
INFLUENCE OF LEARNING COOPERATIVE MODEL TYPE *TEAM GAMES TOURNAMENT* ASSISTED MEDIA *EDUGAMES* MONOPOLY QUESTIONS TO ACTIVITY AND COGNITIVE ABILITY OF STUDENTS IN CLASS IV SDN PAJAGALAN I SUMENEP

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Abstract

This research aims to know differences in student learning activities and the influence of learning models Teams Games Tournament assisted media Edugames Monopoly Questions to students' cognitive abilities. The type of this research is experimental research with nonequivalent control group design. The subjects of this study are SDN I Pajagalan I Sumenep, the sample in this study are IV A and IV B amount of students each 35 students. Data collection techniques used were observations and tests, research instruments used were observation sheets to observe student learning activities during learning and cognitive ability test the pretest-posttest. Data analysis technique is quantitative in the form of figures generated from the formula, by using statistical data analysis that is "t-test". From the results of the study showed that the learning activities of experimental class students using the learning model TGT assisted media Edugames Monopoly Questions is different and better than the control class using conventional learning. While the cognitive abilities of the experimental class students are also higher than the control class. Thus the use of model cooperative TGT assisted media Edugames Monopoly Questions gives a positive influence on learning activities and cognitive abilities of students.

Keywords: Model Team Games Tournament, Media Edugames Monopoly Questions, Student Learning Activities and Cognitive Ability of Student.

INTRODUCTION

Education is one way to make people better, with the education can make people knowledgeable, cultured, cautious. The existence of education aims to prepare human beings to face challenges in the future. In addition, education will give birth to a bright and useful young generation in community life and useful for the nation and the country. Education can be done by human anytime and anywhere, but the first education obtained by children is the family environment, then the child will get education from the school environment that will be enriched by the community environment.

School environment is synonymous with learning, most people assume that learning in school is a child's way to master a material science. The public's assumption agrees with Sardiman (2012, p. 20) that learning is an attempt in the mastery of the material science that is one way in shaping the whole personality. By way of learning since childhood a child will get a new knowledge, but with the addition of a new knowledge then the personality of a child will be better.

In learning, the student as a learning subject whose job is to actively seek, find, analyze, formulate, solve problems, and conclude a problem. Mostly in classroom learning especially in social studies, teachers use methods or media that have

not been able to create an active and creative learning process. Based on the results of preliminary observations made on 28-August 2017 in class IV SDN Pajagalan I Sumenep, researchers analyze and identify the causes of the problem. Some problems that occur in the class IV learning, namely: 1) Students are not actively involved, 2) Students feel bored in following learning, 3) Many students who have not reached KKM. From the problems above, it is necessary to improve the learning process of IPS by changing the conventional learning model into a modern learning model. Modern learning model in question is cooperative learning model of type *Team Games Tournament* (TGT).

The learning model TGT is one type of cooperative learning, Shoimin (2014, p. 45) cooperative learning is a learning activity with groups to work together to help each other understand concepts and solve problems. So with the cooperative learning model that makes all students or members of the group will be involved and have the same responsibility for the success of the group. Veloo & Chairany (2013, p. 59-64) argue that "*The TGT cooperative learning model consists of three main components, namely class presentation, group and academic competition*". While according to Shoimin (2014, p. 203) TGT type cooperative learning consists of five components: presentation of materials, teams,

games, tournaments, and group awards. Based on the above opinion can be understood that cooperative there are several components of class presentation, study groups, tournament games, group awards. With the application of TGT model will make students more motivated and enthusiastic in learning because in the implementation of cooperative learning model type TGT there is a game, which at the age of elementary school children still love the game.

In previous research conducted by I. A. Kd. Novia Puspita Dewi, Dsk. Pt. Parmiti, and I Gst. Ngurah Japa in the year 2017 on the students of class V SDN Gugus III district Bangil. This study was conducted to determine the effect of the application of learning TGT to the results of learning PKN students of grade V SD. From the average of PKN learning outcomes in experiment group that is 14,45 and control group that is 10,46. These results prove that the TGT model influences the learning outcomes. In 2012 Wiwit, Amir and Putra from the results of his research states that the students' chemistry learning using cooperative learning model type TGT with the use of animation media better than the student learning outcomes that only use TGT type cooperative model without the use of animation media. From the results of this study can be concluded that the use of learning media to help students in improving learning outcomes.

