



Research article

Efforts to Increase Motivation and Outcomes of Learning About Economic Activities Through Implementing the STAD Cooperative Learning Model

Sridiyatmiko Gunawan, Lilis Setiyo Rini*, Palupi Sri Wijayanti, Fitri Jamilah

Universitas PGRI Yogyakarta, Yogyakarta, Indonesia

Abstract.

The purpose of this study was to: determine the impact of applying the STAD learning model on the outcomes of students learning about economic activities through social studies; examine the influence of the STAD learning model on student motivation; and describe the application of the STAD learning model. This research was conducted at SD Negeri 2 Aglik in the first semester of the 2016/2017 academic year with fourthgrade students. The classroom action research method consisted of 2 learning cycles with the application of the STAD learning model. The data were collected through a test of student learning outcomes and an observation sheet to determine any changes in motivation. This research included four stages, namely planning, implementing, observing, and reflecting. The results indicated that there was an increase in student motivation and student learning outcomes. Out of 21 students, 11 to 13 were motivated in cycle I and 19 in cycle II. There was an increase in student learning outcomes from 52.38% who completed in the initial conditions, to 61.90% in cycle I; in cycle II this increased significantly by 100%. The average value increased from 64.00 in the initial conditions to 77.14 in cycle I and significantly increased in cycle II to 90.49. It can be concluded that applying the STAD learning model can increase motivation and outcomes for learning about economic activities.

Keywords: motivation, learning outcomes, STAD cooperative learning mode

1. Introduction

Students in student teams achievement division (STAD) cooperative learning are placed in a learning team consisting of 4-5 students who mix by achievement, gender, and ethnicity. The teacher presents the lesson, and then the student works on his team to ensure that all team members have mastered the lesson. Then all students are given tests on the material. At the time of this test, they are not allowed to help each other.

Social Sciences is a subject that explores the social structure, including several subjects that reflect social problems in our society. IPS learning aims to improve students' ability and creativity in dealing with social problems that they have and others

Corresponding Author: Lilis Setiyo Rini; email: lilis.angga.la@gmail.com

Published: 28 September 2022

Publishing services provided by Knowledge E

© Sridiyatmiko Gunawan et al. This article is distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use and redistribution provided that the original author and source are credited.

Selection and Peer-review under the responsibility of the ICESRE 2021 Conference Committee.

How to cite this article: Sridiyatmiko Gunawan, Lilis Setiyo Rini*, Palupi Sri Wijayanti, Fitri Jamilah, (2022), "Efforts to Increase Motivation and Outcomes of Learning About Economic Activities Through Implementing the STAD Cooperative Learning Model " in 4th International Conference Page 830 on Education and Social Science Research (ICESRE), KnE Social Sciences, pages 830–840. DOI 10.18502/kss.v7i14.12035

KnE Social Sciences



and develop a positive attitude to improve social inequality. IPS learning students will become good and responsible citizens and can develop social creativity to solve social problems. In short, IPS is believed to need to be taught since elementary school to solve social problems in their environment, interact well, and build them into good, democratic, and responsible citizens in the future. To achieve the learning objectives of IPS, student support is required through student learning motivation [1].

The results of IPS students in grade IV SDN 2 Aglik about economic activities have not met the standard of learning completion. The standard of learning completion has not reached the Minimum Completion Criteria (KKM) 70, and the value of IPS learning outcomes is still low, which is an average score of 56. Students who scored between 40-70 as many as 15 children, students who scored the lowest score of 40, were four children, and students who got the highest score of 100 had two children. The data showed that out of 21 students, it turned out that only 11 students had a minimum standard of completion of learning that is equal to or greater than 70 if the percentage of student learning outcomes of 21 children completed only 50%.

Several factors cause the learning outcomes of grade IV students of SDN 2 Aglik below, namely the low motivation of students in teaching and learning activities (KBM) and the application of learning models that are less attractive to students. The application of the learning model used is a lecture model and tends to be monotonous. Thus the teaching and learning process is still centered on teachers. Talk to friends as students participate in teaching and learning activities in class.

