

THE EFFECTIVENESS OF THE TEAM GAMES TOURNAMENT (TGT) COOPERATIVE LEARNING MODEL ON LEARNING OUTCOMES OF STUDENTS IN SMA NEGERI 3 SALATIGA

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Abstract

This study aims to analyze the effectiveness of the Team Games Tournament (TGT) cooperative learning model on the learning outcomes of class X/phase E SMA Negeri 3 Salatiga in economics subjects. This research includes collaborative classroom action research with a sample of all students in class X5 consisting of 34 students using two research cycles. The flow in each cycle is planning, implementing, observing, and reflecting. This study uses a quantitative approach with research instruments in the form of pretest, posttest, student activity sheets, and self-assessment to see the effectiveness of the TGT model learning process on learning outcomes. The results showed that, in the cognitive domain, there was an increase in learning outcomes with an average score of 76 for the first cycle and 81 for the second cycle, while in the affective domain, there was an increase in attitude with an average value of 80% in cycle I and 82% in cycle 2. Moreover, student activity was obtained from self-assessment through a questionnaire with an average score of 68.24% in cycle I and 81.76% in cycle II. Furthermore, the gain test result of 0.37926 is included in the medium category. It is suggested that the application of the TGT model can increase understanding and activeness in teaching and learning activities as well as for innovation and development through the application of the TGT model especially for teachers and for other researchers to develop a TGT model that is integrated with interactive media and technology.

Keywords: Cooperative Learning; Team Games Tournament (TGT); Learning Outcome.

INTRODUCTION

Education is a place that can be used to develop students' abilities to channel their talents and interests. This is in line with the educational objectives of the Republic of Indonesia. Constitution no. 20 of 2003 states that the definition of national education is a method used to realize the

situations and conditions that occur in the learning process to increase the activeness and skills of students. In organizing learning activities based on

educational goals, the role of each educational component, namely curriculum, syllabus, materials, methods, infrastructure, and evaluation, is needed (Rusnawati, 2020). This is supported by the opinion of Mahsup and Anwar (2020), namely that learning will feel adequate and efficient if suitable models and methods are used. The importance of learning models is to help educators clarify learning procedures and steps so that there are solutions in the form of appropriate actions for students to understand the material being taught.

In education, it is necessary to create innovative learning processes in order to achieve educational goals. Several things that influence the learning process are educator or teacher, student, and school environmental factors. The role of teachers in education is to determine the success of the learning process. In carrying out the teaching profession, pedagogical, social, professional, and personality competencies are needed by Law No.14 of 2005. If teachers apply these competencies, they can provide the best results in the learning process. The quality of teachers is a factor that influences learning outcomes (Pradina et al., 2021).

Based on the Mid-Semester Summative score analysis in February 2023, the average score in class X5 was 62.87 from a KKTP score of 75. Furthermore, based on observations in March 2023 in class, some students need help learning or doing other activities, such as telling stories with their classmates or playing games on their cellphones, and there needs to be more student activity. Based on the results of the pre-cycle carried out in March 2023, the conclusion obtained after using the discovery learning model was that several students experienced difficulties in learning and understanding the material for the Bank Financial Industry (BFI) and the Non-bank Financial Industry (NBFI). This is shown by the average post-test score on BFI and NBFI material, namely 65. The distribution of completeness scores on post-test post-test scores is presented in the following diagram.

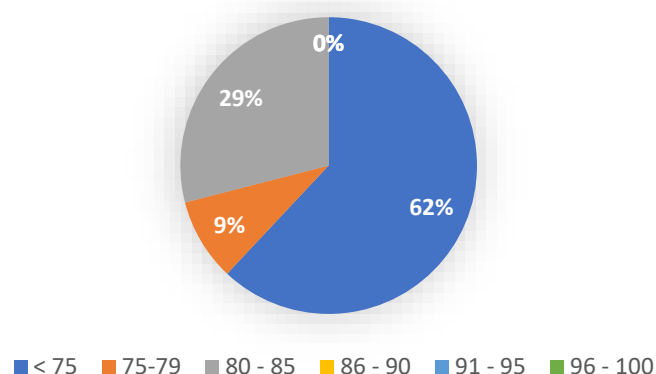


Figure 1: Pre-cycle completion

Based on the diagram, the average score for the class Based on these findings, teachers need to provide action or innovation in the learning process from models, methods, or learning media to pay more attention to involvement, activeness, and learning outcomes. This aligns with Wibowo and Pardede's (2019) opinion that using appropriate learning methods will achieve learning goals and impact students' completion scores, activeness, interest, and learning motivation.

