The Effectivenss Of Teams Games Tournament Model To The 5th Grade Students' Learning Outcomes On Social Science

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Abstract

This research's background is the problem in the low number of learning outcomes in the social studies subject of 5th GRADE students of SDN Gugus Melati Semarang. The purpose of this study is to test whether or not the TGT learning model is effective on the learning outcomes of 5th GRADE students of SDN Gugus Melati Semarang on social science subject. This research is an experimental research with quasi experiment design in the form of nonequivalent control group design. The population of this study is the students of grade 5 at SDN Gugus Melati Semarang. The technique used in data analysis are normality test, homogeneity test, equality test average, hypothesis test, and n gain test. The result of hypothesis test shows that tcount is 7,104 while ttable value with dr = 67 is 1,996. The data indicates that tcount > ttable then Ha is accepted. The conclusion of this research is the TGT model is effective to the learning outcomes on social science subject of 5th GRADE students of SDN Gugus Melati Semarang.

Keywords: students' learning outcomes; social science; teams games tournament model

1. INTRODUCTION

Education is an important part of human life to ensure their life survival. Through education, people can have knowledge, ability, and a high quality human resources (HR) that can advance a nation and its citizens. In the law of Republic of Indonesia number 20 of 2003 about the national education system, in article 1 it is mentioned that education basically is a conscious effort to improve the competence of students by encouraging and facilitating the learning process in order to make learners actively develop their competences to have spiritual strength, self-control, personality, intelligence, noble character, and skills needed by themselves, society, nation and state. In line with the law of Republic of Indonesia number 20 of 2003 article 37 paragraph 1 (2016: 20), the curriculum of elementary schools and junior high schools should teach some subjects which one of them is social science.

The problem that occur in the fifth grade of SDN Gugus Melati Semarang is the low learning outcomes in social science subject. There are four public elementary schools (SDN) in Garang Melati Semarang. In SDN Purwoyoso 03, 18 students of 36 students (50%) have not reached minimal mastery criteria (KKM) that is 65, while 18 students (50%) have reached it. In SDN Purwoyoso 04, 32 of 36 students (89%) have not reached KKM and 4 students (11%) have reached it. In SDN Kalipancur 01, 2 of 38 students (5.3%) have not reached KKM while 36 students (94,7%) have reached KKM. In SDN Kalipancur 02, there are 8 of 35 students (23%) have not reached KKM while 22 others (77%) have reached KKM. Based on observations and interviews done by the researchers, there are some problems found in SDN Gugus Melati Semarang. The teachers there have no variation in using learning models. The limited number of learning media to support learning activities in the classroom affects to students' concentration during the lesson, the reading interest of students is very low in social science subject, and students' social science learning outcomes is far from reaching KKM. Based on these problems, the need for a renewal in the learning method which one of them is by applying innovative learning model.

One innovative learning model that fits the problems is the Teams Games Tournament (TGT) model. The TGT model is chosen because this instructional model provides tournament games containing the question cards as well as awards for the group that gets the highest score. The TGT model is a cooperative learning type consisting of 3 to 6 heterogeneous group members in which each member actively represents his group to compete against other group members in an academic tournament in order to get the highest score. The TGT model includes an academic tournament, quizzes and an individual progress scoring system. The students compete each other as team representatives with other team members with equivalent academic performance previously

(Slavin, 2015). The TGT model makes not only smart students to be more prominent in class, but also makes students with lower academic ability active and have important role in the group. The TGT model can foster a sense of togetherness and mutual respect among members of the group, enable the students to be more enthusiastic in following the lesson because the teacher promises an award for the best students or group, and make the students become happier in following the lesson because there is a tournament game activity (Shoimin, 2014).

The use of the TGT model will ease the students to understand the materials. In the TGT model, students are divided into several groups with five to six heterogenous students and each student represents his/her group in competition or tournament. The TGT learning model makes the students active because the learning model is a fun tournament game. The use of a tournament card ease the students to understand learning materials. When the scores are collected, the teacher will give rewards to the winning group with several categories.

There are some previous studies strengthening this research. The first is a research by Micheal M. van Wyk in 2011 under a title "The Effects of Teams-Games-Tournaments on Achievement, Retention, and Attitudes of Economics Education Students". The results showed that the TGT group was better than the control group. The experimental group showed students had a positive attitude towards TGT as a teaching model for economic education.