Learning motivation is a sense of support that every student has in learning activities to obtain optimal learning outcomes [2]. The motivation is different. Some students are highly motivated. There are students with low motivation. Highly motivated students have the intention to obtain high learning outcomes. Low-motivation students are intended to achieve low learning outcomes. There is good motivation in learning; then, students will get good results as well. Thus the motivation of students' learning needs to be considered.

Learning is essentially the main activity in the series of educational processes in schools. According to Mc, this can be understood because the success of educational objectives is very dominant depending on how the teaching and learning process takes place. Donald's motivation is a change in energy in a person characterized by the appearance of "feelings" and preceded by a response to a goal [3]. Motivation will cause changes in energy in humans, so it will be attached to psychological symptoms, feelings, and emotions to then act or do something. At the same time, the results of





learning can be in the form of changes in behavior, knowledge, behavior that is relatively permanent, personal, and thinking ability.

Cooperative learning is superior to individualistic and competitive forms [4] of instruction in improving school cognitive and non-cognitive outcomes [5]. Cooperative learning refers to the learning methods teachers use to organize students into small groups, where students work together to help each other learn academic content [6]. Cooperative Learning Model type STAD with Cooperative Learning approach emphasizes activities and interactions between students to motivate each other and help each other in the mastery of lesson materials to achieve maximum achievement. This model conditioned students to study together in small groups to help each other. Classes are organized in groups of 4 or 5 students with diverse abilities.

STAD model learning is very suitable for learning purposes [7], formulated with one answer in math lessons [8]. Students work together to achieve goals through cooperative learning and strive to help other students together [9] to complete lesson materials. Success is achieved when all group members achieve the expected goals together. One model of cooperative learning that can be used is the method of learning Student Team Achievement Division (STAD).

The ability to improve learning outcomes requires a learning process that focuses on the mentality of students to the maximum. Students are not only required to master several subject matters. However, they must play a role in developing ideas and ideas based on experience or describing the results of observation of facts and data in daily life. Thus, students are required to master the subject matter and use the potential that has been possessed.

The initial observations made on implementing IPS learning in grade IV SD Negeri 2 Aglik found that learning tends to be teacher-centered. Students lack the opportunity to develop creativity and have not been fully involved in learning. Teachers use lecture methods while students take the information provided by taking notes. Engaging students actively in learning also encountered obstacles; thus, at least students answer questions and ask questions.

2. Methodology

This type of research is class action research with the application of the cooperative learning model type STAD. The research aims to get students used to solving a problem together or in groups by doing many exercises to improve critical thinking skills.

KnE Social Sciences



The subjects selected in this study were grade IV students of SD Negeri 2 Aglik, Grabbag Subdistrict, Purworejo. With a total of 21 students. At the same time, the object is the application of cooperative learning model type STAD to increase motivation and learning outcomes IPS about economic activities through the application of cooperative

The research design that will be conducted on students is by the treatment of cooperative learning model type STAD. Before being treated, students were given diagnostic tests, which were then treated using the STAD cooperative learning model.

Class Action Research (PTK) is a systematic and planned research process through learning improvement actions conducted by teachers in their classrooms. This research aims to improve teacher performance to improve the quality of learning.

Class action research can be done through four main steps: reflection, planning, action, and observation. Four interrelated steps in conducting class action research are often referred to as cycles.

2.1. Cycle I

2.1.1. Planning

learning model type STAD.

Activities include: identification of problems and determination of alternative troubleshooting, establish standards of competence and basic competencies, Plan the learning that will be applied in the teaching and learning process in the form of a Learning Improvement Plan, Application of environmental exploration learning model using cooperative learning type STAD, prepare student LKS, evaluation sheet, and observation sheet

2.1.2. Actions

This applies an action that refers to a planned scenario or learning step

2.1.3. Observation

At this stage, observations are made on the implementation of learning using observation sheets that the author has prepared. Observations are made on the content of actions, the implementation of actions, and the consequences arising from such actions. Observers and implementers of action as a reflection to save the next signaling plan.



