



THE INFLUENCE OF THE USE OF THE TEAM GAMES TOURNAMENT LEARNING MODEL ON THE SCIENCE LEARNING OUTCOMES OF CLASS IV STUDENTS MI MUHAMMADIYAH BONTOBODDIA GOWA DISTRICT

Fatmasari¹, Rosdiana², Fajri Basam³

Madrasah Ibtidaiyah Teacher Education Study Program,
Tarbiyah & Teacher Training Faculty, Alauddin State Islamic University Makassar,
Author Correspondence Email: ftmasarii011@gmail.com

ABSTRACT

This research aims to determine whether using the tournament team games learning model can improve the learning outcomes of at class IV MI Muhammadiyah Bontoboddia District. Gowa. This research uses a preexperimental method with a one group pretestposttest design. The population in this study was class IV MI Muhammadiyah Bontoboddia. The sample in this study was 23 students taken using saturated sampling technique. The data collection techniques are tests and documentation. The data analysis are descriptive statistical analysis and inferential analysis. The results of this research show that the learning outcomes of class IV students before using the Team Games Tournament learning model obtained the highest score of 75, the lowest score of 15 and the average score of 51,83 was in the low category. After using the team games tournament learning model, the students obtained the highest score of 95 and the lowest score of 55 and the average score of 79.00 was in the high category. If compared with the scores before and after implementing the Team Games Tournament learning model, there is a positive influence on the learning outcomes of class IV students at MI Muhammadiyah Bontoboddia District. Gowa. This influence can be seen from the average value which has increased between the pretest value, namely 43.04 and the posttest value of 81,93, as well as the significance test using inferential statistics, with the SPSS version 22 application, the hypothesis test results obtained sig values. (2-tailed) $<$ or $0.000 < 0.05$, it can be concluded that there is a difference in the average learning outcomes before and after using the team games tournament learning model so that it has a positive effect on the science learning outcomes of class IV students at MI Muhammadiyah Bontoboddia.

Keywords: *Learning Model, Learning Outcomes*

1) INTRODUCTION

In essence, science is the science of natural phenomena expressed in the form of facts, concepts, principles and laws whose truth has been tested and through a series of activities in the scientific method. It is best for science learning in elementary/MI to use students' feelings of curiosity as a

Paper presented at The 1st ICONETT on August 21st-22nd, 2024
Faculty of Teacher Training and Education
Universitas Islam Negeri Alauddin Makassar
South Sulawesi-Indonesia

starting point in carrying out investigative or experimental activities. These activities are carried out to discover and instill an understanding of new concepts and apply them to solve problems encountered by students in everyday life (Sulistyani Puteri Ramadhani 2019:13). The problem that is often faced in learning activities, especially science lessons, is that teachers usually do not include students in learning activities, making students less innovative. In the world of education, teachers have an important role in fostering students' interest in participating in learning activities. However, in reality, there are still many educators who use the lecture learning method. So that it has an impact on students, namely that students become bored easily and do not have creativity in learning (Ratih & Sofyan 2021:79). Therefore, teachers must have solutions to overcome these problems.

Based on several problems discussed above, another alternative is needed, namely how to convey material so that students feel happy and understand the material to be studied. Students do not feel bored during teaching and learning activities, so they can improve student learning outcomes. The alternative is to use a team games tournament type cooperative learning model. Team games tournament type cooperative learning is one learning model that can be used to provide more varied learning. Cooperative learning emphasizes cooperation built by students in small groups. From the results of observations made by researchers at MI Muhammadiyah Bontoboddia, Gowa Regency, it can be concluded that science learning outcomes are still below KKM (Minimum Completeness Criteria) 75. By using a learning model, the teaching and learning process will be more effective because the meaning of the message conveyed is clearer and the objectives learning will be easier to achieve. Teaching means continuing and developing knowledge, skills and technology (Rosdiana 2020:26). Apart from that, the application of learning models in the teaching process can arouse students' enthusiasm and interest and provide a broader learning experience (Sumargono 2018:13). The team games tournament learning model is a learning model that can encourage students to actively construct their knowledge, apply and dare to convey ideas about their knowledge, learn to solve problems and discuss learning problems through games with other team members to get scores for their respective teams (Dewiyanti 2018 :5). The stages in the team games tournament type cooperative learning model consist of (1) delivery of material (2) distribution of material (3) games (4) competition between groups (5) rewards. By applying the team games tournament type cooperative learning model in the classroom, it will build students' learning motivation so that students' science learning outcomes will be optimal (Suryanata 2017:235).

