

## The Effect of Cooperative Learning Model Types of Teams Games Tournament Assisted by Flashcard Media on Student Activity

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### Abstract

The learning that takes place in class VII MTs An-Nur Palangka Raya by looking at the activities of learners in the lessons of science is still less than optimal. Learners feel tired, not feel confident when I asked the teacher to perform in front of the class, even most learners are not reflective of the teacher when learning is in progress. The mood of the class when the lesson science progresses it appears less active for at least students who want to ask and respond to questions, the subject shows the interaction of the learners which is lacking in the learning process. This research aims to know the influence of cooperative learning model type Teams Games Tournament (TGT) berbantu media Flashcard to active learners. This research is a quantitative research method is quasi experiment with research design pretest-posttest control group design. The results of data analysis show that the average active learners in the experimental class of 72.62 us% and the control class of 70.00% with good criteria. The results of the analysis of the t-test value of the liveliness of the students of the experimental class obtained Asymp. Sig. (2-tailed) equal to 0.280 > 0.05 then it can be concluded that there is influence of cooperative learning model type TGT-assisted media Flashcard to active learners.

**Keywords:** Learning Model of Team Games Tournament; The Activeness

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## INTRODUCTION

Learning is a process in which there is positive interaction between teachers and students as an effort to achieve learning objectives. The achievement of learning objectives is one aspect that determines the success of teaching and learning (Emda, 2018). The basic factor that determines the success of the learning process is the activeness of students. The activeness of students can be seen from various things such as paying attention, listening, discussing, asking questions, the courage of students, and solving problems (Wibowo, 2016).

The active factor of students as learning subjects greatly determines the success of students in mastering the subject matter. In general, it can be concluded that the activeness of students in the learning process is able to help students to understand the material being taught. Of course this will have an impact on student learning outcomes (Walid, A., 2019)

Good learning is learning that can activate students. internal factors that influence student learning activeness consist of internal and external factors. Internal factors that affect active learning, namely physiological factors in the form of physical condition (five senses), psychological factors in the form of attention, response, and memory are supporting factors for active learning of students. While the physical condition becomes a factor inhibiting the active learning of students. External factors that influence the active learning of students are non-social factors, namely places and facilities and social factors, namely teachers and peers (Farida Payon, F, dkk, 2021)

Based on observations in class VII at MTs An-Nur Palangka Raya by looking at the activities of students in learning science, it is still not optimal. Students feel bored quickly, do not feel confident when asked by the teacher to appear in front of the class, there are even some students who do not pay attention to the teacher when learning is in progress. The learning atmosphere in the class looks less active because of the lack of students who want to ask questions, this shows a lack of student interaction in the learning process. The problems above need to be looked for a solution so that the learning activities carried out at MTs An-Nur Palangka Raya become more interesting, active, and creative which place

more emphasis on the abilities of students and are not always teacher-centered.

Science learning in SMP/MTs, especially for class VII, requires a model that is able to stimulate student activity to understand lessons. This shows that if science material is taught in an interesting learning model, it will definitely stick in the students' memories, as in the cooperative learning model. One of them is the cooperative learning model of the Teams Games Tournament (TGT) type. Learning with this model can be done while playing as a way to create student activity. (Sumiati, 2017).

Another factor that can support teaching and learning activities is the use of learning media. Learning media can stimulate students to think more actively so that students obtain increased learning outcomes. There are many types of media that can be used by teachers in the learning process, one of which is Flashcard media (Sumiati, 2017).

Flashcards are small cards which are usually in the form of images supplemented with text, or symbols that aim to guide students in understanding material concepts. Flashcard learning media is able to overcome the problem of time constraints by displaying pictures during lessons. In addition, Flashcards have concrete properties and are easy to use (Rohmatin, 2017).

Based on the results of research that has been done before, it shows that there is an increase in the activity of students after using the TGT type cooperative learning model on plant structure material conducted in class VIII-F of SMP Negeri 32 Semarang. The increase in student activity occurred due to the use of cooperative learning models as an alternative learning so as to create a pleasant learning atmosphere. (Susilowati, 2016). In addition, other studies have seen that the use of the TGT learning model using puzzle media can increase student activity and learning outcomes by showing that there are significant differences in the experimental class and the control class. (Kristiana, I., dkk, 2017).