Based on the above research the researcher will use cooperative learning model type TGT assisted with media edugames Monopoly Questions, besides the use of media Edugames Monopoly Questions will make the students more active and motivated and the students will more easily understand the learning materials according to the purpose to be achieved. Although the word Monopoly is identical with the nature of greed, but on media edugames Monopoly Problem is not the same as a general monopoly response. Although in the use of Monopoly Media Problem students are competing to collect the answer cards successfully answered. However, in the use of media Edugames Monopoly Problem this student will have the opportunity to use his ability in solving the Questions he faces besides that students also have the same turn to answer questions with the ability he has. Vikagustanti, Sudarmin, and Pamelasari (2014, p. 468-475) developing learning media that is monopoly game on lesson IPA. Based on the results of his research indicate that the learning media monopoly IPA can be said feasible by experts in accordance with the feasibility indicators set by BSNP and get a very good response from teachers and students in addition to the learning media monopoly IPA positive effect on improving student learning outcomes. In previous research conducted

by Agustiya, Sunarso and Haryani (2017, p. 114-119) stated that the use of monopoly games can improve students' motivation and learning outcomes with evidence of results indicating a higher experimental class than a control class.

Therefore, the explanation described above makes the writer interested in conducting research by title "The Influence of Cooperative Learning Model Type Team Games Tournament (TGT) with Media Edugames Monopoly Problem with Activity and Cognitive Ability of Students in Class IV SDN Pajagalan I Sumenep". Based on the description on the background of the above problems, then the above problems can be formulated as follows: 1) Are there differences in student learning activities in learning between classes that are given learning using TGT-assisted media Edugames Monopoly Problem with conventional learning in IPS learning class IV SDN Pajagalan I Sumenep?, 2) Is the application of TGT learning model with Edugames Monopoly Problem influences student cognitive ability in IPS learning in class IV SDN Pajagalan I Sumenep?.

RESEARCH METHODS

The type of this research is experimental research conducted in class IV SDN Pajagalan I Sumenep. Sugiyono (2016, p. 72) suggests that experimental research is a research method used to look for the influence of a particular treatment on another in controlled conditions. In this study used two classes that were sampled, one class for experimental group with TGT assisted model of media edugames Monopoly Problem and control class with conventional method. This research uses *quasi method* of experimental research with *nonequivalent control group design*. According to Sugiyono (2016, p. 79) suggests that this design is almost identical to the *pretest-posttest control group design*, but in this design the experimental and control groups are not selected in the random.

The subject of the research is SDN I Pajagalan I Sumenep located in Kota district. The population in this study is class IV which has 2 study groups. This study was conducted in the academic year 2017-2018 within the period of the study from February to March 2018. This study uses the theme of my 8th place, the subtheme 1 of my neighborhood in Lesson 3 in the 2013 curriculum. Data collection technique in this research is using observation and test, while the instrument used is observation sheet used to observe student learning activity during learning process and cognitive ability test in the form of pretest and posttest. In this study using statistical analysis to analyze quantitative data. The process of data analysis in the form of numbers resulting from

the formula, thus this study using statistical data analysis with 't-test'.

RESULTS AND DISCUSSION

Prior to the execution of this study of learning tools validated trials to experts and trials. The experiment was conducted aimed to improve the learning device that will be used in the research. The trial was conducted at a school equivalent to the place of study to be used for the study. In this activity in the trial is the instrument of student learning activities and tests of cognitive ability. The results of the trial are as follows.

Test Validation of Student Learning Activity Instrument

The result of student learning activity test instrument tested its validity by using SPSS test version 22 that is by using Bivariate pearson correlation (product moment pearson). The result of validation of student learning activity instrument compared between result of r_{count} with r_{table} on significance of 5% and N-35 Then based result of validation r_{count} is greater than r_{table} , so it can be concluded that the instrument item of student learning activity declared valid.

Test Reliability Instrument Student Learning Activity

The result of the analysis of the instrument instrument reliability test of student activity can be seen in table 1 below.