2) METHOD

The type of research used in this research is pre-experimental or pre-experimental, where this research only uses one group, namely the experimental group without a comparison (control) group. The research approach used is a quantitative approach, where the symptoms will be examined or measured using numbers. Data collection techniques are the most important step in research, because they aim to collect data. This research uses data collection techniques using tests and documentation. Regarding the techniques used, including tests and documentation, and the design in this research is one group, pretest-posttest design. The analysis techniques used in this research are descriptive and inferential analysis techniques. Where the scores from the pretest and posttest are data collected and compared. The t-test (t-test) will be used to find differences between two data or values that come from the same sample group.

3) RESULTS AND DISCUSSION

The results of this research were obtained based on information and data findings in the field obtained from research instruments related to the variables of the team games tournament learning model (X) and science learning outcomes (Y) at MI Muhammadiyah Bontoboddia, Gowa Regency. The research approach used is a quantitative approach, where the symptoms to be studied or measured use numbers. According to Sulaiman saat and Sitti Mania, in general, quantitative research usually uses positivist methods and approaches which are based on positivistic philosophy, namely a philosophical teaching that views reality, symptoms and phenomena as being able to be classified. This research includes every type of research that is based on calculations or research that involves calculations, numbers and quantities.

1. Science Learning Results for Class IV MI Muhammadiyah Bontoboddia Gowa Regency Students before (pretest) using the team games tournament learning model.

Based on the results of research conducted in class IV MI Muhammadiyah Bontoboddia. Researchers can collect data through test instruments about students' learning outcomes in science learning before using the team games tournament learning model.

Table 1. Student Science Learning Outcome Values Before Using Learning model

Number	Student name	Pretest Value
1	P1	50
2	P2	70
3	P3	30
4	P4	45
5	P5	65
6	P6	50
7	P7	70
8	P8	70
9	P9	50
10	P10	30
11	P11	65
12	P12	55
13	P13	45
14	P14	65
15	P15	35
16	P16	40
17	P17	45
18	P18	50
19	P19	45
20	P20	60
21	P21	70
22	P22	50
23	P23	60
Rata-rata		52,83

Paper presented at The 1st ICONETT on August 21st-22nd, 2024
Faculty of Teacher Training and Education
Universitas Islam Negeri Alauddin Makassar
South Sulawesi-Indonesia

Next, to find out how much influence the use of the team games tournament learning model has on class IV students at MI Muhammadiyah Bontoboddia, look at testing the following hypothesis:

Tabel. 2 Hypothesis testing

		Paired Samples Test							
		Paired Differences			95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Pretest - Posttest	-35.652	24.831	5.178	-46.390	-24.914	-6.886	22	.000

Based on the SPSS output results, significant values were obtained which can be seen in the t test analysis which obtained a significant value of 0.000, which means H_a was accepted, thus it can be concluded that there are differences in students' science learning outcomes before and after the team games tournament learning model was implemented.

Tabel 3 Descriptive Statistics of Students' Science Learning Outcomes Before Using the Team Games Tournament Learning Model

Pretest	Mean	52.83	2.645
	95% Confidence Interval for Mean	Lower Bound	47.34
		Upper Bound	58.31
	5% Trimmed Mean	53.14	
	Median	50.00	
	Variance	160.968	
	Std. Deviation	12.687	
	Minimum	30	
	Maximum	70	
	Range	40	

Interquartile Range	20	
Skewness	-.175	.481
Kurtosis	-.908	.935

Based on the table above, it can be seen that the science learning abilities of class IV students at MI Muhammadiyah Bontoboddia before using the team games tournament learning model obtained a maximum score of 70 and a minimum score of 30 with an average value of 52.83, a standard deviation of 12.687 and a range of 40.

Table 4 Categorization of Science Learning Outcomes for Class IV MI Students Muhammadiyah Bontoboddia Before Using the Model Team Games Tournament Learning

Number	Category	Value Range	Frequency
1	Very Good (A)	87,75 - 100	-
2	Good (B)	62,75 – 87,5	9
3	Enough (C)	37,75 – 62,5	14
4	Less (D)	0 – 37,5	-

Based on the categorization table above, the learning outcomes of students before being taught using the team games tournament learning model, it can be seen that the learning outcomes of students in the fair category were 14 students and in the good category were 9 students. So, based on the categorization above, it can be categorized that the majority of students' learning outcomes before being taught using the team games tournament learning model are in the sufficient category.

2. Science Learning Results for Class IV MI Muhammadiyah Bontoboddia Gowa Regency Students after (posttest) using the team games tournament learning model

Based on the results of research conducted in class IV MI Muhammadiyah Bontoboddia. Researchers can collect data through test instruments about students' learning outcomes in science learning after using the team games tournament learning model.

