The Effect of Cooperative Learning Teams-Games-Tournaments (TGT) Type on Collaboration Skills and Learning Achievement Class V Students in Science Subjects at SDN Penarang 01 and SDN Penyaran 04 Sidareja District, Cilacap District

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ABSTRACT

This research aims (1) to analyze the influence of cooperative learning of the Teams-Games-Tournaments (TGT) type on the collaboration skills of class V students in science and science subjects at Penyarang State Elementary Schools 01 and 04, (2) to analyze the influence of cooperative learning of the Teams type -Games-Tournaments (TGT) on the learning achievement of class V students in science and science subjects at Penyarang State Elementary School 01 and 04. Meanwhile, the research method used in this research is quantitative descriptive research and the research method used is the explanatory survey method. Collect data using a questionnaire and analyze the data statistically to test the questions and hypotheses raised. The results of this research are (1) There is an influence of Teams-Games-Tournaments (TGT) type cooperative learning on the collaboration skills of class V students in the subject IPAS at Penyarang State Elementary Schools 01 and 04 with the results of the independent ttest, obtained a significance value (p) of $0.008 \ (< 0.05)$. (2) There is an influence of cooperative learning of the Teams-Games-Tournaments (TGT) type on the learning achievement of class V students in the science and sciences subject at Penyarang State Elementary Schools 01 and 04 with the results of the independent t-test, a significance value (p) of 0.002 was obtained. (< 0.05) with a class average score of 78.

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1. INTRODUCTION

In today's modern era, technological advances are growing rapidly in all areas of life. This can make human life easier, so that ease of use of technology becomes a necessity, especially for the younger generation, for example the use of gadgets. The sophistication of the features on gadgets such as online games, Tik Tok, YouTube, Instagram, Facebook and other applications means that most of the current generation are more interested in gadgets than in the surrounding environment. Addiction to gadgets has a big

influence on their lives and can even change their thinking patterns, personality and behavior (Winarno in Nursyifa, 2018).

This causes a person to have introverted, antisocial behavior and find it difficult to join the real world (Arifin in Nursyifa, 2018). The influence of these behaviors will have an impact later when they are in the world of work, when they are required to be able to interact with other people competently and with mutual respect (Redhana, 2015, Zubaidah, 2016). One of the provisions for dealing with these problems is collaboration skills. It is important to have these skills so that humans are able to socialize, be sensitive to the surrounding environment, and control ego and emotions (Tama, 2018; Kusumadewi, 2018). 21st century skills are more international, multicultural and interconnected.

Indicators of student success are no longer based on their level of success in carrying out manual work, routine work with the help of machines or by relying on the labor market but rather based on skills in communicating, sharing information and using that information to solve complex problems and being able to innovate with technological developments to create knowledge. knowledge (Zubaidah, 2017). Collaboration is a process of working together, coordinating, and containing elements of positive dependence within a group that leads to a common goal to be achieved. Meanwhile, the definition of collaboration skills is the ability to exchange thoughts or ideas and also feelings between students at the same level (Lelasari et al., 2017).

Based on research by Law et al., (2017) it is stated that collaborative learning is able to help students learn socially and improve students' social skills. Indicators of Collaboration Skills (Trilling, 2009) (1) Collaboration: Students are said to be able to collaborate if they can work together in groups effectively and with diverse teams. (2) Contribution: Students are said to be able to collaborate if each individual can contribute to the team and can adapt to all team members (3) Responsibility: Students are said to be able to collaborate if they are responsible for team work, can lead team members, and have initiative and can self-manage (4) Compromise: Students are said to be able to collaborate if they can deliberate in solving problems in groups and compromise to achieve common goals (5) Communication: Students are said to be able to collaborate if effective communication can be established within the group.

Furthermore, the definition of achievement, according to Dahar, quoted by Djamarah (Rosyid et al., 2019, p. 6) "achievement is what has been created, the result of work, a pleasing result obtained with tenacity in work." According to Purwodarminto (Rosyidet al., 2019, p. 6) "achievement is the result of something that has been achieved". Achievement based on the expert opinion above, can be concluded as an activity that produces results. According to (Rosyid et al., 2019, p. 19) "learning is a process of effort carried out by a person to obtain a new change in behavior as a whole, as a result of his own experience in interacting with his environment".

Meanwhile, according to Gagne (Susanto, 2016, p. 1) "learning is interpreted as a process of gaining motivation in knowledge, skills, habits and behavior". Based on the opinion above, learning is an overall process to obtain changes in knowledge, behavior and skills. According to Sutratinah Tirtonegoro (Rosyid et al., 2019, p.9) "learning achievement is an assessment of the results of learning activities expressed in the form of symbols, numbers, letters or sentences that can reflect the results that have been achieved by each child in a certain period".