Table 1. Test Result Data Reliability Student Learning Activity

<i>Reliability Statistics</i>	
Cronbach's Alpha	N of Items
,736	5

According to Sujarweni (2014, p.199) states that if the value of Cronbach Alpha is greater than 0.60 then the instrument is reliable. The result of Cronbach Alpha value of student learning activity instrument above 0.736 indicates that value is more than 0,60, so that instrument is declared reliable.

Test Validation of Cognitive Ability Test

Validation of cognitive ability test using product moment Pearson formula using SPSS program. The results of the test analysis of cognitive ability test in the form of written test in the form of description with the number of 10 items tested to 35 students.

The result of validation of cognitive ability

validation test compared between result of r_{count} with r_{table} on significance of 5% and N-35. Then based result of validation r_{count} is greater than r_{table} , so it can be concluded that the instrument item of cognitive ability validation test declared valid.

Test Reliability of Cognitive Ability

The researcher used SPSS version 22 to analyze the test results data of cognitive ability test. In the results of the test analysis of instrument reliability test of cognitive ability can be seen in table 2 below.

Table 2. Data Test Results Reliability Test Cognitive Ability

<i>Reliability Statistics</i>	
Cronbach's Alpha	N of Items
,722	5

The reability test is performed by alpha coefficient method (Cronbach Alpha) using SPSS version 22. If the Cronbach Alpha value is greater than 0.60 then the instrument is reliable (Sujarweni: 2014, p.199). The above result is 0.722 indicates that greater than 0.60, so the instrument is declared reliable.

Research Result

Student Learning Activity in Control Class

During the learning process by conventional methods student learning activity is observed. There are 5 student learning activities observed. The results of the observation of student learning activities during the learning process with conventional methods can be seen in the following table:

Table 3. Observation Results Student Activity Class Control

No	Value	Many Students	Amount
1	60	4	240
2	65	7	455
3	70	8	560
4	75	9	675
5	80	3	240
6	85	4	340
Total		35	2510
Average			71,7

Based on table 3 above shows that the minimum value 60 while the maximum value 85 with the average of student learning activities in the control class 71.7 so it can be stated that categorized good

Cognitive Ability in the Control Class

The pretest and posttest activities aim to know and measure students' ability on the learning that will be given. The test of cognitive capability is a matter of 10 questions. The results of pretest and posttest on students' cognitive abilities can be seen in table 4 below.

Table 4. Test Results Cognitive Ability Class Control

No	Category	Average
1	Pretest	55,46
2	Posttest	68,34

Table 4 above shows that the pretest result scores a minimum of 30 and a maximum value of 78 with an average of 55.46. While in posttest result of student by using conventional method minimum value 40 and maksimum 94 with average 68,34. Although there is an increase in the minimum, maximum and average values but still some students have not reached the KKM.

Student Learning Activity in Experiment Class

Observation result of observation of student learning activity in experimental class using cooperative learning model of Team Game Tournamen with Edugames monopoly help about can be seen in table 5 below.

Table 5. Observation Results Student Learning Activity Class Experiments

No	Value	Many Students	Amount
1	70	2	140
2	75	3	225
3	80	8	640
4	85	9	765
5	90	6	540
6	95	7	665
Total		35	2975
Average			85,00

Table 5 above shows that the observation of student learning activity has a minimum value of 70 and a maximum of 95 with the average that is 85.00. Based on these results students' learning activities in this experimental class get high marks so categorically stated very good.

Cognitive Ability in the Experimental Class

The cognitive ability test contains 10 items with the type of descriptions developed based on the lattice of questions designed in accordance

with the material, KI, KD and learning indicators. Recapitulation of students' cognitive achievement test result with cooperative learning model of Team Game Tournamen with edugames monopoly about problem can be seen in table 6 below.