Many learning models can be used in the learning process to create learning that can help students understand the material being taught. The reference for selecting the learning model is the cooperative learning model with the Team Games Tournament (TGT) type. TGT is a learning model involving students with peer tutoring activities, games, and competitions to make learning more enjoyable. The TGT model aims to increase student activity and create an innovative and interactive learning process. Suardi & Muchtar (2020) in their research argue that using the TGT learning model can improve student learning outcomes when compared with the conventional model at Pasaman Barat Pasaman High School. Furthermore, it is also in line with Santosa's (2018) research that implementing the TGT model improves the quality of learning processes and outcomes. Based on this background, this research aims to analyze the application of the TGT model to the learning outcomes of students in economics subjects.

Learning outcomes are changes in aspects of a person's attitudes by measuring aspects of knowledge, attitudes, and skills. This process gives different results than before; from initially not knowing, it will turn into

knowing. Learning outcomes focus not only on grades but on several aspects, namely what changes occur, the level of reasoning, discipline, improvements in skills, and other positive changes. This statement is in line with Sujana (2013), namely that by learning we will be able to produce a change that can be seen in our behavior, namely: (1) Cognitive, related to activities related to the mental (brain) where there are levels in the thinking process based on Taxonomy Bloom, namely knowledge, understanding, application, analysis, synthesis, and evaluation; (2) Affective, which is related to activities to change a person's attitude, such as attention to lessons, discipline, motivation to learn, respect for teachers and friends, study habits and social relationships. (3) Psychomotoric, related to changes in the level of skills we have and our ability to take action.

Team Games Tournament (TGT) is a learning model that directs students to group learning activities with members of 4-5 people with different ability levels (Sholihah, 2016). Learning activities in the TGT model are combined with groups, games, and tournaments so that students do not get bored, are more relaxed, and can foster an attitude of responsibility, honesty, cooperation, and sportsmanship in learning (Fitriyah, 2018).

The advantages of the TGT model are (1) the learning process becomes exciting and increases learning motivation; (2) learning is much more meaningful because students can exchange ideas during activities in study groups; (3) there are variations in learning methods because teachers do not tend to lecture, but instead learns while playing; (4) there is active involvement of students due to the process of observing, doing, acting, and demonstrating (Sulfemi, 2018).

The syntax in the TGT model, according to Slavin in Tanireja et al. (2011), is 1) Class presentation, namely the activity of conveying material concepts by the teacher to provide students with an initial overview of the material to be taught; 2) Study groups (teams), teachers form students in groups to make it easier for them to understand the material with collaboration and peer tutoring. In this group study, students collectively discuss the LKPD the teacher prepared by actively seeking information through various relevant sources. 3) Games and tournaments: These games and competitions aim to

test whether each student understands the group learning activities. Students will sit at a tournament table of 5-6 people at the game and competition stage. The groups are divided homogeneously. At the game and competition stage, you can use question cards or other media, and the work on the questions will be done randomly and independently. Individual results will be accumulated in group points; 4) Group awards (team recognition): After the game and match phase ends, awards are given to the group with the highest point score. This award is intended to give appreciation to the group team for participating and give points to the group team.

METHOD

This type of research is quantitative with the type of Collaborative Class Action Research (CCAR), carried out in class X5 of SMA Negeri 3 Salatiga with 34 students. Action research answers problems in the field by implementing learning innovations by collaborating with researchers and practitioners (Sanjaya, 2016). This research consists of 2 cycles according to the Kemis and Taggart model; this research consists of two cycles with four stages: planning, taking action, observation, and reflecting (Rasyimah, 2022). At the planning stage, the activities are preparing learning plans and creating learning media, evaluation tools, and assessment sheets. Next, at the action stage of the learning process, the TGT-type cooperative model is used. At the observation stage, researchers carried out observations through class action notes in the form of student activity. Next, the reflection stage is carried out by observers, namely observing the process during learning.

The data collection techniques used are 1) observation to provide an overview of the implementation of learning carried out by the teacher and during pre-cycle activities; 2) written assessment and assessment of student activities carried out during each process of providing action (cycles I and II) to compare the changes that occur in each cycle; and 3) documentation, as evidence of learning implementation. The data analysis technique uses 1) descriptive analysis to describe student learning outcomes in the cognitive domain, which includes maximum and minimum scores, average learning completeness, and student activities, and 2) qualitative descriptive to explain

the results of reflection after the learning process.

