APPLICATION OF TEAM GAMES TOURNAMENT TO INCREASE STUDENTS' KNOWLEDGE IN NATIONAL ECONOMIC OF INDONESIA

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ABSTRACT

To increase university students' knowledge on the national economic of Indonesia needs a specific teaching method. This research paper reported the implementation of Team Games Tournament (TGT) teaching strategy and the influence of this strategy to increase the students' knowledge on some subtopics of national economic of Indonesia. In order to collect data from the first year students of STKIP Tapanuli Selatan, Province of North Sumatra, the experimental design was carried out. The experimental group involved the Teams Games Tournament (TGT) learning strategy, in contrast, the control group was taught conventionally. Data obtained showed that the implementaion of Teams Games Tournament (TGT) learning strategy made the higher learning outcomes (75) compared to those of the conventional learning one (65). Thus, an alternative Hypothesis (Ha) with t value 2.57 was accepted. It suggested the instructors in the first year level at higher education to find any strategy that increases the students' knowledge in economics subject.

Keywords: teaching method, team games tournament, national economic, Indonesia

INTRODUCTION

Understanding national economy for first year students in university needs many teaching methods and strategies. The economic lessons that have been set to be learned at Senior High school level must be expanded in university level and it is necessary to create the qualified methods or strategies. Instructors in university often present the economic learning with the conventional learning strategies. As a result, it fails to stimulate students to be actively involved in the learning process. The instructors often convey the subject matter by using the one direction method. It tends to be boring and less interesting, thus, the students' learning outcomes are less satisfactory. Such conditions will make the learning process more dominated and mastered by the instructors.

Learning Economics is required the instructors to have an active learning strategy that motivates the students thorough understanding the materials presented. In fact the role of instructors in university education is needed and should make the active learning implemented in teaching learning process. According to the Law of the Republic of Indonesia Number 20 of 2003 on National Education System Chapter I Article 1 (1) education is: "a conscious and planned effort to create learning atmosphere and learning process so that learners actively develop their own potential, nation and state society". In this case, it is required the existence of professional educators from the primary, secondary school to university level.

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The focus of this research is an active learning process treatment and its effect on the students' knowledge of national economy. The problems in this study are limited to:

1. Small group working learning strategy with the Teams Games Tournament (TGT)
2. Student learning outcomes on the department of Economics Educational in South Tapanuli of Indonesia

RESEARCH QUESTIONS

The research questions of this study are formulated as follows: (1).Does the implementation of small group work learning strategy with the Teams Games Tournament (TGT) affect the learning outcomes of Economic Educational at STKIP Tapanuli Selatan ? (2). Does the Teams Games Tournament (TGT) increase the experimental group achievement in economics lesson?

THEORETICAL REVIEWS: TEACHING STRATEGIES

Teaching strategy has many types and applications. One of them is a cooperative learning strategy. Riyanto (2009: 229) enlists that the cooperative learning strategies have the following characteristics:

a. To complete the learning materials, students learn groups cooperatively.

b. Groups are formed from students with high, medium and low ability.

c. If there are students in the classroom that consists of several different races, tribes, cultures, and gender.

d. Awards are preferred to group work rather than to individuals.

Thus, Cooperative learning has three important goals, as follows:

A. Results of academic learning: Cooperative learning aims to improve student performance in academic tasks. Many experts argue that cooperative methods excel in helping students to understand difficult concepts.

B. Acceptance of diversity: The cooperative method aims to enable students to accept their friends who have a variety of backgrounds. The difference is between ethnic differences, religion, academic ability, and social level.

C. Development of social skills: Social skills referred to in cooperative learning include sharing tasks, actively asking, respecting the opinions of others, fishing friends to ask questions, want to explain ideas or opinions, work in groups, and so forth. In cooperative learning there are six main steps as illustrated in table 1:

It is noted that advantages of applying the cooperative learning include the following:

a. Getting used to being skilled in critical thinking
b. Improving class results
c. Methods of adjusting students in problem solving techniques
d. Displaying learning to personal taste
e. Motivating students in a particular curriculum
f. Establishing social support system in students
g. Building a variety of understanding between students and teachers
h. Establishing a good environment in modeling and implementing cooperation

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i. Building a learning community
j. Building students’ confidence
k. Adding interest
l. Developing a positive attitude in a teacher
m. Can use various assessment techniques (Riyanto, 2009: 231)

Table 1. The Six Steps in Developing Social Skills

Phases	*Indicator*	*Teacher Activities*
1st	Delivering goals and student motivation	The teacher conveys all the learning objectives to be achieved in the lesson and the student's motivation to learn.
2nd	Presenting the information	Teachers present information to students by way of demonstration or through reading material.
3rd	Organizing students in study groups	The teacher explains to the students how to form learning groups and form each group to make the transition efficiently.
4th	Guiding group learning in work	Teachers guide learning groups as they work.
5th	Evaluation	Teachers evaluate learning outcomes about the material they have learned or each group presents their work.
6th	Awards	Teachers seek ways to appreciate individual and group learning outcomes.