Table 6. Test Results Cognitive Ability Experiment Class

No	Category	Average
1	Pretest	57,29
2	Posttest	85,14

Based on the above table shows that the result of pretest students get a minimum value of 30 and a maximum value of 80 with an average of 57.29. While the posttest result gets a minimum score of 70 and max 100 with an average of 85.14. In the pretest result of 35 students only 11 students are complete while poststeel result after the implementation of learning by using cooperative learning model type Team Game Tournamen with edugames monopoly about the problem, all students or 35 students reached KKM

Analysis of Results

The collected data is still changing the raw value and then the raw value is used in for normality and homogeneity test using SPSS 22. The result of both test is a requirement to perform hypothesis test or t-test.

Normality test

Perform normality test aims to test the data in the form of sheet instrument whether normal or not normal. Researchers in performing data normality test using SPSS 22 with One-Sample Kolmogorov-Smirnov Test technique based on 5% significant level. Normality test results on can be seen in table 7 below.

Table 7. Normality Test Results

Variables	Class	Asymp. Sig. (2-tailed)
Cognitive Ability (Pretest)	Control	0,112
Cognitive Ability (Posttest)		0,144
Cognitive Ability (Pretest)	Experiment	0,123
Cognitive Ability (Posttest)		0,167
Student Learning Activity	Control	0,117
	Experiment	0,145

Based on the above table shows that the results of the normality test of pretest-posttest cognitive ability of the control class, cognitive ability of pretest-posttest of experiment class class, student learning activity of control class and experiment when compared with significant level 5% or 0,05 then more, stated that the assumption of normality has been fulfilled.

Homogeneity Test

Implementation of homogeneity test aims to test the homogeneity or uniformity of variance between two groups. To test the data normality using SPSS 22 with Oneway Anova technique based on 5% significant level. Normality test results on can be seen in table 8 below.

Table 8. Homogeneity Test Results

Variable	Class	Test Results Homogeneity
Cognitive Ability (Pretest)	Control	0.217
	Experiment	
Cognitive Ability (Posttest)	Control	0,248
	Experiment	
Student Learning Activity	Control	0,672
	Experiment	

Table 8 homogeneity test results above proved that the significant value of each variable is higher than the criteria or significant level of 5% (0.05). So based on these results stated that the assumption homogeneity has been fulfilled.

Hypothesis Test

Data to be tested by t-test are pretest result of control class and experiment class, result of posttest of control class and control class, and result of observation data of student learning activity in control class and experiment class. The result of data has been done t-test as follows.

The result of t-test shows posttest value above gets t_{count} of 5,262 with df 68. At t_{table} df 68 and the 0.05 level has a value of 1.668. Then the value of $t_{count} (5,262) > t_{table} (1.668)$, then null hypothesis (Ho) proposed rejected and alternative hypothesis (Ha) accepted. So it can be concluded that “there is influence of cooperative learning model Team Game Tounament (TGT) assisted media Edugames Monopoly Questions on students’ cognitive abilities in IPS learning in class IV SDN Pajagalan I Sumenep”

The result of t-test shows the value of t_{count} on student learning activities of 7.537 with df 68. At t_{table} df 68 and the 0.05 level has a value of 1.668. Then the value of $t_{count} (7,537) > t_{table} (1.668)$, then null

hypothesis (Ho) proposed rejected and alternative hypothesis (Ha) accepted. So it can be concluded that “there are differences in student learning activities in learning between classes that were given learning using TGT assisted media Edugames Monopoly Questions with conventional learning in IPS learning in class IV SDN Pajagalan I Sumenep”.

Discussion

The Effect of Cooperative Learning Model Type TGT assisted Media Edugames Monopoly on Student Learning Activities

Along with the implementation of the learning process using cooperative learning model type TGT assisted media edugames monopoly about activity assessment conducted by observer (classroom teacher) by filling student learning activity instrument. From the observation results obtained student learning activity is stated to have normal and homogeneous with significant value of 0.117 and 0.145 on normality value and significant value 0.672 on homogeneity value.

Implementation t-test to know influence of learning models using cooperative learning model type TGT assisted media Edugames Monopoly Questions. Research result the show that the value of t_{count} on student learning activities of 7.537 with df 68. At ttable df 68 and the 0.05 level has a value of 1.668 . Then the value of $t_{count} (7,537) > t_{table} (1.668)$, then null hypothesis (Ho) proposed rejected and alternative hypothesis (Ha) accepted. So it can be stated that the learning activities of students who follow the learning by using cooperative learning model Team Game Tounament (TGT) assisted media Edugames Monopoly Questions is different and better than the learning activities of students who follow the learning by using conventional. With these results can be concluded that student learning activities are different between using cooperative learning model Team Game Tounament (TGT) assisted media Edugames Monopoly Questions by using conventional in lesson IPS class IV in SDN Pajagalan I Sumenep.