Starting from previous research, researchers also conducted research using the TGT type learning model. The difference between this study and previous research is that in this study all classes will be given the same treatment, namely using the TGT type learning model, but the experimental class will be assisted by Flashcard media while the control class will not use Flashcard media. The use of media in the form of Flashcards is expected to be able to

support the learning process to be more optimal so as to increase the activity of students.

The TGT learning model when combined with Flashcard media can be used as a game which will certainly create active and fun learning activities. Flashcard media is used during the game when the teacher reads the questions, so students are able to answer using the flashcard media that has been provided.

Based on the description above, the researcher is interested in conducting research entitled "The Influence of Teams Games Tournament (TGT) Type Cooperative Learning Model Aided by Flashcard Media on Student Activity.

## METHOD

The author uses the Quasi Experiment or quasi-experimental method with the design used is the Pretest-Posttest Control Group Design. This study emphasizes a quantitative approach in the form of numerical data analysis, then processed using statistical methods. This research took place at MTs An-Nur Palangka Raya for 2 months from February 2021 to April 2021. Data collection techniques were obtained by means of observation, tests and documentation.

Observations are carried out to obtain visible empirical facts in order to obtain new knowledge as an understanding of the context and phenomenon being studied (Widodo, 2017). Tests are defined as questions that are arranged systematically and answered by respondents. In general, tests are used to determine the cognitive abilities of students, so usually used to measure the extent of one's knowledge. The activity of collecting data through document search is called documentation. This technique usually uses documents such as photographs or other objects related to the aspect being studied (Widodo, 2017).

Students who are in class VII A, VII B, and VII C even semester of the 2020/2021 academic year Mts An-Nur Palangka Raya make up the population in this study. In class VII A the number of students is 28 people. Class VII B has 26 students, while in class VII C there are 28 students. The sample in this study used purposive sampling, which is a sampling technique with certain considerations. Sampling in this technique is done deliberately, because the researcher has considerations in determining the sample so that it is in accordance with the research objectives to be achieved. The

experimental class will be taught using the TGT type learning model assisted by Flashcard media, while the control class will be taught the TGT model without using Flashcard media.

The instruments in this study were compiled and used according to the problems that occurred in the field, including: Observation Sheets, Learning Outcomes Tests, Questionnaires.

The data analysis technique aims to find out whether there is student activity after being taught a quasi-experimental based learning model in class VII d MTs An-Nur Palangka Raya.

## RESULT AND DISCUSSION

This research was conducted in class VII with 2 experimental groups. Class VII-A is an experimental class with 28 students, and the control class, VII-B, has 26 students. Natural science learning about the interaction of living things with their environment is taught using the TGT cooperative learning model assisted by Flashcard media in the experimental class, while TGT cooperative learning without the aid of Flashcard media is taught in the control class.

This research was conducted in two meetings. At the first meeting a pre-test was carried out, then a post-test was carried out at the second meeting. The time allocation for each meeting is 60 minutes using study groups via Whatsapp.

Assessment of the activeness of students in learning activities was carried out in two meetings. The activity of these students was carried out by observers from IAIN Palangka Raya totaling 5 female students.

In the learning process students are divided into five study groups. The results of the activeness of students in the experimental class can be seen in table 1.

Table 2. Average Student Activity in the Experimental Class

No	Indicator	Student Activeness Value	
		Pert I	Pert II
1	Notice	65	76
2	Read	54	84
3	Issuing opinions	65	76
4	noted	54	61
5	Answer Questions	36	39
Total Score		274	336

Percentage (%)	65,24%	80,00%
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Based on table 2, the assessment of the activity of students on the interaction of living things with their environment after being taught the TGT type cooperative learning model assisted by Flashcard media in the experimental class at the first meeting had an active percentage of 65.24%, with the attention indicator having a total score of 65, reading 54, issued 65 opinions, recorded 54, and answered questions of 36 of the total students. Students are more active in paying attention and expressing opinions on observations in the first meeting, while students are more active in reading with a total score of 84 in the second meeting. Other indicators include paying attention to a total score of 76, issuing 76 opinions, recording 61, and answering 39 questions with an average percentage of 80%.

In Figure 1, the researcher displays a graph of student activity in two meetings.