Teams Games Tournament (TGT)

The Teams Games Tournament (TGT) is an approach of intergroup cooperation by developing interpersonal cooperation. In this learning strategy there is the use of gaming techniques. Historically the Teams Games Tournament (TGT) learning strategy was first developed by David De Vries and Keith Edward. This game contains competition according to predetermined rules. In the game it is expected that each group can use their knowledge and skills to compete for a victory.

Team game tournament (TGT) is an effective technique of cooperative learning, thus, in groups are created that cooperative function in the class room for a period of time (Frianto et al, 2016). Cooperative learning with the TGT has similarities to STAD (Student Team Achievement Division) method in group formation and delivery of material, but TGT replaces quiz with tournaments or competitions where students play games or academic games with team members or other groups to contribute points for team or group scores. A teammate or group will help each other in preparing for the game by studying activity sheets and explaining problems with each other, but when students are playing in games, other friends should not help, and teachers need to make sure they happen to be responsible answer individually (Slavin, 2005: 163).

In practice, the TGT is one type of cooperative learning strategies that places students in study groups; each group has 5 to 6 students as members who would have a variety of abilities, genders and cultures (Safwandi, 2016). In the Teams Games Turnament (TGT) the students play the games with other teams to earn extra points on their team scores. The game is composed of statements that are relevant to lessons designed to test the knowledge gained by students from classroom teaching and group activities. The game was played on tournament tables. Each tournament table can be filled by representatives of different groups but who have equal ability.

In cooperative TGT, the students play academic games with other team members to seek points that will contribute towards group (Veloo, 2016). The TGT strategy brings together group and cooperation in learning. In cooperative learning of TGT type, students with different abilities and sexes are made into a team or group of 4 to 5 students. As one of TGT's cooperative learning strategies is very easy to implement, it involves the activities of all students without having to distinguish between status differences, involving students as peer tutors, and the existence of reinforcement elements (reinforcement). The ease of implementation of TGT is caused in the absence of supporting facilities that must be available such as equipment or special room. In addition to being easy to implement in its application TGT also involves the activities of all students to obtain the desired concept.

Steps in the Implementation of Cooperative Learning TGT Type (Teams Games Tournament).According to Etin and Raharjo (2007: 20) in general there are 5 main components in the application of TGT model, they are:

1) Class Presentations

At the beginning of the lesson, the teacher presents the material in class presentation or often also called class presentation. This activity is usually done by direct instruction or by a teacher-led lecture.

At the time of presenting this class, the student should really pay attention and understand the material presented by the teacher, as it will help the students work better during group work and at the time of game because game score will determine group score.

2) Group (Teams)

Groups usually consist of 4 to 5 students whose members are heterogeneous in terms of academic achievement, gender and race or ethnicity. The group function is to deepen the material with the group's friends and more specifically to prepare the group members to work properly and optimally during game. After the teacher presents the class presentation, the group (team or study group) is in charge of studying the worksheet. In this group learning the students' activities are discussing problems, comparing answers, checking, and correcting the mistakes of their friend's concepts if a group friend made a mistake.

3) Games

The game consists of questions relevant to the material, and is designed to test students' knowledge of classroom presentation and group learning. Most games consist of simple numbered questions. This game is played on the table of the tournament or race by 3 students representing the team or group respectively. The student selects the numbered card and tries to answer the question according to the number. Students who correctly answer the question will get a score. These scores are later collected students for a tournament or weekly race.

4) Tournament or Contest

Tournaments or competitions are learning structures, where games happen. Usually tournaments or competitions are done at the end of the week or on each unit after the teacher makes a class presentation and the group is already working on the student worksheet. The teacher's first tournament or contest divides the students into several tournament or race tables. The three highest students of his achievement are grouped on table I, the next three students on table II and beyond.

5) Group Award (Team Recognition)

After the tournament or race ends, the teacher then announces the winning group, each team or group will get a certificate or prize if the average score meets a predetermined criteria. Team or group gets the nickname "Super Team" if the average score 50 or more, "Great Team" if the average reaches 50-40 and "Good Team" if the average less than 40. This can please the students for the achievements they have made.

