# The Effect Of Application of The TGT (*Team Games Tournament*) Method on Students Opinion Skills in Class IV Science Subjects MI Al Fattah Juwana Pati

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#### **Abstract**

This research is based on the background that the learning methods applied in learning are innovative, but in class mastery, the learning process is still not optimal, especially in students' opinion skills. With the application of the TGT (Team Games Tournament) method applied by the teacher, the researcher wanted to test the effect of the application of the TGT (Team Games Tournament) method on students' opinion skills in the Class IV science subject at MI Al Fattah Juwana Pati. The aim of this research is to find out how much influence the application of the TGT (Team Games Tournament) method has on students' opinion skills in class IV science subjects Mi Al Fattah Juwana Pati. This type of research is a quantitative type of research using research methods, namely field research. Data collection used the questionnaire method which was distributed directly to class IV students at MI Al Fattah Juwana Pati, observation and documentation. The population in this study was class IV MI Al Fattah Juwana Pati, totaling 100 students, samples taken using Simple Random Sampling technique with a tolerance of 5% found 80 students, using the SPSS 20 analysis test. The data analysis methods used were simple linear regression analysis and statistical tests. F test The results of the researchers' findings related to the influence of the TGT (Team Games Tournament) method were proven by the Regression Equation Coefficient Significance Test or often referred to as the F test with a significance level of 5%. The value obtained was Fcount (4.103) with results greater than Ftable (3.114) and a significance value of 0.046 < 0.05. The results of the research concluded that in accordance with the results of the data obtained and through the results of the test analysis, it was stated that they accepted the hypothesis, namely that there was an influence of the TGT (Team Games Tournament) Method variable on the variable of opinion skills of class IV students in the class IV science subject at MI Al Fattah Juwana Pati.

Keywords: TGT Method, Opinion Skills, Cooperative Learning.

#### INTRODUCTION

Education is very important to instill in children from an early age because education provides guidance and provides a broader perspective and makes oneself a better person(Mulyati, 2010). The education unit, especially at the Madrasah Ibtidaiyah (MI)/Primary School (SD) level, is the level at which students begin learning with marked development in students cognitive, affective and psychomotor skills. In the development of students cognitive, affective and psychomotor abilities, of course there are problems experienced by students, both in the students family environment, the school environment, educators and many other factors(Usman, 2006).

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in students cognitive, affective and psychomotor skills. In the development of students cognitive, affective and psychomotor abilities, of course there are problems experienced by students, both in the students family environment, the school environment, educators and many other factors (Faturrahman, 2018).

Students at the lower level are of course still in a transitional period of adjustment and at the same time education at the MI/SD level is the basis for forming the character and personality of students (Candra, 2012). At the MI/SD level, learning still requires intensive teacher assistance and there is still a childish nature in students, especially since two years ago the country of Indonesia was hit by the *Covid-19* virus which attacked various sectors, especially in the education sector, therefore learning must be able to increase students enthusiasm for learning by being innovative. 21st century teachers must be able to provide innovative methods and approaches that are suitable for students so that learning does not cause students to feel bored, because if they are given classical methods in lower grades, students will experience boredom which will result in ineffective learning (Sardiman, 2007).

The role of the teacher is very necessary in the learning process because the role of a good teacher in managing the class, starting from innovative and creative learning methods, is very influential in learning, one of which is science (Natural Science) learning. The most important part of learning science is for children to understand their insights, fueling their desire to learn more (Ahsani & Praharsini, 2023). Science (Natural Science) learning in MI/SD is an integrated concept because it cannot be separated into the fields of chemistry, biology and physics. Science learning is one of the subjects that the majority of students like because they learn directly and can learn with nature so it can be done by learning by doing (learning by doing) which is part of one aspect of 21st century learning (Ibrahim, 2000).

In learning, of course, there are many methods, models, learning media that are used to support the learning process, because the methods and media are in accordance with what Trianto stated that a set of learning model concepts is a plan or pattern that is used as a guide in planning learning in the classroom or learning in it. refers to learning approaches, teaching, stages in learning activities, learning environment and classroom management (Nupita, 2013).

The concept of the learning model applied is one of the learning methods. There are many types of learning methods according to the needs of teachers to facilitate the learning process, one of which is the TGT (Team Games Tournament) method. The TGT (Team Games Tournament) method is a type of cooperative learning developed by experts. The TGT (Team Games Tournament) learning method is a method that can be used to support varied learning. The TGT (Team Games Tournament) method is game-based, tournament (race), using scoring from quizzes and progress scores per individual (Ibrahim, 2000).

