

# **Team Game TournamentBased Innovative Question for Improving Learning Motivation and Creative Thinking Skills Students**

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**Abstract:** *Student motivation to learn is very influential on the course of the learning process in the classroom and student learning outcomes. This research is a classroom action that is having problems, lack of motivation to learn. The purpose of this research is to increase the motivation to learn and creative thinking skills of students with a team game tournament cooperative learning model collaborated with learning start with a question model. The study consisted of two cycles, each cycle consisting of four activities, including planning, action, and observation, and ends with a reflection. The results showed an increase in participation and creativity of students in each cycle. Cycle 1 the result of student participation as an indicator of learning motivation of 58.33% and the increase in cycle 2, namely 83, 33%. While creative thinking skills of students obtained results in cycle 1 at 54.17 and rise to 85.83. Thus it can be said that the team game tournamentbased innovative question model can increase learning motivation and creative thinking skills of students in economics lesson.*

**Keywords:** *Creative thinking skills, innovative question, the motivation to learn, team game tournament.*

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## **I. Introduction**

The development of science and technology acceleration very big influence on the education system in Indonesia. In line with the progress of an impact in the formal school, especially in curriculum and media. Curriculum 2013 is a curriculum designed on the basis of the character development of students and the development of thinking skills. This curriculum requires students to actively develop themselves in understanding how to acquire knowledge and a good personality. There are 3 domains in students who developed a balanced way, namely the development of cognitive ability, psychomotor, and affective with scientific-based learning process.

Education is basically not just end, but a lengthy process that aims to prepare children to be able to build a life in the future. It is a lot of skills to be developed millennial generation, such as creative and critical thinking skills as well as skills to work together to solve problems and decision-making.

In fact, problems often arise in the learning activities where students are less motivated to follow the lesson, so that the class looks passive and boring. Many teaching still centered on the teacher. This is also supported by the technological facilities which make students more individualistic, less concerned with the social environment. Yet to pursue success in this period that is required is teamwork instead of personal selfishness which gave rise to unfair competition.

The condition also found the author in a high school in Magelang city, which is in class XII IPS MAN 1 Magelang in economics lesson. Some of the problems found by observation and interviews with the student is a passive class, less enthusiastic in learning and lack of interaction between students and teachers and among students themselves. Students are less motivated to engage in the learning process and can not understand the material presented by the teacher. This is possible because students feel bored with learning only teacher-centered. Most teachers make the learning process with conventional methods that involve students, and less encouraging students to think critically and creatively. Other than that, lack of motivation to learn also affect the achievement of learning outcomes is still below the minimum completeness criteria, especially in Basic Competency (BC) of subjects economics that is considered difficult by students. Some BC subjects in class XII Economics requiring high cognitive domains, namely the analysis and synthesis, rather than simply knowing and understanding.

This problem can be solved by the application of innovative learning approaches and varied that allows students to be fully engaged in the learning process. One approach to learning that allows the establishment of an active participation of students is learning with a cooperative approach. Cooperative learning method allows students to be fully engaged independently by small groups to discuss,ask question and answer, the interaction

between friends, and compete with other groups so that learning was fun and dynamic. Students are not required just heard and recorded, but they were allowed to speak, looking out through a variety of learning resources, and determine their own problem solving with his group.

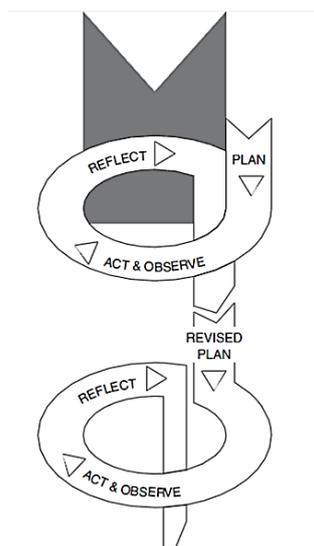
Much cooperative learning models that can be developed by a teacher, one of which is team game tournament model (TGT). This learning model divides the students into small groups in order to work together in a group and can compete with other teams in the learning activities are designed as a game. To support the development of thinking skills, cooperative learning model of this TGT collaborated with learning models start with a question. This model aims to enable students are encouraged to find out from a variety of learning resources other than teachers, can solve the problem of a wide range of innovative questions so that students can have the creative thinking skills to build his own knowledge.

Based on the above background, the authors conducted a study entitled "Team Game Tournament Based Innovative Question Model for Improving Learning Motivation and Creative Thinking Skills Students".