Based on several expert opinions above, it can be concluded that learning achievement is an assessment of the results achieved by students in the learning process which are quantitative and qualitative in a certain period. TGT Cooperative Learning is a type of cooperative learning where in TGT students are divided into learning teams consisting of 4 to 5 people with different levels of ability, gender and ethnic background. Next the teacher delivers the lessons, students learn in them and ensures that all team members have mastered the lessons. After that, students play academic games with other team members to contribute points to their team's score.

Students play this game with three people at a "tournament table", where the three participants in one tournament table are students who have the same final score. A "shifting position" procedure makes the game quite fair. Teams with high performance get certificates or awards from other teams according to Robert E. Slavin (2005:163)

2. RESEARCH METHODS

The research used in this research is quantitative descriptive research and the research method used is the explanatory survey method. Collect data using questionnaires and analyze the data statistically to test

the questions and hypotheses raised. "Survey research is a procedure in quantitative research in which the researcher administers a survey to a sample or to an entire population of people to describe attitudes, opinions, behavior, or special characteristics of the population" (Creswell, 2015, p. 752). The location of this research was at Penyarang 01 and 04 Elementary Schools, Penyarang Village, Sidareja District, Cilacap Regency. When the research was carried out in the even semester of the 2023/2024 academic year in April 2024. The population in this study was all students at SD Negeri Penyarang 01 (109 students) and SD Negeri Penyarang 01 (125 students) in the academic year 2023/2024 so that the total population 234 students. The sample for this research was 28 students in class V at SDN Penyarang 01 and V at SDN Penyarang 04, which included the Independent Curriculum. Class V of SDN Penyarang 01 is the experimental class with 14 students, while Class V of SDN Penyarang 04 is the control class with 14 students. Data collection techniques in this research are as follows: Observation of student activities, Questionnaire for student collaboration skills, Documentation of learning activities AND Multiple choice written test for science learning achievement. Independent Variable (In science and science subjects at Penyarang State Elementary School 01 and 04. Before testing data analysis, a prerequisite analysis test was first carried out, namely by testing normality and homogeneity between subjects in the experimental class and control class. Researchers use SPSS software to analyze research data with normality tests, homogeneity tests, hypothesis tests.

3. RESULTS AND DISCUSSIONS

3.1 Results Description

1. Collaboration Skills

a. Independent T-Test

Based on the results of the independent t-test, a significance value (p) of 0.008 (< 0.05) was obtained. This shows that there is a significant difference between the average score of students' collaboration skills in the experimental class (which applies TGT type cooperative learning) and the control class (which does not apply TGT type cooperative learning).

b. Mean Collaboration Skills Score

The average collaboration skills score of students in the experimental class (89.29) was higher than the average collaboration skills score of students in the control class (68.40). This shows that the application of TGT type cooperative learning can improve students' collaboration skills.

2. Learning Achievement

a. Independent T-Test

Based on the results of the independent t-test, a significance value (p) of 0.002 (<0.05) was obtained. This shows that there is a significant difference between the average learning achievement scores of students in the experimental class (which applies TGT type cooperative learning) and the control class (which does not apply TGT type cooperative learning).

b. Average Value of Learning Achievement

The average student achievement score in the experimental class (78) is higher than the average student achievement score in the control class (62). This shows that the application of TGT type cooperative learning can improve student learning achievement.

3.2 Discussions

1. Collaboration Skills

The increase in student collaboration skills in the experimental class is likely caused by several factors, namely:

- a. High Social Interaction: The TGT learning model encourages students to interact with each other and work together to complete learning tasks. This allows students to learn from each other and develop their collaboration skills.
- b. Effective Communication:In the TGT learning model, students need to communicate effectively with their group members to complete learning tasks. This can help students develop their communication skills
- c. Mutual support:In the TGT learning model, students support and help each other. This can increase students' self-confidence and motivation to learn.

2. Learning Achievement

The increase in student learning achievement in the experimental class is likely caused by several factors, namely:

- a. Active Student Involvement: The TGT learning model encourages students to be actively involved in the teaching and learning process. This can increase students' focus and concentration in learning.
- b. High Learning Motivation:Competition between groups in the TGT learning model can motivate students to study harder.
- c. Deeper Understanding:In the TGT learning model, students explain the lesson material to each other. This can help students understand the subject matter more deeply.

4. CONCLUSIONS

Based on the results of this research, it can be concluded that:

- a. There is an influence of cooperative learning of the Teams-Games-Tournaments (TGT) type on the collaboration skills of class V students. In the science and science subjects at Penyarang State Elementary Schools 01 and 04 with the results of the independent t-test, a significance value (p) of 0.008 (< 0) was obtained. .05).
- b. There is an influence of cooperative learning of the Teams-Games-Tournaments (TGT) type on the learning achievement of class V students in science and science subjects at Penyang 01 and 04 State Elementary Schools with the results of the independent t-test, a significance value (p) of 0.002 (< 0) was obtained. .05) with a class average score of 78.

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