Table 5 Value of Students' Science Learning Outcomes After Using the Team Games Tournament Learning Model

Number	Student name	Posttest Value
1	P1	80
2	P2	75
3	P3	95
4	P4	90
5	P5	70
6	P6	80
7	P7	95
8	P8	85
9	P9	90
10	P10	95
11	P11	85
12	P12	75
13	P13	90
14	P14	85
15	P15	85
16	P16	95
17	P17	90
18	P18	85
19	P19	75
20	P20	90
21	P21	85
22	P22	95
23	P23	95
Rata-rata		79,00

Table 6 Descriptive Statistics of Students' Science Learning Outcomes After Using the Team Games Tournament Learning Model

Posttest	Mean	81.96	2.079
95% Confidence Interval for Mean	Lower Bound	77.65	
	Upper Bound	86.27	
5% Trimmed Mean		82.17	
Median		85.00	
Variance		99.407	
Std. Deviation		9.970	
Minimum		65	
Maximum		95	
Range		30	
Interquartile Range		15	
Skewness		-.183	.481
Kurtosis		-1.116	.935

Based on the table above, it can be seen that the science learning outcomes of class IV students at MI Muhammadiyah Bontoboddia after using the team games tournament learning model obtained a maximum score of 95 and a minimum score of 65 with an average value of 81.96, a standard deviation of 9.970 and a range of 30.

Table 1.7 Categorization of Science Learning Outcomes for Class IV MI Students Muhammadiyah Bontoboddia Before Using the Model Team Games Tournament Learning

Number	Category	Value Range	Frequency
1	Very Good (A)	87,75 - 100	11
2	Good (B)	62,75 – 87,5	12
3	Enough (C)	37,75 – 62,5	-
4	Less (D)	0 – 37,5	-

Based on the categorization table above, the learning outcomes of students before being taught using the team games tournament learning model, it can be seen that the learning outcomes of students

were in the very good category as many as 11 students and in the good category as many as 12 students. So, based on the categorization above, it can be categorized that the majority of students' learning outcomes after being taught using the team games tournament learning model are in the very good category.

3. Differences in Student Learning Outcomes in Science Learning Before and After Using the Team Games Tournament Learning Model for Class IV MI Muhammadiyah Bontoboddia, Gowa Regency.

In this section, based on the discussion above, so it can be seen that the learning outcomes of students before and after using the team games tournament learning model in class IV MI Muhammadiyah Bontoboddia are different. This is proven in the average score before and after being treated with the team games tournament learning model. This study had a sample size of 23 students, the average score before the team games tournament learning model was applied was 51.83% and after the team games tournament learning model was implemented the average score was 81.96%.

Based on the results of the pretest and posttest of the application of the team games tournament learning model, it can be concluded that the hypothesis is accepted. It can be seen in the t test analysis that a significant value of $0.000 < 0.05$ is obtained, which means that H_a is accepted. Thus it can be concluded that there are differences in students' science learning outcomes. before and after implementing the team games tournament learning model on types of animals and their food in class IV MI Muhammadiyah Bontoboddia. So it can be said that the use of the team games tournament learning model has a positive effect.

4) CONCLUSION

The analysis of research data on the implementation of the Team Games Tournament (TGT) learning model in science education for fourth-grade students at MI Muhammadiyah Bontoboddia, Gowa Regency, indicates significant findings. Prior to the application of the TGT learning model, students' science learning outcomes were categorized as very low, with an average score of 51.83%. However, following the implementation of the TGT model, students' learning outcomes improved markedly, achieving a high category with an average score of 81.96%. This notable improvement demonstrates a substantial positive impact of the TGT learning model on the science learning outcomes of fourth-grade students at MI Muhammadiyah Bontoboddia, Gowa Regency.

REFERENCE

- Dewiyanti, (2018). *The Influence of the Team Games Tournament (TGT) Learning Model Assisted by the Snakes and Ladders Game Media on Mathematics Learning Outcomes*, Scientific Journal of Education and Learning, Vol.2.No,1.
- Rosdiana, (2020). *Teaching Profesional Ethics*, Yogyakarta: *The Meaning Of Bumi Intaran*
- Ratih Sofyan,(2021).*The Effect of Using Powtoon Learning Media on Science Learning Motivation in Class V of Elementary Schools*, Perseda Journal, Vol.4, No.2
- Sulistiyani Puteri Ramadhani, (2019). *Basic Contepts of Science in Elementary School*, Jawa barat: Mulyani
- Suryanata, (2017).*The Influence of the Team Games Tournament Type Cooperative Learning Model on Matematics Learning Outcomes*, Journal Mimbar PGSD