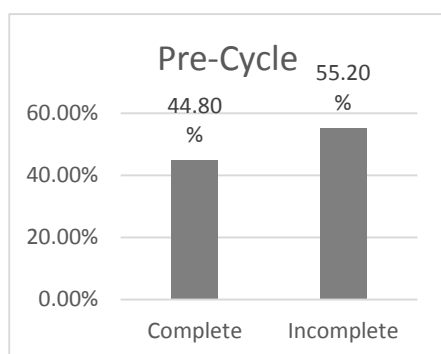


Figure 1 Results of pre-cycle stage.

picture of family members, and the researcher prepared the teacher performance observation sheet for the first cycle.

b. Acting

The learning steps carried out in cycle one are implementing a learning improvement plan that has been prepared in the initial, core, and final activities. In the initial activity, the teacher conditions the class so that it is orderly and smooth. In addition, teachers also motivate students. The teacher invites the students to applaud the spirit.

In the core activity, the teacher conducts learning in several phases.

Phase 1. The teacher conveys the learning objectives. The teacher prepares students to learn by asking questions, "What important events have you experienced?"

Phase 2. The teacher presents teaching materials about the position and role of family members. The teacher demonstrates each role of family members with the help of picture media.

Phase 3. The teacher assigns students to form groups. Each group consists of 4-5 members who have been determined by the teacher. The teacher gives group worksheets to students. Each group is given the task of writing down and then presenting the position and role of family members.

Phase 4. The teacher monitors the work of each group and asks students to ask questions if there is the material that has not been understood.

Phase 5. The teacher asks the representative of each group to tell the position and role of family members in front of the class.

In the final activity, the teacher concludes the lesson regarding the material of the position and role of family members.

c. Observing

The results of the first cycle of observations showed that the teaching carried out by teachers from the STAD type cooperative model reached 83%. Observers recommend improving teacher performance in the next cycle.

d. Reflecting

Based on observations of teacher performance in cycle I, problems were found including, student involvement has not been fully visible. In addition, several advantages were found, namely, the learning process has used student-centered learning methods, the class arrangement is quite good, and have used learning

media, the teacher has established good communication with students, the teacher has also designed a lesson plan by the indicators and materials following the applicable curriculum.

The learning outcomes of the first cycle showed that of the 29 students, 18 students (75.86%) had achieved the learning objectives, while seven students (24.14%) had not achieved the learning objectives.

Researchers decided to carry out improvements in cycle II by using the STAD-type cooperative learning model and audio-visual media. Data on student learning outcomes and observations on the teaching actions of the cycle I teacher are shown in Figure 2.

3.3. Cycle 2

a. Planning

Planning in the second cycle, the researchers chose to use the STAD type cooperative learning model, used audio-visual media, prepared worksheets, and prepared observation notes.

b. Acting

Phase 1. Clarify goals and establish a set. The teacher discusses the lesson objectives regarding the status and roles of family members and sets learning tools.

Phase 2. Presenting information on social science subjects. The teacher informs the material about the position and role of family members. The teacher tells the students through songs related to the nuclear family. The teacher sings one sentence from the song "satu satu aku sayang ibu". Then the teacher displays a family picture and a video of a family story on the screen, the students are enthusiastic to see the video shown by the teacher.

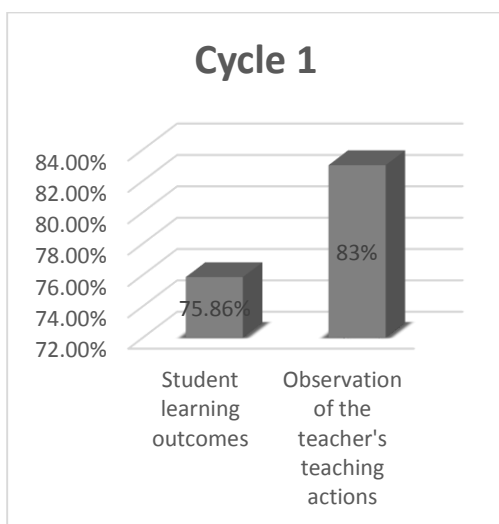


Figure 2 Results of cycle I stage.

The teacher explains the material about the position and role of the family according to the pictures and videos displayed on the screen. The teacher explains about the members of the nuclear family and extended family.

Phase 3. Grouping students into small study teams. The teacher assigns students to form groups. Each group consists of 4-5 members. The teacher gives group worksheets to students, each group is given an assignment.

Phase 4. Providing assistance to teams facing difficulties. The teacher accompanies the students in doing their assignments.

Phase 5. Give a test of the material that has been studied. The teacher assesses students' knowledge of learning materials, namely through holding quizzes in the form of oral questions and answers regarding the position and role of family members. Groups present the results of their work.

Phase 6. Give recognition and prepare rewards. The teacher checks students' efforts and gives recognition for the performance of students, both individually and in groups.

