



## IMPROVEMENT OF STUDENT LEARNING OUTCOMES THROUGH THE TEAM GAMES TOURNAMENT (TGT) COOPERATIVE LEARNING MODEL

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### Abstract

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This study aims to optimize students' learning outcomes in Economics subjects through the implementation of the cooperative learning model, Team Games Tournament (TGT) type. This research employed Classroom Action Research (CAR) conducted in two cycles, consisting of four stages in each cycle, namely planning, action implementation, observation, and reflection. The subjects of this study involved 33 students of class X.4 at SMA Negeri 3 Cilacap. Based on the research findings, it was revealed that there was an improvement in students' learning outcomes in each cycle. This is evidenced by the increase in the average student score, which rose from 62.78% in the pre-cycle, to 68.78% in the first cycle, and reached 85.03% in the second cycle. Therefore, the application of the cooperative learning model of the Team Games Tournament (TGT) type is proven to be effective in the learning process of Economics to help improve students' learning outcomes at SMA Negeri 3 Cilacap.

**Keywords:** Cooperative Learning Model; Team Games Tournament; TGT; Learning Outcomes

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## INTRODUCTION

The scope of economics as a subject equips learners with the needed concepts and practical skills to deal with contemporary era challenges such as personal finance management and strategically dealing with the intricacies of a globalized world. In the context of a disrupted digital era marked by volatile market conditions, critical, analytical, and problem-solving skills are the prerequisite for the youth (Nofriansyah et al., 2024). The teaching of Economics in schools is centered on knowledge transfer. Nevertheless, students should be given opportunities to construct knowledge through interactive and context-based experiences. The reality is that most educators continue to rely on the outdated method of one-way lecturing. As a result, students generally participate passively, demonstrating limited active engagement, becoming stagnant in their understanding, and achieving substandard learning outcomes, often falling below the *Kriteria Ketuntasan Minimal* (KKM).

An essential aspect in learning processes is optimal selection of a model or strategy which best fits the characteristics and needs of the students (Rahayu & Nofriansyah, 2024).

Cooperative learning is an effective model to enhance and maintain students' relationships with their peers regardless of their differences. Cooperative Learning is a carefully crafted and designed approach whereby learners are grouped into small teams to work together and support each other toward the attainment of a common learning goal (Najmi et al., 2021; García et al., 2021; Kova & Mikanovi, 2017). As an alternative solution, Team Games Tournament (TGT) cooperative learning model can be applied to solve these issues. This model encourages learners' active participation through team collaboration and systematically designed instructional games competitions (Dendo et al., 2021). Students are expected to master the material but moreover, students need to actively participate in group discussions, knowledge sharing, and positive competition to complete challenges related to the learning topic (Sinaga et al., 2021). The implementation of TGT is expected to foster a more active student participation and improve critical thinking, subsequently enhancing overall students' achievement in Economics learning. In relation to the lesson on the subject of 'Economics' as for the particular grade or level of learning, the teacher is expected to integrate interdisciplinary themes into a single coherent matrix and develop learning activities that facilitate students' understanding as well as design assessment tools that capture students' capabilities to integrate knowledge across subjects through critical analysis and synthesis (Surjanti et al., 2023).

The Team Games Tournament (TGT) cooperative model has been shown to enhance learning results in Mathematics, Biology, Chemistry, Physics, and Physical Education (Putri et al., 2024; Aziz et al., 2021; Amni et al., 2021). Nonetheless, there are very few studies focusing on the implementation of the TGT model in Economics education, especially on the integration of current developments in digital technology. This highlights a problem that requires further investigation. Thus, to meet this gap, this research seeks to implement the Team Games Tournament (TGT) model in Economics teaching and learning to make the process more participative, group-oriented, and relevant to contemporary demands. The intent of this research was to improve students' learning achievement in Economics by using the TGT model of cooperative learning.

## **METHODS**

This research is a form of Classroom Action Research (CAR) which aims to improve students' learning outcomes through the application of the cooperative learning model known as Team Games Tournament (TGT). The PTK Approach serves as the method of classroom action research that is intended to provide continuous improvement in the teaching and learning processes within the classroom toward creating more effective and optimal teaching strategies to support accomplishing learner achievement (Susilo et al., 2022; Saputra, 2021; Tanjung et al., 2024; Anugrah, 2019). In this study, we opted for the Metode Penelitian Tindakan Kelas, or PTK method, as it allows teachers to identify learning complications firsthand and simultaneously create effective strategies to solve those problems. The implementation of PTK was carried out step-by-step through several cycles, each consisting of four main stages: planning, action, observation, and reflection (Jacub et al., 2020; Rosdiana et al., 2023; Ginting et al., 2024).

