

THE IMPLEMENTATION OF TEAM GAMES TOURNAMENT (TGT) LEARNING MODEL TO FULFILL THE PASSING GRADE OF EIGHT GRADERS' LEARNING OUTCOMES

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Abstract

In learning, teachers are expected to be able to bring students to be active in cooperative learning to solve problems and to discover knowledge. One solution to overcome these problems is to use a learning model Team Games Tournament (TGT). This study aims to determine the implementation of learning using the TGT learning model, student learning outcomes after the application of the TGT learning model, and student learning responses towards learning using the TGT learning model. This study was a pre-experimental design using a One-Shot Case Study research design. The sampling technique was Non-Probability Sampling with the Purposive Sampling technique. The data collection technique used two methods, namely the test method (cognitive test) and the non-test method (observation and questionnaire). The instruments used were learning implementation observation sheets, knowledge test sheets, and student response questionnaire sheets. The observation result of learning implementation based on teacher activity obtained an average score of 92.05% and student activity of 85.38% so that learning was carried out well. Student learning outcomes (post-test) had an average of 85% with complete criteria. While the response of students to this learning which was 95.82% received a positive response by students.

Keywords: Model, Team Games Tournament (TGT), Learning Outcomes

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INTRODUCTION

The learning process is an interactive activity between teacher and students. Teaching and learning activity that form humanity values is a part of a process to reach teaching goals (Syaiful dan Aswan, 2010). The interaction was conducted in the learning process between students as the learning side and the teacher as the teaching side (Inah, 2015). The conducted learning process between the teacher and the students should refer to the students' activity and participation improvement (Nasution, 2017). The teacher should not only conduct the knowledge, skill, and attitude delivery activity but is also expected to actively engage students in various learning activities including discovery learning, independent learning, group learning, and problem-solving-based learning (Anitah, 2013).

Based on students' learning result of Food Additives topic in the last 2 years in grade VIII SMP Unggulan Al-Ittihad, students who passed the minimum passing grade in the academic year 2015/2016 were only 5 out of 28 students meanwhile students who did not pass the minimum passing grade was 23 students. The reached percentage of learning mastery was only 17.85%. In the academic year of 2016/2017 students who passed the passing grade were only 4 out of 25 students with a percentage of 16%. Those results had not met the expected learning minimum passing grade criteria. The lack of students' learning outcome passing grade completeness is due to students' lacking interest in learning that causes students' lacking motivation in learning.

The alternative problem solution that could be conducted to improve student participation is by using a suitable learning model to be used for the students. Based on a questionnaire filling by the students of SMP Unggulan Al-Ittihad, 75% of the students were interested in a learning process varied with the use of a game. Students' learning motivation influences their understanding and study result. Hence, this work was conducted using *Team Games Tournament* (TGT) learning model. TGT is one of the learning models that is included in the cooperative learning method (R. E. Slavin, 2005). The conducted learning using the TGT model is structured and systematical capable to be used in various educational levels (R. Slavin, 1980). The TGT model is also easy to apply in a class by involving students to play their role as a peer tutor without looking at their status differences, fun to use because it uses game in the process which is supported by reinforcement (Bahri & Zain, 2010). TGT learning model enables students to learn with more fun, grow their collaborative, competitive, and responsible attitude along with improving their learning motivation. Several previous works have shown that TGT influences students' emotional intelligence since it is more effective to

improve students emotional intelligence compared to the conventional learning model and capabilities to enhance learning activities and learning results (Ritonga, 2017; Susilo et al., 2019; Syafruddin & Herman, 2020).

Based on the explanation, this work aimed to implement the TGT learning model to improve students' achievement in surpassing the passing grade for grade VIII in the Food Additives topic. The learning model became the innovation in the learning implementation especially in the Food Additives topic in SMP Unggulan Al-Ittihad.

METHOD

This work used a pre-experimental research design and One-Shot Case Study. The research design is shown in Figure 1 (Farooq et al., 2016).



Figure 1. Research design

Notes:

- X = The implementation of the TGT learning model
- O = post-test (after the treatment)

The population in this work was grade VIII students in 2 classes each consisted of 30 students in SMP Unggulan Al-Ittihad. The sample used in this work was 14 students from class VIII-A treated using the TGT learning model. The sampling method was the Non-Probability Sampling using Sampling Purposive technique. The sampling purposive technique is a sample determination technique with specific consideration (Sugiyono, 2016).

The data collection technique in this work used the test method by giving cognitive questions in the form of post-test aimed to obtain students' learning result and non-test method including observation and questionnaire. The observation method was conducted using observation paper. The observation was conducted towards teacher and students' activities during the learning process using the TGT learning model. The questionnaire method was conducted using the students' response questionnaire to investigate students' responses towards the learning using the TGT learning model. Table 1 shows questionnaire analysis criteria for students' response questionnaire.

