



THE EFFECTIVENESS OF *STAD* AND *TGT* TO ENHANCE NARRATIVE TEXT READING COMPREHENSION OF THE STUDENTS WITH HIGH AND LOW ACHIEVEMENT

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Abstract

This study investigated the effectiveness of *STAD* and *TGT* for enhancing narrative text reading comprehension of the students with high and low achievement. This study was a quantitative research, using an experimental factorial design 2x2. The participants of this study were 71 students of the eighth graders of State Islamic Junior High School Lebaksiu. The students were divided into two groups, experimental group and control group. The students of experimental group was given *STAD* in learning narrative text reading comprehension and the control group was given *TGT* in learning narrative text reading comprehension. The findings of this study showed that *STAD* and *TGT* have significant effect for enhancing narrative text reading comprehension. However, the techniques given for enhancing narrative text reading comprehension and student's achievement did not have any interactions

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INTRODUCTION

Reading is an activity to get the written information. It has many advantages such as broadening the knowledge and finding the solution to a problem. It is one of the language skills that should be acquired by the learners. It plays an important role in learning English. By reading the students can understand the material well. On the other hand, it is not easy to comprehend the content of English reading text. Whereas, most of the students got difficulties in comprehending English reading text especially in narrative text. Narrative text is the text to amuse, entertain and to deal with factual or various experience in different ways (Hartono, 2005: 6). Moreover, he states that the schematic structure of narrative text is orientation, evaluation, complication, resolution and re-orientation.

Regarding with those problems, it needs a solution to overcome the problem. One of the solutions is by implementing appropriate teaching method or technique. Implementing appropriate method and technique can develop students' interest and motivation in learning language especially in mastering reading skill. Therefore, it can improve students reading skill achievement. So the teacher should implement cooperative learning technique. Slavin in Jacobs (1995: 16) says that

"All cooperative learning methods share the idea that the students work together to learn and are responsible for their teammates' learning as well as their own. In addition to the idea of cooperative work, Student Team Learning Methods emphasize the use of team goals and team success, which can be achieved only if all members of the team learn the objectives being taught."

Among the cooperative learning techniques, all of them can give the advantages for the teachers if they are appropriated with the materials and skills. Kagan (2009: 32) states that literally hundreds of studies demonstrate cooperative learning boosts achievement more than traditional methods. Cooperative learning outperforms competitive and individualistic. A lot of researchers on some studies have applied

cooperative learning to enhance students' achievement. Zarei (2012) investigated the effects of cooperative learning models on reading achievement and vocabulary learning of Iranian learners of English. The experimental groups were taught with STAD and CIRC, the control groups were taught in a non-cooperative method. The results indicated that the cooperative learning model CIRC and STAD had statistically significant effects on reading comprehension and vocabulary learning. So cooperative learning also will be applied in this research to enhance students reading comprehension. Regarding the focus skill on reading, there are some cooperative learning techniques appropriate to be implemented, such as student teams achievement division (hereafter is STAD) and teams games tournaments (here after is TGT).

Slavin (1995: 71) says that STAD is one of the simplest of all cooperative learning methods, and is a good model to begin with for teachers who are new to the cooperative approach. STAD consists of five major components- class presentations, teams, quizzes, individual improvement scores, and team recognition. Meanwhile, TGT is the same as STAD in every respect but one; instead of the quizzes and the individual improvement score system, TGT uses academic tournaments, in which students compete as representatives of their teams with members of other teams who are like them in past academic performance (Slavin, 1995: 84).

STAD and TGT were applied to students with high and low achievement. Achievement is the knowledge attained or skills developed in the school subjects usually designed by test scores or by marks assigned by teachers or by both (Good in Khan, 2008). In this research, students with high achievements were those pupils had the score of narrative daily test equal or more than minimum standard score. Meanwhile, the low achievement students were the students with narrative daily score less than minimum standard score. Khan (2011) conducted the same study about the effect of a form of cooperative learning instruction that is students' team achievement division (STAD) with that of traditional lectures

method. Students academic achievements were found out by teacher through the test consist of multiple choice questions, short questions and long questions. The result showed that the students' achievements of both the groups were not significant. In conducting STAD, the material and the time allocation should be paid attention more so that the implementation will be successful. Dealt with all explanation above, this research was aimed to measure the effectiveness of STAD to enhance narrative text reading comprehension for the students with high achievement, low achievement then high and low achievement, to measure the effectiveness of TGT to enhance narrative text reading comprehension for the students with high achievement, low achievement then high and low achievement. Furthermore it was aimed to find out the interaction between techniques (STAD and TGT), students achievement, and narrative text reading comprehension.

METHOD

This study is an experimental research with factorial design study. This study aims to investigate the cause and effect between independent and dependent variables by giving certain treatment to the Experimental Group and giving different treatment to the control group as the comparison.