2.1.4. Reflection

This stage is an evaluation of the actions that have been done to determine whether or not the action was successful. At this stage, the author can compare before the actions and conditions are given after the initial stage of a cycle I. In cycle I, there are still incomplete learning outcomes, so that the improvement of learning is continued to cycle II.

Action	Average	Not Finished		Completed	
		Number of Students	percent	Number of Students	percent
Pre-Cycle	64	10	47,62%	11	52,38%

TABLE 1: Average	student table	on initial	proficiency	test.
------------------	---------------	------------	-------------	-------

2.2. Cycle II

2.2.1. Planning

Activities include: identification of problems that arise in cycle I and have not been resolved as well as the determination of alternative troubleshooting, Planning learning that will be applied in the teaching and learning process in the form of Learning Improvement Plan for the improvement of a cycle I, learning model used: cooperative learning type STAD, activities conducted by students Q&A, observation, discussion, home group, and experts, develop LKS, evaluation format, and observation format

2.2.2. Actions

In this action is implemented actions aimed at improving the action in cycle I. In the action cycle, II applied cooperative learning type STAD.

2.2.3. Observation

The activity at this stage is the same as the first cycle, namely the observation of the implementation of learning by using the author's observation sheet.



2.2.4. Reflection

The data of student evaluation results and observation sheets in cycle II are analyzed and reflected to determine whether or not there is an improvement in student learning outcomes in IPS learning about economic activities. Student learning outcomes in cycle II are better than in cycle I and all students achieve KKM. So the improvement of learning stopped in cycle II because it has reached the indicator of success.

3. Discussion

The initial action activity ends with the assignment to students to work on the problem of economic activities. The task is to know the ability of students to learn IPS about economic activities using lecture methods. The initial ability test assignment shows that the average initial ability test result is 64. Data from students' initial ability in IPS learning about economic income can be seen in the following table.



Figure 1: Diagram of Average Results of Students' Initial Ability in Learning IPS on Economic Activities (Pre-Cycle).

Of the 21 students who took the test, there were ten grades between 40-79, 11 students who obtained grades between 80-100 there were 11 students who were able to meet the minimum completion standard of obtaining a score equal to or greater than KKM. If the percentage of student learning outcomes of 21 children has reached 52.38%. The average grade of students in the early condition is 64. The motivation of students in the initial condition of 8 active students out of 21 or the motivation of new students reached 38.09%.

In the results of the first cycle test, it was seen that IPS learning ability about economic activities with cooperative learning model type STAD is 77.14. From the IPS learning



ability test results, economic activities with cooperative learning [10] model STAD are shown in the following table.



TABLE 2: Average student grades in cycle I.

Figure 2: Diagram of average student ability in IPS learning on economic activities (Cycle I).

In cycle, I the motivation of students in receiving an increase from the initial condition data was only 11 students, I to 13 out of 21 students. The increase in motivation is due to the enthusiasm and spirit in implementing [11-12] the cooperative learning model of STAD. The average grade score was 64.76, and the increase in learning in cycle I increased to 77.14. The best score is five children with a score of 100 and the lowest score of 60. The initial condition of the learning outcomes was 11 students who completed. After the improvement in the learning cycle, I increased to 13 students. The initial condition of the proportion of student completion is 52.38%, and after the increase occurs in cycle I to 61.90%. Thus, the completion of student learning outcomes in cycle I increased from the initial condition to cycle I increased by 9.52%. The average value from the initial condition to cycle I increased by 12.38. The observations and observers showed that IPS learning with the application of cooperative learning [7] STAD model type[10] in SD Negeri 2 Aglik grade IV showed an improvement in understanding in IPS learning. It is seen from observations that the motivation to be active shows that only 13 students are motivated. I, students' motivation in receiving IPS learning about economic activities increased from the initial condition data of only 11 students in cycle I to 13 out of 21 students. The increase in motivation is due to the enthusiasm and spirit of students in the implementation of the STAD cooperative learning model [13-14].