The second is a research by Abdus Salam, Anwar Hossain, and Shahidur Rahman in 2015 entitled "Effects of Using Teams Games Tournaments (TGT) Cooperative Technique for Learning Mathematics in Secondary Schools of Bangladesh". The result of this research showed the application of TGT to the experimental group students in achieving significant learning outcomes compared to the control group students.

The third is a research by Syahrir in 2011 under the title "Effects of the Jigsaw and Teams Games Tournament (TGT) of Cooperative Learning on the Learning Motivation and Mathematical Skills of Junior High School Students". The result of the research showed that TGT and Jigsaw learning model were effective to improve mathematics skill and motivation to learn mathematics, and there was different effectiveness of TGT and Jigsaw learning model in improving mathematics skill and motivation to learn mathematics.

The fourth is a research by Subin Khrueakaew in 2015 entitled "Student's Achievement and Attitude in Mathematics of Grade 11 Students by Using Cooperative Learning (TGT)". The results of this study showed a higher mathematics learning achievement after TGT model was applied.

The fifth is a research by Lestari, A. Widiyatmoko, S. Alimah, and I. Juliyani in 2015 entitled "Sounds Learning using Teams Games Tournament with Flash Card as Media at 13th Junior High School of Magelang". The result of this research showed that TGT model on student achievement was effective.

The sixth is a research by Shoimatun Febriyani, Wiwi Isnaeni, and Andin Irsadi in 2016 under the title "Pengaruh Penerapan Strategi Bioedutainment Model Teams Games Tournament pada Pembelajaran Materi Alat Indra Manusia terhadap Keaktifan dan Hasil belajar Siswa". The result of this research showed the application of bioedutainment strategy of TGT model on the learning of the human senses had some effectiveness on the activity and the students' learning outcomes.

The seventh is a research by Ahmad Munif Nugroho, Hardi Suyitno, Mashuri in 2014 entitled "Keefektifan Model Pembelajaran Teams Games Tournament terhadap Kemampuan Pemecahan Masalah". The result of this research is TGT learning model is effective in improving students' mathematics problem solving ability of class VII of SMP N 8 Batang on fractions subject materials.

The eight is a research by Abid Khoirul Ismail, Sugiman and Putriaji Hendikawati in 2013 entitled "Efektivitas Model Pembelajaran Teams Group Tournament (TGT) dengan Menggunakan Media "3 In 1" dalam Pembelajaran Matematika". The result of this research showed that TGT learning model using "3 In 1" media is effective to the students' learning outcomes.

The ninth is a research by Endang Herawan in 2013 with the title "Pengaruh Model Pembelajaran Kooperatif Tipe Teams Games Tournament (TGT) terhadap Hasil Belajar Siswadi SMP Negeri 2 Plumbon Kabupaten Cirebon". The result of this research showed that the use of TGT model on student learning outcomes in SMP N 2 Plumbon, Cirebon is effective.

The tenth is a research by I Kd. Handayana, I Wyn. Rinda Suardika, and Ni Wyn. Suniasih in 2014 entitled "Pengaruh Model Pembelajaran Kooperatif Tipe Teams Games Tournaments terhadap Hasil Belajar IPA Siswa Kelas V SD Gugus VIII Suwat, Gianyar". The result of this research showed that the application of cooperative learning model type TGT gave effects on the learning outcome of science learning of grade V in SD Suwat VIII, Gianyar.

The eleventh is a research by Destaria Sudirman, Fenny Agustina, and Pikal Candra in 2014 entitled "Pengaruh Penggunaan Model Pembelajaran Kooperatif Tipe TGT (Team Game Tournament) terhadap Hasil Belajar Siswa Kelas VII pada Materi Fotosintesis di SMP N 31 Batam". The result of this research showed that the use of cooperative learning model TGT type (Team Game Tournament) is effective to the students' learning outcomes.

The twelfth is a research by Mukaromah, Sugiharto, and Sulistyo Saputro in 2014 entitled "Efektivitas Pemberian Problem Posing pada Model Pembelajaran TGT (Teams Games Tournaments) terhadap Hasil Belajar Kimia pada Materi Pokok Kelarutan dan Hasil Kali Kelarutan Kelas XI Semester 2 SMA Negeri 4 Surakarta Tahun Pelajaran 2013/2014". The result of this research showed that TGT model is more effective than informative discussion method to the students learning outcomes.