Table 1. Students' Response Questionnaire Criteria

Score Percentages	Criteria
81% - 100%	Very Good
61% - 80%	Good
41% - 60%	Intermediate
21% - 40%	Bad
0% - 20%	Very Bad

The analysis of test data was conducted towards students' post-test results and determined based on the learning passing grade. The qualitative data was analyzed based on the observation results and questionnaire that was classified and interpreted based on the questionnaire responses, comments, students' suggestions.

RESULT AND DISCUSSION

This work was conducted in one experiment class as the main subject. The implemented learning in the experiment class was the implementation work of the TGT learning model in the Food Additives topic for grade VIII in middle school. This work obtained data based on the observation of implementation towards the teacher and the students' activity along with the post-test score data.

The observation result of learning implementation using the TGT learning model towards the teacher and the student's activities in two meetings obtained the average implementation as shown in Figure 2. This shows that the learning process using the TGT learning model conducted by the teacher and the students were successfully implemented. In the learning process, there were some active students in the learning using

the TGT learning model. Even though several implementation indicators in each meeting had not been executed, the learning implementation went well.

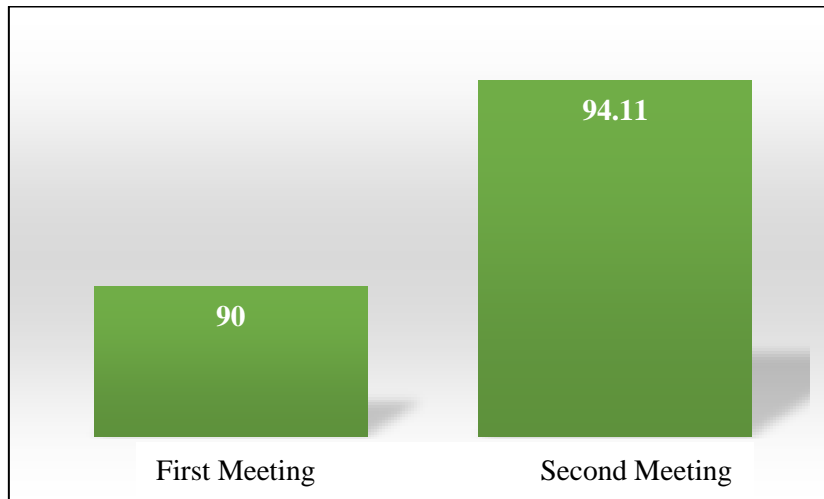


Figure 2. The Average of Learning Implementation using TGT Learning Model

The learning implementation went well because the lesson plan had been reviewed so the teacher could execute the learning process optimally and provide thorough guidance to every group. Hence, it can be concluded that the teacher had understood the syntax of the TGT learning model. In the learning process, the teacher trained the students to demonstrate good teamwork and be responsible for their group. The learning process was in line with the idea that cooperative learning would be effectively used if: (1) the teacher emphasizes the importance of collaborative work compared to individual work, (2) the teacher requires the equalization of learning result achievements, (3) the teacher instills peer tutor or learning through the peer, (4) the teacher requires the equalization of students' active participation, and (5) the teacher requires students' ability in solving various problems to improve students interactivity skill in their groups (Hartoto, 2016; Rusman, 2012).

The result of TGT learning model implementation was determined based on students learning results passing grades obtained through the post-test after using the TGT learning model. TGT learning model was claimed to be well implemented if students' post-test score reaches ≥ 75 which in line with the minimum passing grade in SMP Unggulan Al-Ittihad. Students' post-test data is shown in Table 2.

Table 2. Students' Post-Test Score Recapitulation

Student	Post-Test Score	Passing-Grade Status
1	100	Pass
2	90	Pass
3	90	Pass
4	50	Not Pass
5	100	Pass
6	100	Pass
7	60	Not Pass
8	60	Not Pass
9	80	Pass
10	80	Pass
11	80	Pass
12	100	Pass
13	90	Pass
14	90	Pass
Average	83.57	Pass

Note:

*) Pass if the score ≥ 75 (The passing grade of Science course in SMP Unggulan Al-Ittihad)

Based on Table 2 of the post-test result recapitulation, it could be identified that among the 14 students, the minimum score was 50, the maximum score was 100, and the average was 83.57 which is

categorized as passed. Based on the post-test result, 3 students did not pass the passing grade while the other 11 had passed the passing grade. One of the factors that influence the fulfillment of the passing grade is students' attitude towards the TGT learning model. Hence, students were also required to provide a response related to the learning using the questionnaire.