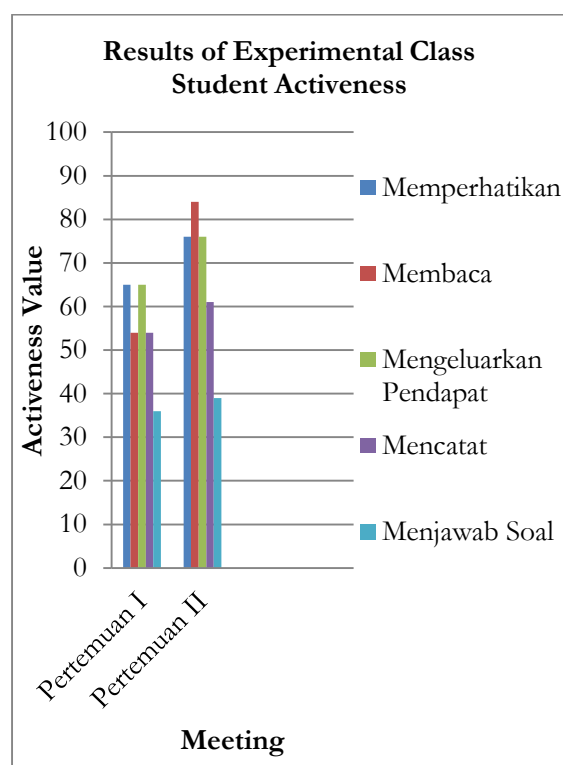


Figure 1. The value of student activity in the experimental class

Figure 1 shows that students in the experimental class increased in two meetings even though the difference was not significant.

The value of the activeness of students in the control class after being treated with the

TGT cooperative learning model without using Flashcard media is shown in table 3.

Table 3 Average Student Activeness Value in the Control Class

No	Indicator	Student Activeness Value	
		PertI	PertII
1	Notice	59	70
2	Read	52	78
3	Issuing opinions	59	70
4	noted	45	52
5	Answer Questions	30	31
Total Score		245	301
Presentase (%)		62,82%	77,18%

Table 3 shows the value of student activity in science lessons taught using the TGT cooperative learning model without using Flashcard media. Observation of activity is carried out at each meeting through the Whatsapp study group.

The following figure 2 illustrates the activity in the control class.

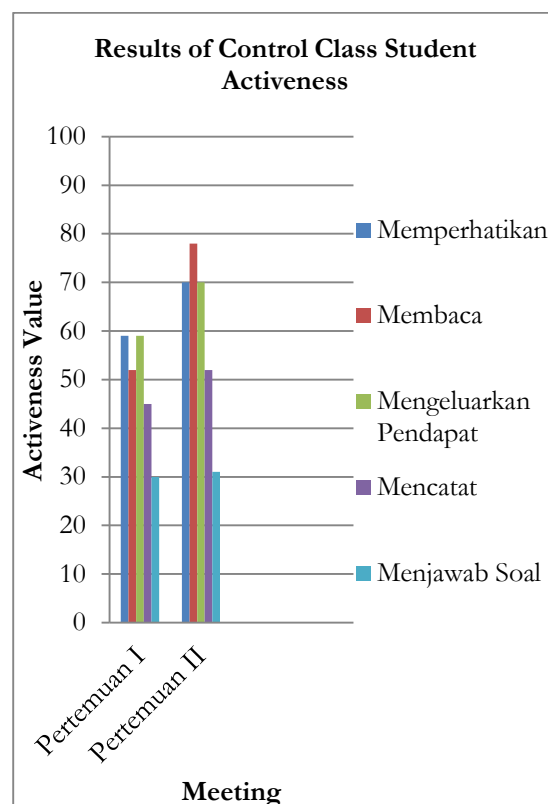


Figure 2. The value of student activity in the control class

Figure 2 shows that in the control class the activity of students has increased. At the first meeting, an average student activity of 62.82% was obtained with a total score that was different for each indicator, including: paying attention to having a total score of 59, reading 52, issuing opinions 59, taking notes 45, and answering questions by 30. At the meeting the second average student activity amounted to 77.18%. At the second meeting the students were more active on the reading indicator with a total score of 78, then followed by paying attention to 70, issuing 70 opinions, taking 52 notes, and answering questions with a total score of 31 out of all students.

The difference in the activity of students in the experimental class and the control class can be observed in table 3.

Table 4 The Average Percentage of Activeness

Meeting	Class		Ket
	Eksperimen	Kontrol	
I	65,24%	62,82%	Good
II	80,00%	77,18%	Good
Average	72,62%	70,00%	Good

Table 4 shows that the percentage of active learning in the experimental class at the initial meeting obtained an average of 65.24% while the control class obtained an average value of 62.82% at the first meeting. At the second meeting the average value of the experimental class was 80.00% and the control class was 77.18%. Based on these data, the overall value obtained in the experimental class is 72.62% and the control class is 70.00% so that it is categorized as good.