The thirteenth is a research by Putu Enny Rusmawati, I Made Candiasa and I Made Kirna in 2013 under the title "Pengaruh Model Pembelajaran Kooperatif TGT terhadap Prestasi Belajar Matematika Ditinjau dari Motivasi Berprestasi Siswa Kelas VIII SMP Negeri 2 Semarapura Tahun Pelajaran 2012/2013". The result of this research showed that TGT learning model is very influential on the learning achievement on mathematics.

The fourteenth is a research by Denta Oki Sari Artha Galuh Astrissi, JS. Sukardjo, and Budi Hastuti in 2014 under the title "Efektivitas Model Pembelajaran Teams Games Tournament (TGT) disertai Media Teka Teki Silang terhadap Prestasi Belajar pada Materi Minyak Bumi Siswa Kelas X SMA Negeri 3 Sukoharjo Tahun Pelajaran 2012/2013". The results of this study showed that the use of TGT model with TTS media is effective in improving students' learning achievement.

The fifteenth is a research by I Kt. Agus Budiastawa Putra, Ni Nym. Kusmariyatni, and I Md. Citra Wibawa in 2014 entitled "Pengaruh Model Pembelajaran Kooperatif Tipe TGT terhadap Hasil Belajar IPA pada Siswa Kelas IV di Gugus VIII Kecamatan Kubutambahan". The result of this research showed that the TGT model on the natural science subject learning outcomes is effective, and there are differences of natural science subject learning outcomes between students taught with TGT learning model and students taught by using conventional learning model.

In accordance with the backgrounds above, the researcher examines the problem through "The Effectivenss of Teams Games Tournament Model to the 5th GRADE Students' Learning Outcomes on Social Science Subject". The purposes of this study were (1) to test whether or not the TGT learning model is effective to the learning outcomes of 5 grade SD N Gugus Melati Semarang on social science subject; (2) to describe the increase of students' activity using TGT model on social science learning of 5 grade of SD N Gugus Melati Semarang; (3) to test whether or not the learning outcomes of TGT model with NHT model on social science learning are different in 5 grade of SD N Gugus Melati Semarang.

2. RESEARCH METHODOLOGY

This research is an experimental research with quasi experimental design in the form of nonequivalent control group desain. The population of this research is the 5th grade students of SD N Gugus Melati Semarang. The technique of collecting the samples uses cluster random sampling and SD N Purwoyoso 03 is chosen to be the experimental group, SD N Purwoyoso 04 as control group. The technique of collecting data is done by test, interview, observation, and documentation.

The research was started by doing pre-research in SD N Gugus Melati Semarang by doing interview with class teachers there and documenting the 5th grade students' scores in final test (UAS) of semester 2. The next step was the researcher decided the research sample of experimental group and control group. Then, the researcher compiled a prediction of test questions and tryout questions. The questions are then given to 5th grade students of SD N Kalipancur 01. The researcher then analyzed the result of tryout test including validity test, reliability test, difficulty level test, and questions' appropriateness test. After the questions are valid and reliable, the researcher tests the questions' difficulty level to measure the difficulty level of every question. Then, the researcher tests the questions' appropriateness to measure how a question differentiate the level of students' ability.

The researcher held a pretest to measure the students' initial ability in the experimental group and control group to collect data before a treatment done by the researcher. Both groups had same initial ability and the next step was the researcher gave different treatments. The experimental group got TGT model treatment, while the control group got NHT model treatment.

The technique of data analysis included the normality test using Kolomogorov-Smirnov test, homogeneity test, and average sameness test using independent sample t-test. In the final data analysis that was done by normality test, the researcher used Kolomogorov-Smirnov test, homogeneity test, and hypothesis test using independent sample t-test, and N-gain test to see the increase of students' learning outcomes. In the initial data analysis and the final data analysis, the researcher used Statistical Product and Service solution (SPSS) version 16 computer application.

3. FINDINGS AND DISCUSSION

3.1 Initial Data Analysis

Normality Test

The research initial data is the students' scores in pretest dealing with the independence day's proclamation of The Republic Indonesia materials. The normality test is to measure whether or not the data that would be analyzed is normal (Sugiyono, 2010). The normality test was done in kolmogorov smirnov formula in SPSS version 16 application. The data was clarified normally distributed if the significance is > 0,05 (Priyatno, 2016). Based on the calculation using SPSS, the significance of experimental group was 0,070 and control group was 0,102. The significance of both group was more than 0,05 (> 0,05), so the data was normal.

Homogeneity Test

The homogeneity test was done by using t-test sample independent test. If the significance score was > 0,05, the data was homogen (Priyatno, 2016). Based on the calculation of homogeneity test results using SPSS version 16, it was obtained that 0,263 > 0,05 which meant the pretest score of both data from the experimental group and control group have same variant or homogeneous.