In accordance with the above five components, then briefly the scenario in this TGT model is as follows:

1. The instructors explain the goals to be achieved and present the material to be discussed that day. Then instructors create a heterogeneous student group of 4-5 people, then provide the subject information and the mechanism of the activity.
2. Prepare a table of tournaments or contests sufficiently, e.g, 10 tables and for each table occupied by 4 students with equal ability, the first table filled by students with the highest level of each group and so on until the tenth table occupied by the lowest level students. The determination of each student sitting at a particular table is the result of a group agreement.
3. Next is the implementation of tournaments or competitions, each student takes the question card that has been provided on each table and do it for a certain period (e.g, 3 minutes). Students can work on more than one problem and the results are examined and assessed, resulting in a score of tournaments or contests for each individual and at the same time the original group score. Students at each table of the tournament or race in accordance with the scores obtained are given title (title) of superior, very good, good and medium.
4. Likewise for tournaments or third-fourth races, and so on. And shifting seats at the tournament or race table according to the title, the superior students in the same tournament table or race group, as well as for the tournament or other contest table filled by students of the same degree.
5. After completion count the scores for each group of origin and individual scores, reward groups and individuals.

RESEARCH DESIGN

The Experimental Research Design was made with the sample that being divided into two groups, namely the experimental and the control one. The experimental is the group of students were taught by the Teams Games Tournament (TGT) learning strategy. While the control group was taught without the Teams Games Tournament (TGT) learning strategy or in other words taught conventionally. The research design was put into as the following table:

Table 2. Research Design

No	*Group*	*Implementation*	*Post Test*
1	Experiment	Treatment: *Teams Games Tournament* (TGT) Learning strategies	√
2	Control	No treatment: conventional learning strategies	√

RESEARCH RESULTS

After the learning process done, the researchers administered the test to all students who were the samples in this study. After the question is finished answered by the students, then the researchers collect their answer sheet for analysis.

HYPOTHESIS TESTING

Before conducting hypothesis testing, the research data was taken from the post-test of the experimental group and the post-test value of the control group on the influence of the use of Teams Games Tournament (TGT) method to the learning outcomes of national income subjects in the first year of STKIP Tapanuli Selatan Province of North Sumatra.

The formula used to test the hypothesis is t test, namely:

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$

Where:

t = t-tes

$\overline{X}_1$ = the average score of experiment group in post test

$\overline{X}_2$ = the average score of control group in post test

n_1 = the total number of sample of experiment group

n_2 = the total number of sample of experiment group

s_1^2 = Varians sampel 1

s_2^2 = Varians sampel 2

then it is obtained :

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$

$$t = 2{,}57$$

After the t_{count} is obtained, then the result is consulted with t_{table} value at significant level 0,05, that is equal to 1,725. From these results it can be concluded that the value of $t_{count} > t_{table}$ or $2.57 > 1.725$, which means that "the implementaion of Teams Games Tournament learning strategy (TGT) produces higher learning outcomes compared with conventional one". Thus Hypothesis Zero (H0) is rejected, and Alternative Hypothesis (Ha) is accepted.

DISCUSSION

There are several findings from the results of data analysts in this study, they are:

1. From the calculation results obtained, the average value of post-test experimental group of 75 and the standard deviation is 5.0, then the mean value of post-test control group was obtained at 65 and the standard deviation is 6.3.

2. From the results of the hypothesis test, it is obtained t_{count} value of 2.57, which then consulted to the value of t_{tabel} is 1.725, thus $t_{count} > t_{table}$ or $2.57 > 1.725$.

Differences in learning outcomes can arise due to various things, among others: the potential inherently of learners (IQ), the atmosphere of learning, faculty and other factors. One of the important factors is the selection of teaching methods. Teaching methods are a number of specific strategies or ways of operating to achieve better results. Teaching and learning process have many factors that influence the mastery of the teaching materials, the initial ability of the students, the teaching methods used and the accuracy of the selection of teaching methods. To know the success or failure of the teaching method used to be evaluated. The appropriate teaching methods can create meaningful learning conditions in conveying a subject matter. The method chosen by teacher support to improve student's learning achievement. The more precise and appropriate in choosing the teaching method, is to give better results. The selection of Teams Games Tournament (TGT) model has supported students in the learning activities of Economics. Thus, the Teams Games Tournament (TGT) model can provide direct experience can give an example in real form. Additionally, the use of Teams Games Tournament (TGT) mode provideed a meaningful learning experience so that the concepts easier to grasp. Teams Games Tournament (TGT) model was embedded in their memories. Finally, Teams Games Tournament (TGT) improve learning outcomes in the student's cognitive domain.

CONCLUSIONS

Data analysis and discussion give some conclusions:

1. The average post-test of the experimental group is 75 and the standard deviation is 5.0 Then the mean value of post-test control group was obtained at 65 and the standard deviation was 6.3.
2. The implementation of Teams Games Tournament (TGT) learning strategy produced higher learning outcomes than conventional learning strategies, thus Hypothesis Zero (H_0) is rejected, and Alternative Hypothesis (H_a) is accepted.

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