The second cycle of learning cycles is a written test in IPS learning about economic activities with cooperative learning model type STAD. The test results showed that the average test result of IPS learning ability for economic activities with cooperative



learning model type STAD cycle II is 77.14. The IPS learning ability test economic activities with cooperative learning model STAD are shown in the following table.



TABLE 3: Average Student Proficiency Score in Cycle II.



Figure 3: Diagram of average student ability in IPS learning on economic activities (cycle II).

In the action of cycle II, there is an increase in motivation and learning outcomes. In cycle, I the average value of 77.14, and after repair, by accommodating the reflection results on cycle, I the average grade value in cycle II increased to 90.49. In cycle I, the learning outcomes of 13 students are complete. After the increase in learning in cycle II increases to 21 students, 100% of children have completed the study. The percentage of completion of students in cycle I was 61.90%, and after the increase in learning in the cycle, II increased to 100%. The best score with 100 obtained 11 students, and the lowest score of 70 obtained two students. The completion of student learning outcomes in cycle II increased from cycle I by 38.10%. The average grade value from cycle I to cycle II increased by 13.34.

Based on data collected in cycle II obtained through the application of cooperative learning model type STAD shows an improvement in student learning outcomes in IPS learning about economic activities from cycle I, the average grade score of 70.00 increased to 95.00. The percentage of completion in cycle I increased to 100% in cycle II.

The implementation of the STAD cooperative model obtained data from observations and replays in cycle I and cycle II that researchers have conducted. In cycle I, researchers aim to improve learning outcomes. At first, the student's learning outcomes are meager because the students do not understand the concept of IPS learning. Based on the observations, most of the shortcomings found in the cycle I process are present in students, but students are not the only cause of the shortage. One of the shortcomings



found in cycle I is students' lack of motivation to follow the learning process to the maximum. Students are less active, and student participation is low, making it difficult to understand the subject matter because researchers have not used an attractive model. Methods in learning tend to be monotonous.

Students are less active, with students less motivated with the subject matter and low student participation. In these conditions, students need motivation for students to be active in learning. Students desperately need the motivation to encourage them to achieve a goal and stimulate them to be more active in learning. Encouragement can come from the inside or the outside. The external encouragement that comes from the teacher is not adequate because the teacher is not only focused on some students but also the teacher is less scattered among the students. The actions of the second cycle supplement the shortcomings in the execution of my cycle.

From the implementation of action two-cycle with the implementation of the cooperative model, STAD knew that understanding the concept has improved. By knowing the problems that exist, action is taken in cycle I with improved results. The lowest score obtained by students was 60, and the highest score was 100, while the average grade score was 77.14. The number of students who scored more than KKM was as much as 38.10% of the results. It appears that the success of learning has improved but is not yet in line with expectations to improve further the learning success of researchers carrying out Cycle II, which at the same time can be an affirmation that students have mastered the material.

In cycle II, the lowest score obtained by students was 70, and the highest score was 100, while the average grade was 90.48. Students who scored more than KKM increased by 100%. On the completion of cycle II, as many as 21 students or the entire class is complete, meaning that classically it has reached 100% completion. Moreover, individually 100% of students have met the minimum level of completion.

4. Conclusion

Based on the results of class action research obtained by applying cooperative learning model type STAD in IPS learning about economic activities in grade IV students of SD Negeri 2 Aglik, the application of cooperative learning model type can be concluded STAD can be improved. The motivation of learning students of grade IV SD Negeri 2 Aglik in learning IPS about economic activities, thus providing a meaningful learning nuance. Then there was an increase in students' learning motivation from the initial condition of 47.61% (10 students) and 52.38% (11 students). I increased to 61.90% in





the cycle, which means that student learning motivation increased by 13 out of 21 students. Furthermore, it can also improve student learning outcomes in the initial learning conditions of complete learners by 52.38% (11 students) and 61.90% (13 students). Cycle II increases significantly to 100%, which means that one class has been completed. (21 students). The suggestions that researchers can submit are as follows. In the application of cooperative learning STAD that evokes motivation, innovation, creativity, fun, happiness, and weightiness, teachers always find innovation in improving student motivation. Furthermore, the application of the STAD-type cooperative learning model can improve IPS learning about economic income so that teachers can use STAD cooperative learning model on other materials.