The advantage of using the TGT (Team Games Tiuenament) learning method is that it uses learning that involves all students, so everyone plays an active role and no one is passive. The TGT (Team Games Tournamnet) method also applies learning by doing (learning while doing) which allows students to better explore their abilities both in the cognitive, affective and psychomotor aspects of students. Learning is also based on competitions and games so that children can learn widely and they are also motivated because the system is a competition (Susana, 2017).

With these problematic problems applied to class IV at MI Al Fattah Juwana Pati, the basis that led to the adoption of the TGT (Team Games Tournament) learning method for opinion skills was because science learning is synonymous with experimentation, with making engineering tools, as well as analyzing work processes., science learning is of course not only about making, but also explaining work procedures for making, presenting results, and other things by way of opinion, therefore by using the TGT (Team Games Tournament) method in science learning, it is hoped that students can be more balanced and besides being able to making but also being able to understand the concept of making it. The case studies found in the educational units studied are that the learning carried out is still not optimal in the learning process and innovation must be utilized as best as possible in the learning carried out by teachers. Based on the existing observational problems, the researcher wants to apply one of the learning methods which will later be applied in KBM (Teaching and Learning Activities), therefore the researcher took the title " THE EFFECT OF APPLICATION OF THE TGT (TEAM GAMES TOURNAMENT) METHOD ON STUDENTS OPINION SKILLS IN CLASS IV SCIENCE SUBJECTS MI AL FATTAH JUWANA PATI".

#### **METHODS**

The type of research used is based on the information and problems that occur. This research uses a quantitative type of research, where researchers focus on measuring variables with numbers and statistics for testing theories (Sugiyono, 2013).

In quantitative research, field research methods are used. According to Dedy Mulyana, field research is a type of research that studies phenomena in their natural environment, which means examining events that occur in a field/object where symptoms occur. This research connects the selected and explained variables and aims to examine the extent to which variables in one factor are related to other variables, with the aim of research objects in general to specific learning in educational institutions (Budiyono, 2016). This research was conducted to determine the effect of applying the TGT (Team Games Tournament) method on students opinion skills in class IV science subjects at MI Al Fattah Juwana Pati (Masrukhin, 2015).

#### **RESULTS AND DISCUSSION**

Based on the results of the questionnaire, respondents came from class IV students at MI Al Fattah Juwana Pati, in this case to obtain research data, questionnaires were distributed to class IV students at MI Al Fattah Juwana Pati who were the research objects. The method used by the author in distributing questionnaires is through learning that takes place in class IV because the sample for this research is class IV students at MI Al Fattah Juwana Pati.

## A. Data Analysis

## 1. Validity Test

The validity test can be interpreted as the degree of accuracy between the data that occurs on the research object and the data that can later be reported by researchers in a study (Dajan, 1974). In this research, before data collection was carried out, there were instruments used as data collection tools. The instrument that will be tested will be validated by 3 validators on the items that will be tested to find out to what extent the items represent the aspects that will be measured. The instrument validation assessment is carried out by describing the SR (very

relevant), R (relevant), CR (quite relevant), TR (not relevant), and STR (very irrelevant) assessments then after being claimed to be appropriate, the results are tested through validity and reliability tests.

The questionnaire contains statements that have been adjusted to the indicators of each variable. The research questionnaire was tested on 80 grade IV students at MI Al Fattah Juwana Pati. There is a correlation between scores or question items by comparing the rount which is greater than the rtable for *degree* or freedom (df) = n-k, seen from this equation for the information "n" which is the number of samples and "k" is the number of constructs. If the rount value is greater than rtable then the question is considered valid. For df, it is known that it is 80 - 2 or df = 78 with an r table of 0.219 (the grid and questionnaire can be seen in the attached sheet).

The results of the validity test of the questionnaire items related to the TGT (Team Games Tournament) Method, it can be concluded that with a total of 10 questions tested in the TGT (Team Games Tournament) Method variable, all questions are declared valid, because all the items contained in the questionnaire have an r count > rtable (0.219) and is positive and suitable for use and the results of the research that has been carried out are related to the validity test of the respondent's opinion skill variable. From the results of this test it was concluded that with a total of 10 questions tested in the student's opinion skill variable, all the questions were declared valid, because all the items contained in the questionnaire had a count > rtable (0.219) and is positive and suitable for use.

## 2. Reliability Test

Reliability test which aims to analyze the consistency of the question items contained in the survey that has been distributed. A question item in a questionnaire on a certain variable is said to be reliable if the *Cronbach's Alpha* value is > 0.60. Based on the *Cronbach's Alpha* value for each of the variables that have been produced (X and Y) exceeding 0.60. So it can be concluded that the TGT method variables and students opinion skills are reliable.