This research was done in two cycles with a research subject of 33 students from kelas X-E 11 at SMAN 3 Cilacap. The subject was selected based on results of preliminary observations which showed that learner outcomes in the Economics course were significantly underperforming and did not meet the Kriteria Ketuntasan Minimal (KKM) benchmark. These results suggested that there is a need for intervention through appropriate teaching methods. The implementation of Cycle I consisted of four main stages. First, the

activity began with the planning stage, which involved developing a lesson plan (RPP) using the Team Games Tournament (TGT) model, preparing a scenario based on relevant economic issues, and setting up research instruments such as observation sheets and learning outcome tests. Second, during the action stage, the teacher applied the TGT model by dividing the students into small groups to discuss and collaboratively solve problems in accordance with the lesson plan. Third, observation was carried out to monitor students' activities, group discussions, and their critical thinking skills throughout the learning process. Fourth, reflection was conducted to evaluate the learning outcomes achieved and to identify challenges encountered. The results of this reflection served as a basis for designing improvements in teaching strategies for the next cycle. With the implementation of TGT in Cycle I, it is expected that the effectiveness of the TGT model would gradually improve.

The observation and the learning achievement tests are the two main instrument of this study. In this achievement test, students are assessed using a multiple-choice test at the end of each cycle to determine how well they have mastered the topic taught to them. While the observation sheet is used to record what the students do during the lesson, which includes: the level of participation, the ability to work in a group, the level of critical thinking skills and the level of problem solving skills. The data were analyzed using a quantitative descriptive approach by comparing the average student scores from the pre-cycle, Cycle I, and Cycle II to measure the improvement in learning outcomes. The observation results were also analyzed to assess the effectiveness of the learning process and student participation during the implementation of the Team Games Tournament (TGT) model.

The objective of the study was met when at least 75% of the students scored above the *Kriteria Ketuntasan Minimal (KKM)* and there was improvement in the average score from pre-cycle to phase 2 considering the observable classroom activities. Another indicator of success was the higher level of active participation by students during the lessons, which was clearly demonstrated through the observation results.

## RESULTS & DISCUSSION

### *Results*

This study was designed in two cycles to examine the impact of implementing the Team Games Tournament (TGT) cooperative learning model on improving student learning outcomes in Economics at SMA Negeri 3 Cilacap.

### **Pre-Cycle Learning Outcomes**

**Table 1.**

Pre-Cycle Learning Outcomes		
Number	Name	Score
1	Alfiah nur ayla	52
2	Areta sayuri yoneda	50
3	Arsya obrilliana setiawan	48
4	Avrilya bunga permatasari	64
5	Cantika dewi novia	60
6	Charlie gaviel luviananda	80
7	Chusnul halimah	70

8	Faqih mustafiq arfa	82
9	Fardan fadhilah	64
10	Farhan Zara Evano	62
11	Fasya Naura Salsabila	50
12	Galih	52
13	Giezel Zivanna	54
14	Givanni Ramadhani	66
15	Hilmiyatussilmi	68
16	Jason Nathanael	84
17	Karina Nida Fauziah	84
18	Kezia Dwi	90
19	Lucky	80
20	Lusiana Derin	70
21	Luvita Anggraini	60
22	Merylianna Antika	50
23	Mouses Stevanus	40
24	Naywa Farrel	46
25	Ninda Yanti	48
26	Putri Widya	76
27	Raden Citorizqi	44
28	Rahma Aqilla	48
29	Rakhatama Fabianthallah	56
30	Reyfando Reza	58
31	Saskya Chairunisa	66
32	Seli Widia	70
33	Steafanus Prabowo	80
	Average Score	62.78
	Minimum Score	40
	Maximum Score	90

*Source: Primary Research Data*

Thinking about the pre-cycle data (Table 1) for the Economics subject at SMA Negeri 3 Cilacap, it can be observed that students' exam scores showed a learning achievement result that was below average. The highest score ever recorded was only 90 and the lowest was still 40 which resulted in an average score of 62.78 which is below the Kriteria Ketuntasan Minimal (KKM) benchmark. These numbers show that most students did not reach the targeted competencies and further emphasize that the prior instructional methods adopted were sub optimally designed to address learners' needs. It becomes essential to upgrade the active learning TGT model of Teams Games Tournament (TGT) strategy to enhance student learning activities and performance in Economics.