The post-test data analysis results had an average score of 83.57 which is categorized as passed. Based on the result, the TGT learning model impacted students' learning results evenly both for students with high academic skills and low academic skills. It could be explained using the idea of previous work that TGT learning model is not only making students with the high academic skill stand out in the learning process but students with low academic skill could also participate actively and has an important role in their groups (Shoimin, 2014; Sudjana, 2010).

Students' responses towards the learning using the TGT learning model were obtained using the questionnaire method. Students' responses are shown in Table 3.

Table 3. The Recapitulation of Students' Questionnaire Response Results

No	Statements	Students' Responses			
		Yes		No	
		Σ	%	Σ	%
1.	Science learning using the TGT model makes me more active in the learning process.	14	100	-	-
2.	The use of the TGT learning model makes Science learning more fun.	12	85.7	2	14.2
3.	I prefer to study Science using the TGT learning model because it is not boring.	14	100	-	-
4.	Science learning using the TGT model trains me to appreciate my peers' opinions.	14	100	-	-
5.	Science learning using the TGT learning model trains me about teamwork.	14	100	-	-
6.	TGT games make me more active to learn.	12	85.7	2	14.2
7.	TGT learning model makes me interested in Science.	13	92.8	1	7.1
8.	I could understand more about the Food Additives topic.	14	100	-	-
9.	TGT learning model makes me interested in Science.	14	100	-	-
10.	TGT learning model makes me more relaxed in following the learning process.	12	85.7	2	14.2
11.	TGT learning model trains me to be responsible to my teammates.	14	100	-	-
12.	TGT learning model trains me to compete fairly.	14	100	-	-
Averages		13.41	95.82	0.58	4.14

Based on Table 3 of students' questionnaire responses results, the average students' response towards the learning using the TGT learning model gives an average of 95.82% positive responses and an average of 4.14% negative responses. The negative responses came from students with initial thinking that Science is not interesting, they lack learning motivation from the beginning, later they found that TGT was not interesting. The average result shows that learning using the TGT learning model in Food Additives topic for Science course in grade VIII SMP Unggulan Al-Ittihad obtained a positive and good response from the students.

TGT learning model obtained a good response, hence it is capable of growing students' motivation in following the learning process. This is in line with the previous opinion that the TGT learning model is capable of enhancing students' learning activity because the best team will be given an appreciation (Susilo et al., 2019). Based on Table 4 about the recapitulation of students' comments and suggestions toward the TGT learning model on the Food Additive topic, the comments and suggestions were relatively positive about the learning implemented using the TGT learning model. It might be caused by the fact that the TGT learning model provided relatively new learning situations for the students and involved teamwork and games that were believed capable to improve students' learning activity in class. Students became more collaborative and cooperative in the learning process.

Table 4. Students' Comments and Suggestions Recapitulations

No	Comments and Suggestions
1.	TGT learning makes me interested more in Science. I love this subject.
2.	It is capable of exercising my brain and simple.
3.	By using this learning, I become more interested in Science learning.
4.	I am happy with the game. TGT game makes me more active in studying.
5.	I like and love to learn using the TGT game and it attracts me to study Science since it makes me relax, comfortable, and calm.
6.	Science learning makes me more active. TGT game makes me more motivated to study. TGT learning model trains me to compete fairly.
7.	I love TGT since it trains students' way of thinking.
8.	Because of the Food Additives topic, I could identify natural and artificial substances.
9.	TGT learning makes me love Science subject more.
10.	I am becoming more excited about learning Science because of TGT learning.
11.	I understand more about the Food Additives topic.
12.	I have become more understanding about the Food Additives topic and how to choose healthy food.
13.	TGT learning makes me more interested in Science subject.
14.	TGT game makes me more excited. I love Science since the beginning, but after the TGT learning, I have become more interested in Science.

CONCLUSION

Learning using the TGT learning model on the Food Additives topic for grade VIII in SMP Unggulan Al-Ittihad had been conducted well. This work used a pre-experimental research design with One-Shot Study. The observation result of the learning implementation using the TGT learning model based on the teacher and the students' activity obtained an average of 90% in the first meeting and 94.11% in the second meeting. Students learning results after the learning using the TGT learning model in the Food Additives topic has an average of 83.57 which is categorized as past the passing grade. Students are said to pass the passing grade if reached a score of ≥ 75 based on the passing grade of the Science course for grade VIII in SMP Unggulan Al-Ittihad. The results of students' questionnaire responses using the TGT learning model on the Food Additives topic yield a relatively positive response. The positive responses are proven based on the questionnaire result calculation of 96.82% which is categorized as very good. This learning model was only implemented on the Food Additives topic so it is very potential to be used on the other topic as well.

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