Furthermore, Gay (2011: 272) states that experimental research with factorial design study is an elaboration of single-variable experimental design to permit investigation of two or more variables, at least one of which is manipulated by the researcher.

In addition Evelyn and Farhady (1982: 28) state that factorial design simply the addition of more variables to the other designs. There will be more than one independent variable (ie., moderator variables) considered and the variables may have one or many levels.

Frankel and Wallen (in Safari, 2014: 31) state that population is the group to which the result of the study is intended to apply. In this research the population was the eighth graders of State Islamic Junior High School Lebaksiu that

consist of 294 students which were divided into 8 classes.

Cohen, et al. (2000: 92) state that sample is the smaller group or subset of the total population in such a way that the knowledge gained is representative of the total population. The sample in this research was VIII A and VIII B. VIII A was the experimental class and VIII B was the control class.

Instrument is a tool for measuring, observing, or documenting the data. There are two kinds of instruments. They are test and non-test. The instruments used in this research were document study and pre-test post-test.

Before the test will be tested to the sample, the test has to be tried out. It is done to know whether the test is valid and reliable or not.

After implementing the treatments, the post-test for the students was conducted. Then, the data analysis was done. Data analysis is the process of analysing data, which has been collected. The data, here, was related to the research conducted, namely the data of pre-test and post-test. The data was analysed to see how significant was the difference of students' achievement taught by using STAD and TGT.

The first step of data analysis was the pre-test and the post-test score of each groups were processed by using Univariate analysis to find out mean, median, minimum and maximum score, and also standard deviation.

The next step was the normality test of the data. It was calculated by one-sample Kolmogorov-Smirnov test to see whether the data has normal distribution or not.

The third step was the homogeneity test of the data. It was used Levene's Test for Homogeneity of Variance to see whether the data is homogeneous or not.

The last step was the calculation to answer the statements of the problem and to see whether the hypothesis was accepted or rejected. The first to four statements of the problems were about whether STAD and TGT was effective to high and low achievement students or not. It was calculated by paired t-test, which compared t-count to t-table. If the t-count is higher than the t-table, it means that the null hypothesis is rejected

and the alternative hypothesis is accepted. Meanwhile, if the t-count is lower than the t-table, it means that the null hypothesis is accepted and the alternative hypothesis is rejected.

The next two statements of the problem were asked to know whether the certain technique was effective to both high and low achievement students or not. It was calculated by independent t-test, which also compared t-count to t-table. If the t-count is higher than the t-table, it means that the null hypothesis is rejected and the alternative hypothesis is accepted. Meanwhile, if the t-count is lower than the t-table, it means that the null hypothesis is accepted and the alternative hypothesis is rejected.

The last statement of the problem asks whether there is an interaction among techniques, achievement, and narrative text reading comprehension or not. It was calculated by factorial design 2x2 with ANOVA analysis. Null hypothesis was rejected if F-count is lower than F-table.

RESULTS AND DISCUSSION

The aim of this research was to find out the effectiveness of STAD and TGT to enhance narrative text reading comprehension for the students with high and low achievement. The research was conducted in two classes. They were experimental class and control class. STAD was implemented in the experimental class and TGT was implemented in the control class. Both students in the experimental class and control class were classified into two. They were high achievement students and low achievement students.

In choosing the samples, the researcher should be careful because in cooperative learning, some factors can affect it. The time allocation was also affected the result of cooperative learning implementation. Then, the other things which affected the implementation of cooperative learning were the number of samples (Khan, 2011).

The classification of choosing the samples in this research was based on the

narrative score data which was gained from the teacher. It was based on the narrative text daily test score. The students with the score equal to or more than 75 were categorized as the students with high achievement. Then the students with the score less than 75 were categorized as the low achievement students. The researcher didn't need to tell to the students that some of them were categorized either as high or low achievement students. Before conducting the treatment, the pre-test was done. It was conducted in order to know the narrative text reading comprehension of the students before the treatment given

Then, after asking the students to do the pre-test, the researcher was ready to give the treatment. The treatment was implementing STAD for experimental class and TGT for control class. There were three times treatments for each class. The researcher tried to plan and organize the research well because it can influence the result of the implementation. As what had been said by Nair and Kim (2014) cooperative learning could be effective if the teacher can plan and organize well the implementation since teacher is one of important factor in planning and implementing it. Furthermore, Slavin in Jacobs (1995: 16) says:

“All cooperative learning methods share the idea that the students work together to learn and are responsible for their teammates' learning as well as their own. In addition to the idea of cooperative work, student team learning methods emphasize the use of team goals and team success, which can be achieved only if all members of the team learn the objectives being taught.”