RESULT AND DISCUSSION

This research consists of a pre-cycle and two research cycles with the following flow:

Table 1. Research Flow

Stage	Cycle I	Cycle II
Plan	Develop teaching tools, learning media, evaluation tools, and assessment sheets based on the results of pretest activities to improve learning processes and outcomes.	Develop an improvement plan that will be used in cycle II actions.
Do	We implement teaching and learning using the TGT model to improve student learning outcomes.	Implement KBM based on the improvement plan that has been prepared.
Observe	Carry out class action records in the form of student activity and achievement of learning objectives.	
See	Discuss the results of learning activities with observers to analyze the achievements of the learning process.	It reviews the learning process activities carried out on student learning outcomes, both from the cognitive, affective, and active aspects, using the TGT model.

Source: research data processing, 2023

Furthermore, the results of learning in the cognitive domain are presented in the following table:

Table 2. Cognitive Domain

Class Interval	Pre cycle	Pretest	Post-test cycle I	Post-test cycle II
< 75	21	24	2	0
75-79	3	9	26	13
80 - 85	10	1	6	17
86 - 90	0	0	0	2
91 - 95	0	0	0	0
96 - 100	0	0	0	2
Average	65	66	76	81

Source: research data processing, 2023

Based on Table 2, the average pre-cycle score using the discovery learning method was 65. Furthermore, in the pretest activity before using the TGT model, the average score was 66. The next activity, class action using the TGT model in cycle I, was obtained. The average score is 76. This score has

increased from pre- and pretest activities, but researchers retook action in cycle II with an average score of 81. The following is a diagram of the cognitive domain.

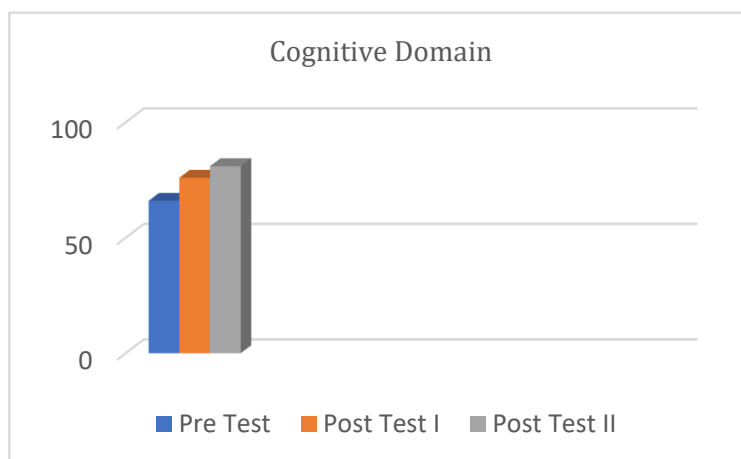


Figure 2: Cognitive Domain Diagram

The level of effectiveness of the use of the TGT cooperative learning model is also processed in the form of descriptive analysis. This aims to explain research data, including minimum, maximum, and average scores, the number of students, and the number of students who completed and did not. The results are listed in Table 3.

Table 3 Descriptive Analysis			
	Pretest	Post-test cycle I	Post-test cycle II
Minimum value	40	70	75
Maximum value	85	80	100
Average value	66	76	81
The number of students	34	34	34
Complete amount	10	32	34
The number is not yet complete	24	2	0

Table 3 shows that the number of students in class post-test cycle I is 80, and post-test cycle II is 100. The average score in class X5 in pretest activities is 66, posttest posttest cycle I is 76, and posttest posttest cycle II is 81. The number of students who completed economic learning activities also increased from the pretest, cycle I, and cycle II, with the respective numbers being 10, 32, and 34. Furthermore, the number of students still needed to complete the pretest was 24, and cycle I was II.

Next, the learning outcomes from the affective domain were reviewed through a questionnaire addressed to all class X5 students to see changes in

students' attitudes. The results on the affective aspect are presented in the following table.

Table 4. Affective Domain

No.	Indicators	Cycle I (%)	Cycle II (%)
1.	Respect religion	93	93
2.	Honesty	77	80
3.	Politeness	80	80
4.	Self-confident	79	80
5.	Discipline	76	79
6.	Responsibility	79	79
7.	Cooperation	75	80
Average		80%	82%
Criteria		Tall	Tall

Source: research data processing, 2023

Based on the results of the data in the affective domain, there was an increase from cycle I to cycle II of 2% with high criteria. The indicators used to assess the affective aspect are respect for religion, honesty, politeness, self-confidence, discipline, responsibility, and cooperation.

The success of the learning process can also be seen from observing students' activities through notes during the learning process carried out by observers. The results of these observations are presented in Table 5 below.

Table 5. Results of Student Observation Activities

No.	Indicators	Cycle I (%)	Cycle II (%)
1.	Pay attention to the teacher's explanation	85,29	94,12
2.	Actively ask questions	44,12	58,82
3.	Active opinion	58,82	73,53
4.	Actively doing tasks	79,41	94,12
5.	Collect assignments on time	73,53	88,24
Average		68,24%	81,76%
Criteria		Satisfactory	Active

Source: research data processing, 2023

Based on these data, it shows that there was an increase in student activity in cycle I and cycle II. The average score in cycle I was 68.24% in the sufficient category, and the average in cycle II was 81.76% in the active category.