The average percentage of students' active learning in the experimental and control classes can be seen in Figure 3.

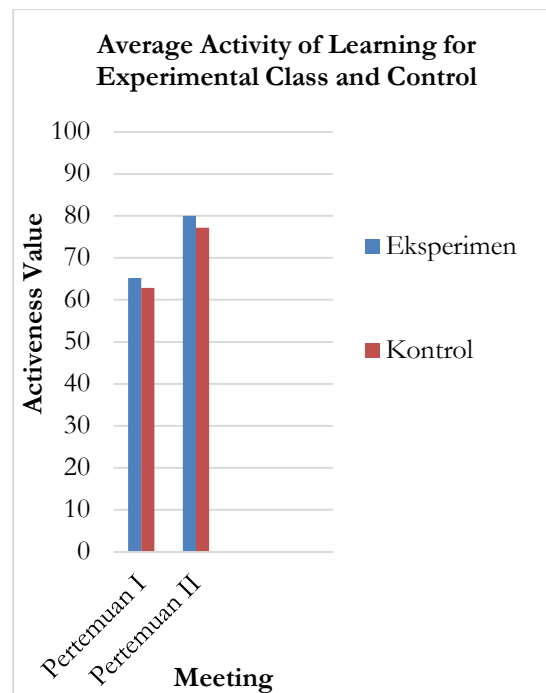


Figure 3. Average Learning Activeness in Experimental and Control Classes

#### Normality test

The distribution of data from the experimental class and the control class can be determined through the data normality test. Normality analysis was carried out with the help of the SPSS for Windows 21.0 program. Data is said to be normally distributed if it has a significance  $> 0.05$ , whereas if the significance is  $< 0.05$  then the data is not normally distributed. The results of the normality test for the activity data of students in the experimental and control classes can be observed in table 5.

Table 5 Normality Test of Student Activity in Experimental & Control Classes

No	Kelas	Sig*	Ket
1	Eksperimen	0,138	Normal
2	Kontrol	0,200	Normal

Table 5 shows that the data normality test in the experimental class and control class obtained a significance of  $> 0.05$ . In the experimental class a significance value of 0.138 was obtained and in the control class it was 0.200, so that the



overall activeness score of the students was declared to be normally distributed.

#### Homogeneity Test

The sample used in a study needs to be tested to find out whether the sample comes from a homogeneous population or not. Test the homogeneity of the data using the Levene test with the help of the SPSS for Windows 21.0 program. The test criteria are at a significance level of 0.05. The data is said to be homogeneous if a significance of  $> 0.05$  is obtained, otherwise the data is said to be non-homogeneous if the significance is at the level  $< 0.05$ . The homogeneity test value of student activity can be observed in table 6.

Table 6 Homogeneity Test of Student Activity in Experimental & Control Classes

Perhitungan	Sig*	Ket
Keaktifan	0,630	Homogen

Table 6 explains that the results of the Levene test with the help of the SPSS for Windows 21.0 program to obtain homogeneity of activity data obtained a significance value of 0.630, meaning that the value is  $> 0.05$ . Based on the results of the data obtained, it can be concluded that the value of student activity is homogeneous.

#### Hypothesis testing

Hypothesis testing was carried out using parametric statistical tests (t-test) with the condition that the data were normally distributed and homogeneous. Independent Samples T-Test has testing criteria, namely if the significance value is  $> 0.05$  then  $H_0$  is accepted and  $H_a$  is rejected, and conversely  $H_a$  is accepted and  $H_0$  is rejected if it has a significance value  $< 0.05$ .

This was carried out to find out whether there was an influence of the TGT cooperative learning model assisted by Flashcard media on the activeness of students. It can be observed in table 7.

Table 7 Hypothesis Test of Student Activity Classes in Experiments & Controls

Uji	Kelas	Sig*	Ket
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Hipotesis			
Uji-t	Eks-perimen	0,280	Tidak terdapat perbedaan
Uji-t	Kontrol	0,282	Tidak terdapat perbedaan

Table 7 shows that the results of the Independent Sample T-Test on the activeness of students in the experimental class were obtained by Asymp. Sig. (2-tailed) of 0.280 and the control class of 0.282. Based on the basic decision making Asymp. Sig (2-tailed)  $> 0.05$ , then  $H_0$  is accepted and  $H_a$  is rejected, so it can be concluded that there is no influence of the TGT type cooperative learning model assisted by Flashcard media on the activity of students in the interaction material of living things with their environment.

