

The Effect of Teams Games Tournament (Tgt) Cooperative Learning Models On Students' Learning Outcomes in Natural Sciences Learning in Elementary School

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Abstract-This research aims to find out the influence of Teams Games Tournament (TGT) method in students' learning outcomes in Natural Sciences learning at Elementary School SDN 2 Meyambanga; this is formulated based on the problem statement of this study. Further, this study applied a quantitative approach with the experimental method and one group pretest-posttest design. The data were collected from learning outcomes test and documentation. As many as 25 students at grade V were involved as the research samples. The results show that the students' average pre-test score is 66.20. In addition, their average post-test score is 79.90. Additionally, the result of t-test obtains $t_{count} > t_{table}$ or $16.044 > 1.6843$ at the significance level of 0.05. In brief, Teams Games Tournament (TGT) model does influence students' learning outcomes in learning Natural Sciences.

Keywords-Learning, TGT, Achievement

I. INTRODUCTION

Learning is an activity carried out to initiate facilitation and to improve the quality of learning because learning is a systematic effort to improve the learning process. It is a series of activities designed by teachers to measure students' abilities in learning at school.

In the whole process of education in schools, learning is the most important activity. Learning process leads the teacher to understand the basic abilities. Students' low outcomes in learning are the center of attention of all elements related to education.

One of the causes of low outcomes is the lack of learning models applied by the teacher. By interviewing one of the teachers at Elementary School SDN 2 Meyambanga, the teacher is a homeroom teacher of grade V, so that it becomes a guide for conducting this research using a new model. Teaching methods can make students more comfortable they can be involved in the learning process.

In making efforts to maximize students' learning outcomes, science practitioners have introduced and applied various models and approaches to teaching. However, the reality in the field reveals that learning that seems to be only an active teacher, while students are passive. For this reason, learning activities tend to be boring. Another fact is that teachers do not use various media and learning models that can attract students' interest in learning. The result indicates

that students are less interested in the learning process, which is ultimately impactful on the learning process and outcomes. One way to overcome this problem is by using the Teams Games Tournament (TGT) cooperative learning model.

A teacher must be able to use a learning model that can stimulate students in learning. This study takes the Teams Games Tournament (TGT) learning model as one way to make students better to understand the learning material presented. It is able to create human resources quality.

Based on the background of the study, the formulation of the problem is: How is the Effect of Cooperative Teams Games Tournament (TGT) Learning Model on Students' Learning Outcomes in Natural Science Learning in Elementary School?

II. METHOD

This study was conducted at Elementary SDN 2 Meyambanga, Bolaang Mongondow Selatan Regency for seven days using a quantitative approach with the experimental method and one group pretest-posttest design. The purpose of this study is to provide an overview of the influence of learning models and use. The research design used in this study was pretest-posttest design. It employed a purposive sampling technique. Moreover, there were 25 students involved as the research population. The data were collected from observation, test, and documentation.

III. RESULTS AND DISCUSSIONS

The results of the final score prior to the treatment model.

TABLE I. PRELIMINARY RESEARCH DATA

No	Students' Name	Initial Score
1.	Abdul Manaf Botutihe	64
2.	Adrian Moilomo	70
3.	Farel Husain	53
4.	Fahril R. Borahima	62
5.	Ishak Saman	60
6.	Moh. Aryan Djaiu	57
7.	Romi Ali	65
8.	Zulkarnain Tangahu	65
9.	Yudian Saman	52
10.	Satrio Muksin	45
11.	Fatra Sariipi	67

12.	Tiara Lestari pakaya	60
13.	NalaofriantiOtoluwa	60
14.	Zulfianti Ibrahim	54
15.	Moh. ZuhairilMursalin	55
16.	NurAlifitaPakaya	65
17.	Nursiaente	67
18.	NurtinDaintau	60
19.	PathaLamanau	61
20.	PutriUtina	56
21.	Rabiatul A. Botutihe	42
22.	RatuPratiwiPakaya	43
23.	RityantiSamheda	55
24.	SriElsawatiSalilama	60
25.	Sri MandaPunu	52

^a. Secondary Data, 2018

This initial score is presented in the following figure:

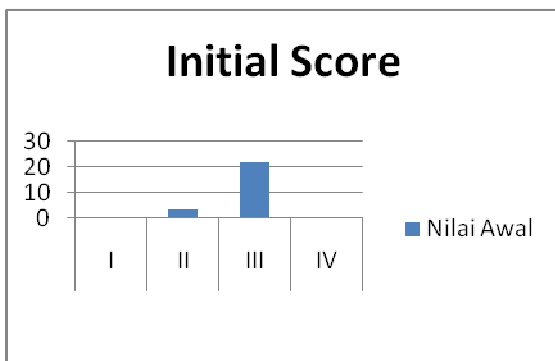


Fig. 1. Students' Initial Score

Description:

Nilai Awal: Initial Score

The data collection was carried out in two meetings; the first meeting was a pre-test. This test was conducted to determine the students' score before given a treatment. The next step is to give the treatment in Natural Sciences learning with Respiratory Process learning material. After finishing the treatment, a final test (post-test) is provided. The initial test (pre-test) and the final test (post-test) are using different test questions, with a maximum score of 83. The results of the hypothesis testing indicate that H_a is accepted and H_0 is rejected with a level of 0.05. TGT is a learning model designed in such a way to help students understand in-depth theory through practical learning experiences (Experiments). Teams Games Tournament Learning model leads students to compete in order to achieve the highest score academically, build togetherness in the learning process, and involves all learners in the learning process. Moreover, by comparing the initial knowledge they already have to the new knowledge they get, students are able to apply the concepts that they have gained to solve problems in everyday life. Based on the above description, there are differences in the results of the average score of both tests. The average score shows that the treatment of the TGT learning model is applied to find out the effect on students' learning outcomes after being given a post-test. It does affect students' learning outcomes before and after given a treatment. Thus, it is proven that the TGT learning model influences students' learning outcomes in Natural Sciences learning.

TABLE II. TEST AND POST-TEST

No	Students' Name	Pre-test	Post-test
1	AbdulManafBotutihe	70	72
2	Adrian Moilomo	72	63
3	Farel Husain	66	78
4	FahriR.Borahima	56	81
5	IshakSaman	70	72
6	Moh. Aryan Djaiu	66	84
7	Romi Ali	84	97
8	ZulkarnainTangahu	60	83
9	YudianSaman	58	88
10	SatrioMuksin	43	78
11	FatraSaripi	61	83
12	Tiara Lestari Pakaya	72	88
13	NalaofriantiOtoluwa	81	84
14	Zulfianti Ibrahim	78	87
15	Moh. ZuhairilMursalin	56	78
16	NurAlifitaPakaya	50	74
17	Nursiaente	66	78
18	NurtinDaintau	72	83
19	PathaLamanau	74	88
20	PutriUtina	80	91
21	Rabiatul A. Botutihe	64	82
22	RatuPratiwiPakaya	58	74
23	RityantiSamheda	80	87
24	Sri ElsawatiSalilama	58	70
25	Sri MandaPunu	60	56
Total		1.655	1.999
Average		66,20	79,96

^a. Primary Data, 2018

The results of this pre-test and post-test can be seen in the following figure.

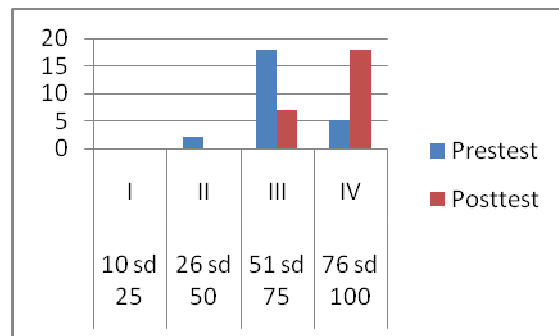


Fig. 2. The Score of Pre-test and Post-test

IV. CONCLUSIONS

Teams Games Tournament learning model in Respiratory Process learning material significantly influences students' learning outcomes. The results can be seen from the average pre-test score of 66.20. After applying the TGT learning model, the post-test average score becomes 79.90. This is strengthened by the results of the hypothesis testing with the post-test t-test at the level of $\alpha = 0.05$ arrives at t-count 16.004 with t table 1.684. Therefore, TGT model does influence students' learning outcomes in learning Respiratory Process material.

Several suggestions are provided as an improvement in the future. The teachers of Natural Sciences subject are expected to be able to apply Teams Games Tournament learning model in the learning process at school.

1. There needs to be a further development designed according to the Teams Games Tournament learning

model. This is intended to improve the quality of the material that will lead to more optimal teaching and learning activities.

2. To be able to improve teachers' ability in employing the Teams Games Tournament learning model, they should be able to optimize the meeting time, so that the learning quality will be enhanced, and it will have a good impact on students' learning outcomes.
3. The results of this study may be a reference for teacher candidates to conduct subsequent studies.

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