DISCUSSION

This research is collaborative classroom action research to see the application of the TGT model to improve learning outcomes for class X SMA Negeri 3 Salatiga on Financial Services Authority material. Based on the

existing background, namely the average Mid-Semester Summative score in the class, implementing CCAR using the TGT model to improve learning outcomes. TGT is based on involving all students in teaching and learning activities accompanied by implementing games. This is in line with the opinion of Merti (2020) that applying TGT helps homogeneously increase student activity and activeness with the existence of game stages. Apart from that, group collaboration and peer tutoring also support understanding of the material.

This research uses two cycles, namely, in the first cycle, after pre-cycle activities, the researcher tries to improve or optimize the learning process and outcomes by applying the TGT model. In the first cycle, a pretest was held to determine students' initial insights and understanding of the Financial Services Authority material. The average result of the pretest score was 66. Furthermore, after the pretest activities, the researchers took action, namely implementing the TGT model. The learning steps are: 1) Class presentation: In the class presentation, the researcher first provides a general overview to students regarding the OJK material by playing a learning video; 2) Study groups (teams), grouping students into groups determined through pretest results. This group is heterogeneous, with students with poor, fair, sound, and perfect learning levels. The aim of dividing these groups is that students with good and excellent levels of readiness can become tutors for other friends (peer tutors). This group can be called the original group because later, each student will play and compete with other groups, and the scores from the games and matches will be accumulated in the core group. In group learning activities, students work on LKPD that researchers and students have provided are given the freedom to access various relevant learning resources accompanied by assistance from the teacher; 3) Games: At the game stage, researchers group students into new groups based on the level of students, namely poor, sufficient, reasonable, and very good. This group division aims to ensure that each student, according to their level of readiness, can compete with others with the same level of readiness. The stages of the game in cycle I are that students work on LPKD crossword puzzles, and in cycle II, they use question cards; 4)

Competition (tournament): Students are still in the same group at this stage, namely in the game group. The step in the competition stage is that students compete with each other by doing LKPD via Google Forms. The results of the game and competition stages will be calculated into group scores and individual scores so that students can continue to play and compete honestly and sportingly. 5) Group awards (team recognition), namely the stage of giving appreciation to the group that gets the highest points.

Based on actions using the TGT model, there was an increase in learning outcomes from pre-cycle, cycle I, and cycle II activities. This increase can be seen in 1) cognitive aspects with an average of 65 in pre-cycle, 76 in cycle I, and 81 in cycle II; 2) affective aspect, there was an increase with the average value for cycle I being 80% and cycle II being 82%; and 3) student observation activities with an average in cycle I, namely 68.24% and cycle II, namely 81.76%. Increasing learning outcomes in the practical domain are reflected in attitudes of honesty, self-confidence, responsibility, and cooperation. The application of the TGT model will improve students' attitudes. The existence of game and competition stages in this learning model will require students to be honest and confident in working independently and not to ask questions or look for answers through any source. Apart from that, the increased attitude of responsibility and cooperation is reflected in each student's role, who must try to work on the LKPD at the group learning stage so that all group members can understand the material. Furthermore, at the game and competition stage, each student must also play an active role in getting points and competing with other group members.

The application of the TGT model in learning about the Non-bank Financial Industry (NBFI) and OJK also provides positive things to students, namely increasing the attitude of caution and vigilance in choosing non-bank financial industries for investment if they are not registered with the OJK and increasing literacy for students to choose guaranteed online loan applications. Its security. Sari et al. (2022) research results align with this research, namely that there is an influence on the increase in learning outcomes for class XI Science at SMA Muhammadiyah Batam after taking

action using the TGT model. Other research by Armandi et al. (2022) also showed the same results, namely that using the TGT model improved learning outcomes in class XI MA Darul Ittihad Campor Geger. Kurniawan's (2019) research results also show that using the TGT model increases learning outcomes by 23.3%.

CONCLUSION

This research concludes that using the TGT model in class X5 economics learning at SMA Negeri 3 Salatiga can increase learning outcomes in the cognitive aspect by 5%, affective aspect by 2%, and student activity by 13.52%. Based on the existing description and conclusions, the suggestions in this research are: 1) by implementing the TGT model, it is hoped that student activity will increase; 2) teachers can use the TGT model reference to improve students' understanding and learning outcomes; 3) Future researchers can develop TGT models that are accompanied by media or integrated with technology.

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