Research that has been carried out by researchers regarding the activity of students in the two experimental classes obtained different results in each meeting. The control class has a total activeness value of 70% while the experimental class is 72.62%, in other words, the difference in values is not much different. In the experimental class and the control class, their activity increased after being taught the TGT learning model.

The difference in the value of activeness is due to the difference in the media used in learning. The bar graph of the experimental class is higher than the control class, this is due to the difference in the media used when playing games with the TGT cooperative learning model. Flashcard media is used in the experimental class while the control class only uses worksheets to find answers to questions from the games, so there are differences in the value of student activity even though these values are not much different..

#### a. Experimental Class Student Activeness

Learning in the experimental class that has been taught with the TGT cooperative model using Flashcard media obtained an average value of the

first meeting of 65.24% and the second meeting of 80.00%. On the observation sheet there are 5 aspects of observation, including: paying attention, reading, giving opinions, taking notes, and answering questions.

The science learning process after being taught the TGT cooperative learning model by using Flashcards as a learning medium, students obtained an average score of 72.62% in the good category, meaning that students in the experimental class had played an active role in participating in class learning.

#### b. The Activeness of Control Class Students

In the teaching and learning process that was carried out in the control class using the TGT type cooperative learning model without using Flashcard media, the value of student activity at the first meeting was 62.82% and 77.18% at the second meeting. .

The control class obtained an average activity value of 70.00%, so that activity was categorized as good. This is because the control class also uses the TGT cooperative learning model, the difference is only in the media used, namely not using Flashcard media like in the experimental class.

#### c. Effect of Student Activeness

The success of students in mastering the subject matter is largely determined by their activeness, namely by looking at the involvement of students during the learning process.

The results of the activeness of students in the two experimental classes, namely the experiment and control, have abilities that are not much different, which can be seen from the average value of activity. Based on data analysis in the experimental class as a whole, an average of 72.98% was obtained and the control class was 70.00%. The activeness data that has been obtained is then tested for normality and homogeneity. Data analysis showed that the scores in the two experimental groups, namely the

experimental and control groups, were normally distributed and homogeneous.

The hypothesis was carried out aiming to find out whether there is an influence or not there is an influence of the TGT type cooperative learning model on student activity. The results of the hypothesis testing were obtained by conducting a t-test, so that the significance value of the Asymp experimental class was obtained. Sig. (2-tailed) of 0.216 and the control class 0.218. Based on the basic decision making Asymp. Sig (2-tailed)  $> 0.05$ , then  $H_0$  and  $H_a$  are rejected, so it can be concluded that there is no effect of the TGT cooperative learning model assisted by Flashcard media on student activity.

The results showed that the TGT type of cooperative learning model could increase the activity of students in the two experimental classes, namely the experimental and control classes. The increase in activity can be seen from the average value of observations at the first meeting and the second meeting. This certainly makes there is no influence of the TGT type cooperative learning model assisted by Flashcard media on the activity of students, because both classes use the same learning model, only the media is different.

Learning media here is only a tool to support the learning process, so it does not have a big role in activity. Students are able to independently look for references from many sources, for example worksheets and the internet as learning materials.

Based on the data obtained, there are factors that can affect activity, including internal factors and external factors. Internal factors originate from the psychology of students which include attention, response, and memory. In the teaching and learning process, the teacher will ask questions about the material that has been presented to measure whether students pay attention to the teacher's explanation or not. Some students can answer the questions raised, thus it can be stated that students pay attention when learning takes place.

Another factor that can influence student activity is external factors. External factors include teachers and the role of parents. The teacher is a supporting factor in teaching and learning activities in the classroom in order to create a conducive learning. The teacher plays a

role in activating students by teaching various models, how to convey material, the media to be used, and the attitude of the teacher are supporting factors for students' active learning. Parents also play an important role in always providing attention and support so that students are able to play an active role in the classroom during the learning process.

## CONCLUSION

The conclusion in this study revealed that there was no effect of the TGT cooperative learning model assisted by Flashcard media on the activity of students with a significance value of  $> 0.05$  and the average activity of students in the experimental class was 72.62% and the control class was 70.00% with good criteria.

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