### **First Cycle Results**

In Cycle I, the use of the cooperative learning model of Teams Games Tournament (TGT) has started to make a positive contribution toward the students' learning outcomes. This can be seen from the increase in the average score from 62.78 (pre-cycle score) to 68.84 after Cycle I. Furthermore, the number of students who met the Minimum Criteria of Mastery Learning (KKM) increased from 12 students (36.33%) to 20 students (60.67%). However, there are still 13 students (39.39%) who did not fulfill the KKM, showing that the implementation of TGT needs to be refined through more extensive evaluation and adjustment of teaching strategies.

This teaching strategy was carried out through heterogeneous grouping where each learner actively participated in group discussions, collaborated to master the material, and participated in educational games or quizzes aimed at enhancing their understanding of the material. The evaluation results indicated an increase in the average score of the learning outcomes as well as the number of students who met the *Kriteria Ketuntasan Minimal* (KKM) in comparison to the pre-test. These findings corroborate that the TGT model is effective in providing a competitive, interactive, and stimulating learning environment and as a result enhances the students' active participation in learning.

The results of the evaluation indicate an increase in the average score of learning outcomes and the number of students achieving the *Kriteria Ketuntasan Minimal* (KKM) since the implementation of the interventional strategies. The findings affirm that the TGT model was successful in facilitating a competitive, interactive, and stimulating learning environment. As a result, it promoted active engagement among students in the learning process.

**Table 2.**  
Learning Outcomes of Cycle I

<b>Number</b>	<b>Name</b>	<b>Score</b>
1	Alfiah nur ayla	60
2	Areta sayuri yoneda	60
3	Arsya obrilliana setiawan	68
4	Avrilya bunga permatasari	64
5	Cantika dewi novia	70
6	Charlie gavriel luviananda	70
7	Chusnul halimah	70
8	Faqih mustafiq arfa	72
9	Fardan fadhilah	68
10	Farhan Zara Evano	66
11	Fasya Naura Salsabila	52
12	Galih	56
13	Giezel Zivanna	58
14	Givanni Ramadhani	70
15	Hilmiyatussilmi	68
16	Jason Nathanael	84
17	Karina Nida Fauziah	84
18	Kezia Dwi	92
19	Lucky	82
20	Lusiana Derin	74
21	Luvita Anggraini	70
22	Merylianna Antika	60
23	Mouses Stevanus	50
24	Naywa Farrel	56
25	Ninda Yanti	68
26	Putri Widya	86
27	Raden Citorizqi	64
28	Rahma Aqilla	70
29	Rakhatama Fabianthallah	64
30	Reyfando Reza	66
31	Saskya Chairunisa	74
32	Seli Widia	74

33	Steafanus Prabowo	82
	Average Score	68.84
	Minimum Score	50
	Maximum Score	92

*Source: Primary Research Data*

From the table above, it's clear that the 33 participants' posttest scores after implementing the cooperative learning model Team Games Tournament (TGT) increased significantly compared to their pretest scores. The posttest scores ranged from 70 to 84, with an average score that was significantly higher than the pretest average. This indicates that the TGT model was effective in assisting students in understanding the lesson material more effectively.

Examining the pre and post data comparison, there is remarkable progress in the participant group with the lowest achievement metric. A vivid example is the remarkable improvement of an learners final score from an initial score of 48 to 68 after the implementation of the Teams Games Tournament (TGT) method. This phenomenon implies that the TGT strategy positively advanced learners who initially faced difficulties in understanding the material.