Authors' Contributions

The author is a researcher who focuses on the field of education and the social dynamics of students when participating in classroom learning. This relationship has a tremendous impact in realizing research articles as part of the research outputs carried out.

Acknowledgments

The research was carried out with the contribution of the lecturers of the research methodology course. In addition, students' activeness in appreciating lecture assignments by implementing them in the class being taught. Our gratitude goes to the lecturers of the research methodology course, students, teachers in the class who are willing to be collaborators, and fellow students.

References

- [1] S.A.A. Ismail and K. Al Allaq, "The Nature of Cooperative Learning and Differentiated Instruction Practices in English Classes.," SAGE Open. vol. 9, no. 2, pp. 1–17, 2019
- [2] Tran VD. Does cooperative learning increase students' motivation in learning? International Journal of Higher Education. 2019;8(5):12-20. https://doi.org/10.5430/ijhe.v8n5p12
- [3] M. Utomo, M. Sudaryanto, and K. Saddhono, "Tools and Strategy for Distance Learning to Respond COVID-19 Pandemic in Indonesia.," *Ingénierie des systèmes d information*. vol. 25, no. 3, pp. 383–390, 2020.



- [4] Slavin RE. Cooperative learning in elementary schools. Education. 2015;43(1):5-14. https://doi.org/10.1080/03004279.2015.963370
- [5] D.G. Erbil, "A Review of Flipped Classroom and Cooperative Learning Method Within the Context of Vygotsky Theory.," *Frontiers in Psychology*. vol. 11, no. June, pp. 1–9, 2020
- [6] Widiana IW, Japa IG, Suarjana IM, Diputra KS. The students' ability to solve realistic mathematical problems through Polya type problem solving learning model. Journal of Education and Learning. 2018;12(3):399-405. https://doi.org/10.11591/ edulearn.v12i3.4526
- [7] Kim D. A Study on the influence of Korean middle school students' relationship through science class applying STAD cooperative learning. Journal of Technology and Science Education. 2018;8(4):291-309. https://doi.org/10.3926/jotse.407
- [8] J.J. Kirkham, K. Davis, D.G. Altman, et al., "Core Outcome Set-STAndards for Development: The COS-STAD recommendations.," *PLOS Medicine*. vol. 14, no. 11, pp. 1–10, 2017
- [9] Munir MT, Baroutian S, Young BR, Carter S. Flipped classroom with cooperative learning as a cornerstone. Education for Chemical Engineers. 2018;23:25-33. https://doi.org/10.1016/j.ece.2018.05.001
- [10] Nair SM, Sanai M. Effects of utilizing the STAD method (cooperative learning in enhancing students' approach) descriptive writing skills. International Journal of Education and Practice. 2018;6(4):239-252. https://doi.org/10.18488/journal.61.2018.64.239.252
- [11] Wyk MM. The effects of the STAD-cooperative learning method on student achievement, attitude and motivation in economics education. Journal of Social Sciences. 2012;33(2):261-270. https://doi.org/10.1080/09718923.2012.11893104
- [12] Yeung HC. Literature review of the cooperative learning strategy-student team achievement division (STAD). International Journal of Education. 2015;7(1):29-43. https://doi.org/10.5296/ije.v7i1.6629
- [13] Costouros T. Jigsaw cooperative learning versus traditional lectures: Impact on student grades and learning experience. Teaching & Learning Inquiry. 2020;8(1):154-172. https://doi.org/10.20343/TEACHLEARNINQU.8.1.11.
- [14] S. Habsiah, R. Effendi, and A. Mulyadi, "The Effect Of Cooperative Learning Model Of Student Team Achievement Division (Stad) Type In Attempt To Improve Student Tolerance Character.," *International Journal Pedagogy of Social Studies*. vol. 2, no. 1, p. 115, 2017.