The Effect of Cooperative Learning Type Model TGT assisted Media Edugames Monopoly Questions on Cognitive Ability.

The cognitive ability test is developed based on the adjusted lattice of KI, KD, learning indicators as well as the subject matter of Economic Activities based on the surrounding Environment. Evaluation of learning in the form of cognitive ability test in the form of the description of the 10 points of this point aims to know and measure students’ understanding of the material that has been studied. The results

of normality and homogeneity test on students' cognitive ability test have been identified and expressed normal and homogeneous with significant values of 0.144 and 0.167 obtained in the normality test and significant value of 0.248 obtained on the homogeneity test.

Implementation t-test to know influence of learning models using cooperative learning model type TGT assisted media Edugames Monopoly Questions the show that the value of t_{count} in the cognitive ability test of 5.262 with df 68. At df table 68 and the 0.05 level has a value of 1.668. Then the value of $t_{\text{count}} (5,262) > t_{\text{table}} (1,668)$, then null hypothesis (H_0) proposed rejected and alternative hypothesis (H_a) accepted. So it can be stated that the cognitive ability test results of students who follow the learning by using cooperative learning model Team Game Tournament (TGT) assisted media Edugames Monopoly Questions better than the results of cognitive ability test students who follow the learning by using conventional. With the results tersebut can be concluded that using cooperative learning model Team Game Tournament (TGT) assisted media Edugames Monopoly Questions affect the cognitive abilities of students lessons IPS class IV in SDN Pajagalan I Sumenep.

CONCLUSIONS AND SUGGESTIONS

Based on the above results and discussion it can be concluded that:

There are differences in learning activities of students who follow the learning by using cooperative learning model Team Game Tournament (TGT) assisted media Edugames Monopoly Questions learning activities of students who follow the learning by using conventional. It is proved by the result of tcount value on student learning activity equal to 7,537 with df 68. Then $t_{\text{count}} (7,537) > t_{\text{table}} (1,668)$, so null hypothesis (H_0) proposed rejected and alternative hypothesis (H_a) accepted. It can be concluded that the learning activities of students who follow the learning by using cooperative learning model Team Game Tournament (TGT) assisted media Edugames Monopoly Questions is different and better than the learning activities of students who follow the learning by using conventional lesson IPS class IV in SDN Pajagalan I Sumenep.

In addition, there is also an influence on the results of cognitive ability test students follow the learning by using cooperative learning model Team Game Tournament (TGT) assisted media Edugames Monopoly Questions student learning activities that follow the learning by using conventional. It is proved by the result of tcount value on student ability test 5,262 with df 68. So that $t_{\text{count}} (5,262) >$

$t_{\text{table}} (1,668)$, then null hypothesis (H_0) proposed is rejected and alternative hypothesis (H_a) is accepted. It can be concluded that the students' cognitive achievement test results that follow the learning by using cooperative learning model Team Game Tournament (TGT) assisted media Edugames Monopoly Questions is better than the result of cognitive ability test of students who follow the learning by using conventional lesson IPS class IV in SDN Pajagalan I Sumenep.

Based on the results, the discussion and the conclusions described above, the suggestions from researchers are as follows:

For students: the use of cooperative learning model Team Game Tournament (TGT) assisted media Edugames Monopoly Questions can improve the learning activities and cognitive abilities of students because during learning all the students take an active role in the classroom.

For teachers: in the implementation of learning teachers are advised to use cooperative learning model Team Game Tournament (TGT) assisted media Edugames Monopoly Questions that can motivate students and improve students cognitive abilities.

For schools: It is recommended that the use of cooperative learning model type Team Game Tournament (TGT) assisted media Edugames Monopoly Questions is one way that teachers can use in learning in the classroom and facilitate students in understanding the material given by teachers.

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