In the final activity, the teacher advises students to continue reading and practicing the material that has been delivered then the teacher ends the lesson.

c. Observing

The researcher collected data related to the implementation of the STAD-type cooperative learning model and utilization of audio-visual media through observation notes written by the observer on the teacher's performance and noting the strengths and weaknesses of the teacher. Based on the results of the observation in

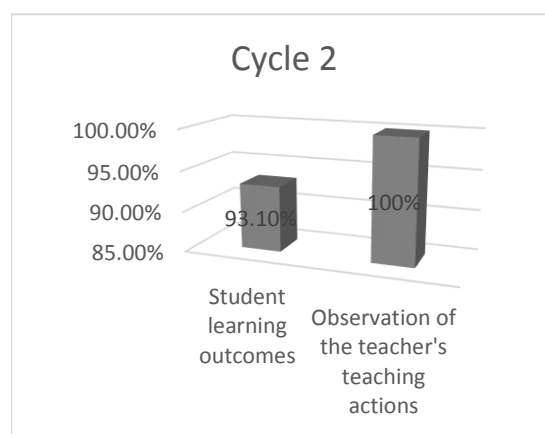


Figure 3 Results of student learning outcomes and observations.

Table 1. Data on student social science learning outcomes in cycle II

No	Achievement Level	Total Students	Percentage
1	Very Good (85-100)	11	37.93%
2	Good (70-84)	14	48.28%
3	Enough (60-69)	2	6.90%
4	Less (<60)	2	6.90%
	Total	29	100%

cycle 2, the teacher has achieved a successful performance for the STAD type cooperative model of 100%.

d. Reflecting

The result of reflection in cycle II shows, it was found that two students had not achieved the learning objectives. However, the researcher decided to end the improvement of learning because 93.10% of students had achieved the learning objectives. The teacher gives the drill to the two students. The following are student learning outcomes in cycle II.

Data on student learning outcomes and observations on teacher performance in cycle II are shown in Figure 3.

Data on social science learning outcomes for class II students for the material on the position and role of family members taught through the constructivist model, namely STAD cooperative learning, are shown in Table 1.

Figure 4 shows a graph of student learning outcomes in Cycle II.

Overall, as shown in Figure 5, the data from this study showed that 44.80% of students achieved the learning objectives in the pre-cycle. The first cycle data shows that 78.86% of students achieve the learning objectives, while the teacher's teaching performance is 85%. Cycle II

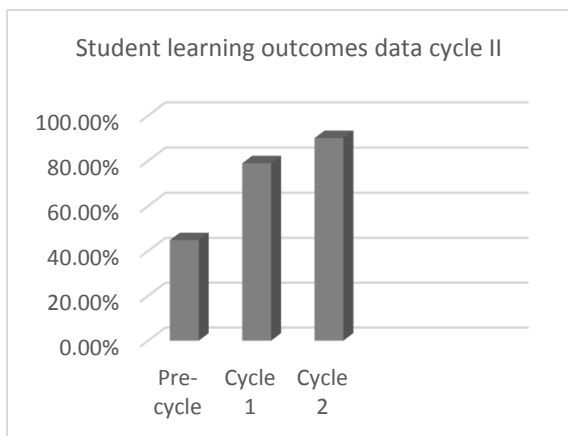


Figure 4 Data on student learning outcomes in cycle II.

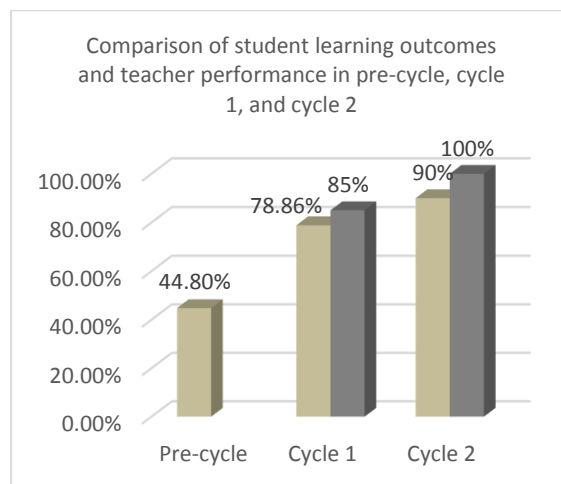


Figure 5 Results of student learning outcomes in pre-cycle, cycle 1, and cycle 2 and teacher teaching performance in cycles 1 and 2.

shows that 90.10% of students achieve learning objectives, and teacher teaching performance is 100%. Results all of the cycles can be seen in Figure 5.

These results agree with the findings of Rianawati (2017) that the implementation of STAD cooperative learning strategies improves the social skills of students. This finding also adds that STAD is proven to be able to improve student learning outcomes, and student understanding, and be able to increase student motivation to discuss in small groups. Among them are Karali and Aydemir's (2018) finding which reveals the STAD technique is more effective in improving learning achievement compared to teacher-centered teaching. These results also support the idea of Berzener and Deneme (2021) in that STAD is more effective in supporting students' understanding of a concept. The results of Rahmatika's research (2019) even show that STAD is more effective than the direct method.

4. CONCLUSION

The research has shown that students who are less involved in the learning process, the presence of disruptive student behavior, teachers who do not use teaching aids, communication that is built by the teacher in one direction, and the selection of inappropriate learning methods, have not been proven to be able to improve student learning outcomes, even though the teacher has mastered the curriculum to be taught and mastered technology in teaching.

The research has also shown that teachers who choose to use student-centered learning models, manage classrooms well, and use appropriate learning media, and teachers who establish two-way communication with students are proven to be able to improve student learning outcomes.

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