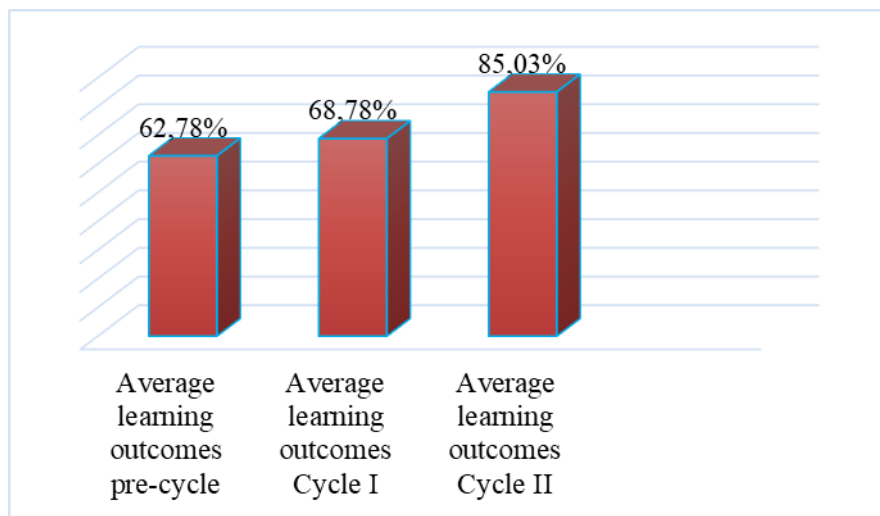
However, in terms of the maximum achievement metric, there was a recorded high score of 92 in the post evaluation which indicates that some learners managed to surpass the basic understanding level of the material through the TGT approach. The large gap between the initial and final scores demonstrates the effectiveness of the TGT instructional model in transforming the learners understanding to be more organic and conceptually clear with systematic, applicative, and adaptable presentation of the instructional material to the learners' needs. In conclusion, the TGT cooperative approach not only stimulates cognitive development but enhances the learners retention of the subject matter in a fun collaborative manner.

The use of the TGT model in cooperative learning enhanced understanding, as evident from the average scores. This suggests that most of the students scored above 65, indicating that they have a basic understanding of the material taught. In addition, the cooperative learning model using TGT appears to be effective for both advanced and struggling students since there was improvement in average scores. Furthermore, the scores gained from the post-tests indicate that interactive or experimental teaching aids such as TGT assist learners in comprehending the taught concepts logically.

These findings are consistent with the TGT as a blend of collaboration and competition. With the refinement of game design, the team member support, appropriate adjustment of material complexity, and Explanatory Sequential Mixed Methods design, TGT model is expected to narrow learning gaps and equalize learning outcomes by Cycle 2.

### **Second Cycle Results**

In Cycle II, this study notes a significant increase in progress after corrective teaching was implemented in light of the findings from cycle I. The average score of the students improved from 68.84% (Cycle I) to 85.03% (Cycle II). In addition, the number of students who met the minimum criteria of mastery learning increased to 29 students (87.87%), while those who have not completed the task remain 4 people (12%). These findings strongly affirm that the improvement of the learning strategy in Cycle II enhanced the effectiveness of the learning process. Thus, the Team Games Tournament (TGT) cooperative learning model further corroborates its effectiveness in fostering optimal learning and improving academic achievement of the students.



**Figure 1.**  
 Recapitulation of Average Learning Outcomes

**Table 3.**  
 Learning Outcomes in Cycle II

Number	Name	Score
1	Alfiah nur ayla	90
2	Areta sayuri yoneda	86
3	Arsya obrilliana setiawan	88
4	Avriya bunga permatasari	84
5	Cantika dewi novia	90
6	Charlie gavriel luviananda	88
7	Chusnul halimah	86
8	Faqih mustafiq arfa	84
9	Fardan fadhilah	86
10	Farhan Zara Evano	84
11	Fasya Naura Salsabila	86
12	Galih	88
13	Giezel Zivanna	92
14	Givanni Ramadhani	86
15	Hilmiyatussilmi	88
16	Jason Nathanael	90
17	Karina Nida Fauziah	88
18	Kezia Dwi	92
19	Lucky	88
20	Lusiana Derin	88
21	Luvita Anggraini	90
22	Merylianna Antika	60
23	Mouses Stevanus	88
24	Naywa Farrel	86
25	Ninda Yanti	68
26	Putri Widya	86
27	Raden Citorizqi	64

28	Rahma Aqilla	90
29	Rakhatama Fabianthallah	64
30	Reyfando Reza	90
31	Saskya Chairunisa	88
32	Seli Widia	84
33	Steafanus Prabowo	94
	Average Score	85.03
	Minimum Score	60
	Maximum Score	94

*Source: Primary Research Data*

Referring to the table above, the maximum score obtained by students was 94 whilst the minimum score was 60. The achievement of the highest score indicates that a learning has been understood effectively by the students. However, the low scorers indicate the presence of certain difficulties regarding understanding the concepts. Most of the students' scores were between 85-94, highlighting that the Team Games Tournament (TGT) cooperative learning model succeeded in deep understanding and proved its effectiveness in enabling the learner to achieve educational outcomes.