## II. Materials And Methods

This research is a classroom action research (CAR), which is action research with the aim of improving the quality of classroom practice, both process and outcome. CAR originated from problems found in class that impedes the learning process and student achievement. This research was conducted in the first half of the school year 2017/2018. The research subject is class XII IPS 4 MAN 1 Magelang city with the number of students 29 people consisting of 11 male students and 18 female students.

This action research design using the design proposed by Suharsimi Arikunto (2015) which consists of four stages: 1) planning, 2) acting, 3) observing, and 4) reflecting. The fourth stage is executed in sequence and will return to the initial step so as to make the cycle. The number of cycles performed depends on the researcher and field conditions. If researchers do not yet satisfy at the results of the first cycle, the researchers can continue to cycle 2, 3, and so on until the research is considered saturated. This action research using a model Kemmis and McTaggart. In general stages in this model is the same as the design described by Suharsimi Arikunto, yet at the stage of action and observation carried out simultaneously. To the researchers conducted this study assisted by observers who observe the course of action in the classroom. The model, if visualized, will form a chart like the following:



**Figure 1:** Spiral Round Design Kemmis and McTaggart

**Study Design:** Class Action Research (CAR)

**Study Location:** MAN 1 of Magelang, Central Java, Indonesia

**Study Duration:** August-September 2017

**Sample size:** 29 people

### Procedure Methodology

In accordance with the action research model Kemmis & McTaggart, the procedures in this study included several activities, namely:

#### 1) Pre-Action

The pre-load acts preliminary studies conducted by the researchers to assess the problems in the classroom. These activities include a) make the initial tests, b) determine the source of the data, c) conduct initial tests, and d) determining the subject of research

**2) Activity Implementation Measures**

Activity implementation of actions includes:

**a) Plan**

In the planning stage, the activities conducted by researchers namely:

- (1) Make learning implementation plan, which contains learning objectives and action plans face to face,
- (2) Develop economic instructional design with the basic competencies, Accounting as information system and Concept of fundamental accounting equation,
- (3) Prepare instructional media, namely materials for the game TGT form of cards containing questions innovative and cards answers and compiles a final test of action,
- (4) prepare instrument of data collection in the form of observation sheets and sheets assessment of students' work,
- (5) Coordinate work programs with colleagues as an observer.

**b) Implementation**

This stage is the implementation of the plan has been prepared to researchers, namely implementing team game tournament based innovative question model. Implementation of the action is divided into three meetings in each cycle.

**c) Observation**

Observations were carried out simultaneously with the implementation of the action. Observations were made by peers as an observer, so as not to interrupt the learning process in the classroom. The purpose of these observations is to identify, record, document all the indicators were observed, both the process and the results of changes that occur as a result of actions taken by the researcher.

**d) Reflection**

Reflection is done at the end of the action. This reflection is done by discussing some issues, namely (1) analyze the new measures carried out, (2) comparing the plan with action, (3) perform interpretation and inference of data obtained. Results of reflection are used to modify, enhance, and develop the action on the next cycle.

Researchers are planning two cycles of learning. Cycle one is planned to be held for 3 sessions (6 hours of lessons). Stages of activity in the first cycle include planning, implementation, observation, and reflection. If the cycle has not yet reached this one indicator of success, will be evaluated and repaired and action as the second cycle.

**Data analysis**

The data have been collected in the observation sheet will be analyzed descriptively using percentages techniques to look at trends in each of the learning process. Every aspect that shows the size of the student's motivation will be given a score of 1 if fulfilled and a score of 0 if not met. The total score is then processed by the formula:

$$P = \frac{M}{N} \times 100\%$$

**Information :**

P: The percentage of learning motivation

M: Scores of student motivation to learn

N: The number of aspects assessed

The study is said to be successful if the score of the achievement of the student's activity as an indicator of their motivation to learn in observation sheet has increased and shows the number of > 70% as the criteria that the students' motivation in class rated high.

The gratings to observe the students' motivation in the learning process in the classroom are as follows:

**Table No. 1:** Grille Observation Sheet Student Motivation to Learn

| No. | Aspects investigated   | Appear |    |
|-----|--|--------|----|
|     |  | Yes    | No |
| 1.  | Students bring and prepare instructional supplies Economics lesson |        |    |
| 2.  | Students greet teachers  |        |    |
| 3.  | Students respond to questions teacher                              |        |    |
| 4.  | Students create their own groups without prompting                 |        |    |

|     |  |  |  |
|-----|--|--|--|
| 5.  | Sounded small jokes and laughter limited   |  |  |
| 6.  | There was a discussion group   |  |  |
| 7.  | Students are opened and read textbooks without prompting                               |  |  |
| 8.  | Students seeking knowledge through a variety of learning resources other than teachers |  |  |
| 9.  | Each student participating in team   |  |  |
| 10. | Each team completed the task on time   |  |  |
| 11. | Each team competing with other teams in obtaining the maximum score                    |  |  |
| 12. | Students observe and appreciate the presence of others                                 |  |  |

While the game result data in the form of score corresponding rules of the game are accumulated according to its competence base of economic subjects, then searched the average grade achievement. The study is said to be able to increase creative thinking skills of students if the learning outcomes have increased and reached grade class average scores >75 in accordance with the MCC (Minimal Complete Criteria) grade XII in MAN 1 of Magelang city.