Average Sameness Test

The average sameness test was done by independent sample t-test by the following hypothesis:

H_0= there is no average difference

H_a= there is average difference

The rule of the test is as follows:

If tcount < ttable, H_0 is accepted.

If tcount > ttable, H_o is rejected.

Data is claimed to have average sameness if $t_{count} < t_{table}$ (Ho is accepted). Based on t-test for equality of means table, the score of tcount = 0,375 while ttable = 1,996 with df = 67 and tcount = 0,375 which means that there is no average sameness or the experimental group and control group have the same ability.

3.2 Final Data Analysis

Normality Test

The final data of the research was obtained from posttest scores. The posttest scores of experimental group and control group was obtained by doing normality test using kolmogorov smirnov formula in SPSS version 16. The data is normally distributed if the significance > 0,05 (Priyatno, 2016). By doing this step, the significance result of both groups was obtained: experimental group 0,59 and control group 0,107 which means the data was normally distributed.

Homogeneity Test

The homogeneity test was done by independent sample t-test by comparing the significance score with 0,05 as significance level. If the significance score > 0,05, the data was homogeneous (Priyatno, 2016). The significance result shows that the data of the experimental group and the control group have the same variant or homogeneous because the signification score is 0,214 which is greater than 0,05 (0,214>0,05).

Hypothesis Test

The hypothesis test is to test the hypothesis' validity. The hypothesis test is done by using difference test of 2 averages with one right side test. The hypothesis test is done by using t-test (independent sample t-test) to measure the hypothesis' validity, whether the hypothesis is rejected or accepted. The test rule of t-test was done by the following formula: if tcount > ttable, Ha is accepted (Priyatno, 2016). The hypothesis used is:

H_a = TGT Model is effective to the learning outcomes of the 5th grade students of SD N Gugus Melati Semarang on social science subject.

The rule of the test is listed as follows:

If tcount < ttable, Ha is rejected

If tcount > ttable, Ha is accepted

In accordance with the results of SPSS version 16 calculation, tcount value = 7,104 is greater than ttable value = 1,996 (7,104 > 1,996) with significance (0,000 < 0,05) which means that Ha is accepted and Ho is rejected. It can be concluded that TGT model is effective to the learning outcomes of the 5th grade students of SD N Gugus Melati Semarang on social science subject.

N-gain Test

N-gain test was used to measure the increase of the students' learning outcomes (pretest and posttest) before and after the treatment was given. Based on the calculation done using Microsoft Excel 2007, it was shown that the obtained n-gain from the experimental group was 0,61 which was in medium category (0,3 < g < 0,7), while the obtained n-gain from the control group was 0,2 which was in low category (g < 0,3), so the increase of pretest to posttest score of the experimental group was greater than the control group.

The Experimental Group Activity

The observation on the students' activity was done in the research as supporting data of TGT model evaluated through observation sheet. The percentage value of students' activity in the first meeting was 48%, increased to 56% in the second

meeting, increased to 67% in the third meeting, and increased to 71% in the fourth meeting. The average of percentage value in the experimental group increased in every meeting which proves that TGT model can increase the activity of SD N Gugus Melati Semarang students in social science learning.

The Students' Learning Outcomes

The average of students' learning outcome on social science subject in the experimental group is 83, 06, while in the control group is 64,55. The average between the experimental group and the control group proves that there is a difference of learning outcomes on social science subject of both groups.

4. CONCLUSION

In line with the results of findings and discussion of this research entitled "The Effectiveness of Teams Games Tournament Model to the 5th Grade Students' Learning Outcomes on Social Science Subject", it can be concluded that TGT Model is effective to the learning outcomes of the 5th grade students of SD N Gugus Melati Semarang on social science subject dealing with independence day proclamation of the Republic of Indonesia. This conclusion is also based on the average difference test with tcount value = 7,104 which is greater than ttable = 1,996 (7,104 > 1,996), so Ha is accepted.

5. ACKNOWLEDGEMENT

The researcher gives her big thanks to her parents who have given their supports and prays, to Drs. Isa Ansori, M.Pd. and Dra. Sri Susilaningsih, S.Pd., M.Pd. who have given their great supervision from the very beginning and the last in conducting this research, to everyone in SD N Purwoyoso 03 and SD N Purwoyoso 04 who has given her permission to conduct this research, and anyone who has helped and support.

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