On the other hand, the other learners seem to score between 64-84. Even though these construe close to the KKM threshold, supporting effort is still required to maximize their achievement. These learners require tailor-made support such as an intensified tutorial with specific teaching methods so that the learners can improve the level of learning achievement in more effective ways.

Meanwhile, learners scoring between 60-64 have yet to meet the KKM standard. Sustaining the threshold means understanding has yet to be fully achieved. Therefore, remedial programs focusing on individualized strategies with those learners need to be employed to help them strengthen the understanding of the subject matter, so that achieving the learning targets set.

### ***Discussion***

As to this research, it has been noted that cooperative learning model Team Games Tournament (TGT) has been used to improve learning achievements of students in Economics subject in SMA Negeri 3 Cilacap. Based on the first cycle result, TGT has improved student's average scores from the baseline, although the overall achievement is still below the expectations set at the beginning of the implementation. Some key findings from cycle I include: (1) a significant increase in average score as the majority of students achieved marks above the passing score which indicates that the TGT model enabled learners to grasp the lessons taught; (2) most of the students were already at the Kriteria Ketuntasan Minimal (KKM), albeit a few of them would need remedial support; (3) Active participation of students still remains low which is evidenced by limited involvement in group and collective discussion and completing the task shared by peers. The tentative understanding is that it is the limited understanding students have of the TGT that he has wrought his understanding of the model into, or the adaptation stage to new pedagogical frameworks.

In this second cycle, substantial changes were made based on the main reflection results from the first cycle. These changes involve the strengthening of teachers' roles in managing the learning process, increasing the level of instructional support given to the students, as well as coordinating the teaching methods and strategies to enhance the effectiveness of the implementation of cooperative learning model of TGT type. The results

obtained in the second cycle showed far more optimal results compared to the previous cycle. This is evidenced by: (1) an increase in mean-score achievement by students that was higher together with a fairer distribution of scores among all students; (2) near to all students being able to exceed the Minimum Mastery Criteria (MMC) meaning that the remedial actions taken were effective; (3) an increase in active participation of the students in the class, especially in group discussions and team work activities; (4) the improvement of the teacher's role in the lessons as the facilitator who provided more focused and directing teaching to help grade participants understand the concepts taught; and (5) some of the problems raised in the first cycle concerning time management and ineffective support for learners or students who have learning difficulties were focal points of instruction for the teachers in the second cycle so that teaching learning activities became more productive.

With the implementation of two cycles in the lessons, there have been significant improvements in students' performance, as findings suggest. These findings strengthen the assertion that the Team Games Tournament (TGT) cooperative learning model had a positive impact on the academic performance of learners. This is consistent with the study conducted by Fauzi & Masrupah (2024) who found that students learning with the TGT model have better learning outcomes than those using the conventional method and the model's effectiveness in advancing academic achievement. This was also supported by research done by Putri & Wati (2020), where the average score of students improved from 51.625 (pre-cycle) to 63.75 (first cycle) and subsequently to 75.625 (second cycle). As with previous research, TGT continues to demonstrate evidence that it can systematically enhance learners' performance (Hasanah et al., 2020; Nofriansyah et al., 2024; Nurhidayah, 2018; Syaifuddin et al., 2020; Hasibuan et al., 2022; Wahyuningsih et al., 2021; Ridwan et al., 2022).

## CONCLUSION

This study aims to optimize the academic competence of learners in Economics by employing the Team Games Tournament (TGT) method in SMA Negeri 3 Cilacap. Utilizing the Classroom Action Research (CAR) model, the research was conducted in two consecutive cycles consisting of planning, learning action, participatory observation, and reflective evaluation phases. The results of the study depict improvement in participants' average score in a positive way, from 62.78% (pre-cycle) to 68.78% (Cycle I), and then to 85.03% (Cycle II). The percentage of participants reaching the Minimum Criterion Mastery of the class (KKM) also experienced an increase from 36.33% (pre-cycle) to 87.87% (cycle II). The TGT Model proved to be effective in enhancing learners' participation, collaboration, critical thinking skills, and other skills through a combination of cooperative and competitive elements. Despite this, some learners still require special assistance because they do not achieve KKM. This study urges further validation using experimental methods with control groups, comparison studies of different TGT applications, and cooperative models, as well as other cooperative models. Practically, TGT can be used by teachers to plan and implement interactive and fun lessons to students, especially in subjects that require contextual analysis like Economics.

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