### III. Result

#### Pre-Action

In the pre-action researchers have managed to gather qualitative data about the problems in class XII IPS 4 MAN 1 of Magelang. Based on interviews with teacher, students and direct observation in the classroom, the main problems is the lack of motivation to learn economics students, as shown by several indicators, namely 1) the majority of students in the class did not prepare or do not bring textbooks and exercise book of economics, 2) students are less enthusiastic, did not pay attention to the material covered, 3) rarely seen in classroom interaction, 4) students do not complete the assignment of teachers.

In addition to low motivation to learn in the classroom, problems arise which has not been achieved mastery class. The average value of the class is still below 75. The interview data obtained from students indicate if the economic subjects especially basic competence accounting cycle is considered very difficult. In addition, they said that if the economic lesson is boring because the learning process is still centered on the teacher and students are rarely involved.

#### Action Activities

In the first cycle, the researchers conducted a pre-test initial standards to measure student understanding on mastery competent basis of economic subjects and measure the improvement of educational outcomes with TGT model. The researchers then asked the students to make six study groups consists of 4-5 students. The researcher explained that if the learning process is designed as a game between groups (team game tournament), and the agreed rules of the game between researchers and students.

The first game session, each group was asked to make inquiries about accounting concepts as system information and answers on the cards provided. The question then exchanged with another group to be resolved. The first group completed will earn extra points and each group will have a value according to the criteria of the correct answer. In this session, the student learning experience of new knowledge and socialize with friends in the group. This session will provide benefits that help students build their own knowledge. At the end of the session conducted sharing answers and discuss some of the questions that is considered difficult by students.

The second game sessions are researchers share the cards that contain innovative questions to the students. Each group completed the race on time and formulate an answer appropriately. At the end of the cycle of researchers to reflect on the course of action process and observations by the observer.

In cycle one students' motivation is still undervalued by the observers, some indicators are still students who do not bring textbooks and exercise book of economics and stationery. Students are reluctant to make a group independently and eventually assisted by investigators. Not all students are engaged in the task group and the timely completion of tasks yet. Scores measuring students' motivation by the observer of 58.33%. For the measurement of students' creative thinking skills are still not meet the minimum completeness obtained the grade class average score of 54.17 with the lowest value 40 and the highest value 75.

**Table 2:** Summary of pretest and posttest values student learning outcomes between groups

| Test     | N | Minimum | Maximum | Mean  |
|----------|---|---------|---------|-------|
| Pretest  | 6 | 15      | 50      | 31.67 |
| Posttest | 6 | 40      | 75      | 54.17 |

From these data, it was found an increased mastery of economics as an indicator of the increasing creative thinking skills of students. However, this increase is less significant for researchers, so that the second cycle of corrective action.

In the second cycle, the researchers conducted the same steps as the first cycle by improvements in the planning stage. Some improvements were made based on the reflection of the cycle is the improvement of instructional media, cards game made with colored paper and a larger size so that interested students. Material basic competence in the second cycle is the fundamental accounting equation. This material is considered very difficult for students so that the final goal in the cognitive domain was the students really understand the concept of assets and liabilities, as well as understand the types of accounts required in any transaction with the correct placement on the position of assets/liabilities. In addition to the improvement of media, researchers also provide rewards for the group that won the game in each session so that adds to the students' motivation. Students are expected to more intensive interaction among friends in the group to obtain a high score in a game that occurs indirectly in peer learning. Sharing activities and discussions that had been conducted at the end of the cycle, for the second cycle was conducted after the game session 1 so that building students' knowledge of basic accounting equation becomes more complex.

In this cycle, students are enthusiastic to form a group. This makes each member of the team involved in the game. They also prepared economics textbooks and other learning resources and read it without prompting by the teacher with the aim to finish the game with a maximum score. Each group also collided finish the game on time. Nonetheless designed as a learning process that this game looks fun. There was a discussion relaxed and joked among students. Based on the observations of the observers, scores measuring students' motivation increased to 83.33% and the measurement results for the creative thinking skills of students increased significantly from the first cycle. The class average score of 85.83 with the lowest value 75 and the highest value 100.