## 3. Classic Assumption Test

## a. Data Normality Test

The normality test aims to find out whether the data used in research is normally distributed or not. A good regression model is one that has normal or close to normal distribution of data and is tested with a test of normality. The data normality test in this study was carried out using the Kolmogorov-Smirnov (K-S) test and the Normal Probability Plot test with the help of SPSS for Windows version 20.0 software, the following results were obtained:

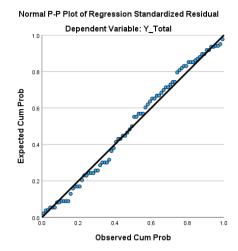


Image 1. Normality Test Diagram with Probability Plot

Test normality with the Normal Probability Plot, a model is said to be normal if the residual data plots follow and are close to the linear line. It can be seen that the significance value of 0.064 is greater than alpha (0.05), so it can be concluded that the residual data is normally distributed.

#### b. Data Linearity Test

The data linearity test is a test that aims to find out whether two variables have a linear relationship or not significantly. This test is carried out with a visual test using a Scatter plot (*scatter diagram*) and there are results of testing the linearity of the TGT (Team Games Tournament) method and students' opinion skills based on the regression line on the graph which produces a plane shape in the top right direction. It can be concluded that in the linear test between the TGT method and opinion skills there is linearity in these two variables, so that the regression model is suitable and valid to use.

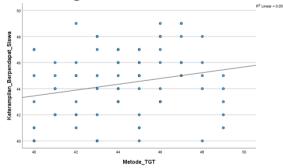


Image 2. Linearity Test Results

# c. Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is inequality of variance and residuals from one observation to another. The way to detect whether there is heteroscedasticity is by looking at the graph plot between the predicted value and the residual. The requirement for the regression model to be fulfilled is the absence of symptoms of heteroscedasticity.

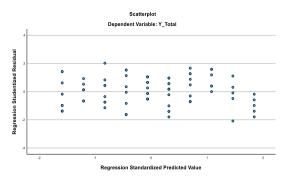


Image 2. Heteroscedasticity Test Results

It can be seen that the points form an irregular (unclear) pattern and spread above and below the number 0 on the Y axis. It can be concluded that the model in this study passed the heteroscedasticity test.

#### B. Results Of Data Analysis

1. Data analysis regarding the TGT (Team Games Tournament) Method at MI Al Fattah Juwana Pati

Analysis of the TGT (Team Games Tournament) Method questionnaire value data, then a scoring table of the questionnaire results from variable x, namely the TGT (Team Games Tournament) Method, was created and after that, the mean/average value of variable :

$$X = (\sum x)/n$$
  
= 3.534/80  
= 44,175

It can be seen from the hypothesis value data that has been generated by the  $\,\mu$  o TGT (Team Games Tournament) Method that a value of 44 is obtained which is included in the "**Enough**" category because this value is in the interval 44 - 45. It can be concluded that the researcher took the TGT (Team Games Tournament) Method hypothesis. Tournament) at MI Al Fattah Juwana Pati is included in the quite good category.

2. Data Analysis Regarding Students Opinion Skills at MI Al Fattah Juwana Pati Analysis of data from the students' Opinion Skills questionnaire scores,

Analysis of data from the students' Opinion Skills questionnaire scores, which will later create a scoring table for the questionnaire results from variable .

$$\bar{Y} = (\Sigma Y)/n$$
= 3550/80
= 44,375

Judging from the hypothesis value data that has been generated  $\mu$  o Students' Opinion Skills obtained a score of 44 which is included in the "Enough" category, because the value is in the interval 44 - 45. Thus it can be concluded that the researcher took the hypothesis for the Opinion Skills of class IV students at MI Al Fattah Juwana Pati is included in the quite good category.

The learning process that takes place in class has several supporting aspects in achieving maximum learning, one of which is characterized by the use of innovative research methods. The TGT (Team Games Tournament) learning method, which is an innovative breakthrough in developing teaching materials,

uses academic tournaments and quizzes as well as an individual progress score system where students compete with their classmates in other groups. There are several stages carried out in applying the TGT (Team Games Tournament) method to students' opinion skills in science subjects at MI Al Fattah Juwana Pati. There are preparations which include presenting material, placing them in study groups, placing them at competition tables, and there are procedures for learning activities including namely learning, group learning, competitions, group recognition, and there is an emphasis on the TGT (Team Games Tournament) method in students' learning opinion skills and the effectiveness of TGT (Team Games Tournament) Method learning.