**Table 3:** Summary of the results of creative thinking of students score in a team game tournament

| Cycles | N | Minimum | Maximum | Mean  |
|--------|---|---------|---------|-------|
| 1      | 6 | 40      | 75      | 54.17 |
| 2      | 6 | 75      | 100     | 85.83 |

**Table 4:** Summary score of the observation of student motivation to learn

| Cycles | N-Students | N-Groups | Aspects that are met * | Score  |
|--------|------------|----------|------------------------|--------|
| 1      | 29         | 6        | 7                      | 58.33% |
| 2      | 29         | 6        | 10                     | 83.33% |

\*) The number of aspects of motivation to learn as much as 12 votes

**Table 5:** Summary increase learning motivation and creative thinking skills of students in the TGT

| Cycles        | N-Students | N-Groups | Scores of motivation to learn | Scores creative thinking skills |
|---------------|------------|----------|-------------------------------|---------------------------------|
| 1             | 29         | 6        | 58.33%                        | 54.17                           |
| 2             | 29         | 6        | 83.33%                        | 85.83                           |
| Enhancement : |            |          | 25%                           | 31.66                           |

From these data, obtained evidence of an increased students motivation of learning by application of team game tournament cooperative learning model based innovative question. In cycle 1 obtained a score of 58.33% and 83.33% in cycle 2. A large increase was 25%. In cycle 2, fulfill criteria that are >70%. The data also show that the implementation of action can enhance the creative thinking skills of students with a score of 54.17% increase to 85.83%. A very significant amount of the increase, which amounted to 31.66%. This score has met the minimum completeness criteria class of >75. From the result of reflection, the researchers were satisfied with the results and decided to suffice the action in the second cycle.

#### IV. Discussion

In the classroom action research class XII IPS in MAN 1 of Magelang city result that with the adoption of cooperative learning model of team games tournament (TGT) may increase students' motivation to learn. This is reflected from the observation observer, namely the points ratings ever-increasing student activity. Students were passivity and did not want to engage in learning can be an indicator of lack of motivation to learn. The low motivation of student learning in the classroom make learning become passive and can adversely impact learning outcomes. This low learning motivation can be caused by internal factors and external factors for students. To create an interactive class into which teachers can apply appropriate learning methods, one of which is a cooperative learning. Several studies have shown that this method is effective to enable interaction in

the classroom, good interaction between students and the interaction of students and teachers. Research conducted by Winarni S (2014), proving that cooperative learning was instrumental in the 2013 mathematics curriculum requiring analysis and synthesis. Many students have difficulty learning mathematics carried out individually, thus lowering the students' motivation. When the model is applied cooperative learning, students become involved because it can put forward the idea of real teacher observations so as to find a pattern of a series of observations and draw conclusions. In addition, research conducted by Kurnia RD et al (2014) proved that cooperative learning can increase learning motivation of students in the subject of web programming. Research Gonzales A et al (2014) concluded that cooperative learning has its greatest effect on student learning is when groups are recognized or rewarded based on the individual learning of reviews their group members.

Some of the benefits of cooperative learning method are; 1) Students are not too dependent on the teacher but can increase confidence in its ability to think for themselves, find information from a variety of sources, and learn from other students, 2) Develop the ability to express an idea or ideas with words verbally and comparing the ideas of others, 3) Help children respect for others and aware of the shortcomings and accept all the differences, 4) Strategies powerful enough to increase academic achievement at the same time social capabilities.

Team Game Tournament is one model of cooperative learning that engages students through competition played between the study groups. Because it is designed like a game, the learning process in the classroom feels good, so that each student is encouraged to get involved play and motivated to learn. This is according to research conducted by Frianto, Soetjipto BE and Amirudin A (2016), that the cooperative learning model Team Game Tournament can improve motivation and student learning outcomes.

Some of the benefits gained in the application of learning models Team Game Tournament in this study were; 1) Encouraging all students to be involved in learning. When every student wants their team to win, they will contribute to the team and work harder. Given that individual score higher = score better team, 2) Strengthen the role of students as a team player, because students will help each other and improve the performance of the team, 3) Strengthening the learning experience more enjoyable, students will see learning as a social game, not isolated individual learning.

TGT model in this study are designed with innovative question cards games proven can stimulate students to think critically and creatively. The students are encouraged to find out from sources other than the teacher learning, analyzing, synthesizing, and finally get the problem-solving of the questions posed. Some game sessions are provided cards containing questions and answers with a different number. This means that not all cards are the answer to the key question. Here, students are encouraged to be able to analyze and build creativity and his team to give a good reason before the other team. In other words, they were not consciously building knowledge creatively. The end result of this research, with the implementation of cooperative learning model of team game tournament based innovative question proven to increase students' motivation to learn and to help students build the skills of creative thinking. The learning model is appropriately used to implement the curriculum in 2013 where learning is expected to shift from teacher-centered learning to student-centered learning.

## V. Conclusion

Based on the results of action research, the implementation of cooperative learning model of Team Games Tournament (TGT) may increase students' motivation in economics subject. TGTmodel collaborated with Question Innovative model, in addition to increasing the motivation to learn, also can improve creative thinking skills students to analyze and solve problems in economics.

## References

- [1]. Arikunto S, Research Procedure A Practice Approach. 2002. Rineka CiptaReserved. Jakarta.
- [2]. Arikunto S, Suhardjono, Supardi. Classroom Action Research. 2015. Bumi Aksara. Jakarta.
- [3]. Djamarah. Teaching and Learning Strategies. 1996. Rineka Cipta. Jakarta.
- [4]. Ekawarna. Classroom Action Research. 2010. Gaung Persada. Jakarta.
- [5]. Frianto, Soetjipto BE, Amirudin A. The Implementation of Cooperative Learning Model Team Game Tournament and Fan Pick to Enhance Motivation and Social Studies Learning Outcomes. IOSR Journal of Humanities and Social Science. 2016; 21 (5): 7
- [6]. Gonzales A, Jennings D, Manriques L. Multi-Faceted of A-Team Game Tournament on the Ability of the Learners to Engage and Develop Their Own Critical Skill Set. International Journal of Engineering Education. 2014; 30 (5): 1213-1224
- [7]. Hamalik. Teaching and Learning Process. 2011. Bumi Aksara. Jakarta.
- [8]. Haryadi NH, Nurharyati N. Application of Learning Model Start with A Question Approach of Icare on Learning Outcomes. Journal of Chemical Education Innovation. 2015; 9 (2): 1528-1537
- [9]. Ismawanto. Economy Grade XII Curriculum 2013. 2014. Putra Kertonatan. Surakarta.
- [10]. Kemmis S, R McTaggart, R. Nixon The Action Research Planner: Doing Critical Participatory Action Research. 2014. Springer. Berlin
- [11]. Kurnia RD, Ruskan EL, Ibrahim A. Development of Cooperative Learning Based Learning Model to Improve Student Learning Motivation and Improving the Quality of Graduates Fasilkom Unsri Based E-Learning (Case Study: Web programming courses). Journal of Information Systems (JSI). 2014; 6 (1) 645-654
- [12]. Salam A, Hossain A, Rahman S. Effect of Using Team Games Tournament Technique for Learning Mathematics Cooperative Secondary School of Bangladesh. Malaysian Online Journal of Educational Technology. 2015; 3 (3)
- [13]. Sanjaya W. Planning and Design of Learning Systems. 2011. Kencana Prenada Media Group. Jakarta.
- [14]. Sanjaya W. Standard Process Oriented Learning Strategy Education. 2014. Kencana Prenada Media Group. Jakarta.

- [15]. Sitorus EN, Surya E. The Influence of Team Game Tournament Cooperative Learning Model on Students' Creativity Learning Mathematics. *International Journal of Science: Basic and Applied Research (IJSBAR)*. 2017; 34 (1): 16-24
- [16]. Suprijono a. *Cooperative Learning Theory & Applications PAIKEM*. 2009. Pustaka Pelajar. Yogyakarta.
- [17]. Susatyo EB, SM Rahayu, Yuliawati R. Use of Learning Model With A Question and Self Regulated on Chemical Education. *Journal of Chemical Education Innovation*. 2009; 3 (1) 406-412
- [18]. Van Wyk M. The Effect of Team Game Tournament on Achievement, Retention, and Attitudes of Economics Education Student. *J Soc Sci*. 2011; 26 (3): 183-193
- [19]. Warsono, Hariyanto. *Active Learning Theory and Assessment*. 2014. Remaja Rosdakarya. Bandung.
- [20]. Winarni S. Role of Cooperative Learning in Mathematics Education in Curriculum 2013. *Edumatika: Journal of Mathematics Education*. 2014; 4 (1): 16-22
- [21]. Zaini H, Munthe B, Aryani SA. *Active Learning Strategies*. 2008. CTSD (Center for Teaching Staff Development) UIN Sunan Kalijaga. Yogyakarta.

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