## 3. Simple Linear Regression Analysis

Simple linear regression analysis is an analysis used to measure how much influence the independent variable has on the dependent variable. This research was conducted to find out how much influence the application of the TGT method has on the opinion skills of class IV students at MI Al Fattah Iuwana Pati:

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Model		del	Unstandardized		Standardized	t	Sig.
			Coefficients		Coefficients		
			В	Std. Error	Beta		
	1	(Constant)	34.561	4.853		7.122	<,001
		X_Total	.222	.110	.224	2.026	.046

Table 1. Results of Simple Linear Regression Analysis

Based on the data results obtained from simple linear regression analysis which shows the independent variable (X) has a significance value of less than the 5% significance level, namely 0.046. It can be concluded that the independent variable (application of the TGT method) has an influence on the dependent variable (students' opinion skills), so it can be continued to form the following regression equation:

$$\hat{Y} = 34.561 + 0.222X + e$$

The regression equation above can be explained as follows:

## a. Constant ( $\alpha = 34.561$ )

This constant value can be interpreted as if the TGT Method Application variable (X) is considered 0 or constant or does not change, then the Student Opinion Skills variable (Y) has a positive value of 34.561.

## b. Coefficient X = 0.222

The coefficient value shows that the variable applying the TGT method has a significant effect on the opinion skills of class IV students at MI Al Fattah Juwana Pati with a positive regression coefficient value of 0.222. If the variable applying the TGT method increases by one unit, it will cause students' opinion skills to be 0.222.

#### **CONCLUSION**

The preparations that must be made for TGT (Team Games Tournament) learning begin with selecting science material. In learning using the TGT (Team Games Tournament) method, one of the indicators is that there is a class presentation, in this case it relates to the preparation of the teacher who has designed it in such a way as to 217 | ICIE 2023

what will be taught later, preparing related material in the form of a module sheet/material description to make it easier. in implementing learning (Suprijono, 2015). The learning used in this research will be Theme 6 focusing on science learning "My Dreams" Sub-theme 1 "Me and My Dreams" for class IV MI/SD. This material explains the various life cycles of animals.

TGT (Team Games Tournament) Method Emphasis on Opinion Skills. there is an implementation of the TGT (Team Games Tournament) learning method by observing students opinion skills, students are trained to think critically and the components contained in the TGT (Team Games Tournament) method, one of which includes games and tournaments which make Skilled students in the cognitive and psychomotor domains who collaborate to create ideas/opinions (Parera, 1984). The learning system with active learning makes classroom learning come alive with ongoing communication between students and educators, as well as with the system contained in the learning method, namely tournament-based which triggers students to give arguments, give their opinions on strengthening the answers given. it's been written (Mudjijono, 2009).

Based on the data calculations obtained and observations in the field that have been carried out regarding the independent variable (application of the TGT method) (Nupita, 2013), it has a significant relationship and is distributed positively or in the same direction as the dependent variable (student opinion skills), even in the application of the TGT (Team Games Tournament) method to Students opinion skills are still not optimal, but based on respondents and several stages of learning and the effectiveness of learning has reached quite good, so it can be concluded that the application of the TGT (Theme Games Tournament) method can be used as an innovative learning method, not only from a cognitive perspective, but it can also have a good effect on students' psychomotor aspects, one of which is improving students opinion skills (Navis, 2014).

The results of the second descriptive hypothesis test with the hypothesis formulation "Students' opinion skills in the science subject class IV MI Al Fattah Juwana Pati", which among others, after reviewing several aspects of students' opinion skills starting from expressing opinions in good language, expressing opinions analytically, putting forward logical opinions, expressing opinions creatively, the results of data validation and data reliability tests show valid and reliable data (Sudjana, 2000). With the results of the calculations that have been carried out, the data calculation is 1.279, in this case the student's opinion skills have an effect of 44% with the interval class being quite good.

There is an influence of the application of the TGT (Team Games Tournament) method on students' opinion skills in class IV science subjects at MI Al Fattah Juwana Pati, as evidenced by the results of the F Test data processing. The Regression Equation Coefficient Significance Test or often called the F test obtained an F value of (4.103) with

results greater than Ftable (3.114) and a significance value of 0.046 < 0.05. This can be interpreted as saying that H0 is rejected (accepting H1), so it can be concluded that the application of the TGT method simultaneously has a significant effect on the opinion skills of class IV students at MI Al Fattah Juwana Pati. Strategies and methods can increase student learning activities (A'isah et al., 2023). Implementing the Teams Games Tournament (TGT) type cooperative learning model can improve student learning outcomes (Sa'adah et al., 2022).

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