In implementing STAD and TGT the teacher should ensure that every student get involved in teaching learning process because it can influence the teams goal and also the goal of cooperative learning itself. In the teaching learning process using cooperative techniques the teacher should ensure equal participation of every group member in activity. If activities are not properly constructed the goal of cooperative learning can't be achieved (Khan, 2008).

In implementing STAD, firstly the researcher told to the students that they would be taught by cooperative learning which called

STAD then the researcher gave the explanation dealt with the material. Here was the narrative text. The explanation was about the purpose of narrative text, language features, and generic structures. Moreover, the researcher gave the example of narrative text. Secondly, the students were divided into seven groups. It consisted of five students in each groups. In assigning the students to teams, the researcher used some criteria. Due to one of consideration of formatting the groups in cooperative learning is the teams should be heterogeneous. It was based on the score, and the gender. In a team should consist of high performing students and average performing students. Thirdly, each group was given the narrative text to be understood together. Fourthly, the students were asked to do the quiz dealt with the text they had been understood. After that, the researcher, as the teacher or facilitator, was together with the students counted the quiz result. It would be counted to get the improvement score by counted the difference between quiz score and initial base score. The initial based score was gained from the teacher, it was the prior score which was possessed by each students. Then, the teacher asked to the students to put the score of every members of the group in the team summary sheet. Next, they counted the total team score and divided the total team score by the number of the students of each groups. It was got the team average. Finally, from the team average, the teacher gave the award to the teams.

After implementing STAD in the experimental class, the researcher implemented TGT in the control class. The steps were almost same with TGT. Before conducting TGT, the researcher as the teacher said to the students that they would implement TGT as the cooperative learning technique. Firstly, the teacher gave the explanation about the narrative text. Secondly, the students were divided into six groups which were heterogeneous. Thirdly, the students were given the material to be understood. The material was narrative text. It was same as what had been given to experimental class. Every tournament table consisted of six students from different groups with different ability which was classified by the scores. They were the students who had

high, average, and low score. It was based on initial base score. Fifthly, the students in tournament tables did game tournament. The ways were each student in turn pick a card, read the question out loud and tried to answer the question. If she or he could answer, she or he could keep the card. If she or he could not answer, the challenger could answer. Then if the challenger could not answer, he or she should return a previously won card (if any) to the deck. For the next round, the turn moved one position left, the first challenger became the reader. The student was next to the reader kept the key answer to match the reader answer with the correct answer. All the students in the each tournament tables played the same game at the same time. The teacher was only as facilitator who moved from group to group to make sure that everyone understood the game procedures. After all the students in all tournament tables had already finished the game, the students were asked to count the cards that they gained. After that, each tournament table had game score sheet. It was used to write the score of each student who came from different teams. Then, each student went back to their teams. They reported their score to the team mates and wrote the scores in the Team Summary Sheet. It was same with STAD, the students were asked to count the total team score and team average. Then, the teacher gave the awards.

Finishing treatment implementation, the post test was given. The post test items were same with pre-test items. The result of pre test and post test were the data to be analyzed to know the effectiveness of STAD and TGT to enhance narrative text reading comprehension of the students with high achievement and low achievement.

After getting the data, the researcher calculated the normality test and homogeneity test. the data based on pre-test and post-test result of both experimental class and control class. The P value of pre-test of experimental class was 0.606 and 0.769 > 0.05. Then, the pre-test P value of control class was 0.536 and 0.737 > 0.05. So the pre-test data of experimental class and control class were accounted as normal distribution data.

Then the post-test of experimental class was 0.692 and 0.687 > 0.05. For the control class was 0.334 and 0.678 > 0.05. It showed normal distribution for the post-test data for both experimental and control class. Those all data showed the normality test. Then for homogeneity test, the P value of pre-test was 0.674. 0.674 > 0.05. So the pre test data were homogenous. Meanwhile, the post test showed the P value was higher than α . 0.568 > 0.05. So the homogeneity tests both for pre-test and post test showed the data were homogenous. Based on those result, it can be concluded that normality and homogeneity test showed the pre-test and post test data were normal and homogenous.

Related to the first statement of the problem, the mean of pre-test for students with high achievement who were taught with STAD was 58.3846. Then for the post-test, the mean was 82.000. The t- count of the pre-test and post-test was 13.392 and the t-table was 1.782 at the significant level $\alpha = 0.05$. So the t-count was higher than t-table, 13.392 > 1.782. Therefore, Ho was rejected and Ha was accepted which meant STAD was effective to enhance narrative text reading comprehension for the students with high achievement.

In relation to the second statement of problem, the pre-test mean of the students who were taught using STAD was 57.3077 and the post-test was 79.000. The t-count was 9.423 and t-table was 1.782 at the significant level was 0.05. It indicated that t-count was higher than t-table. So STAD was effective for low achievement students in enhancing their narrative text reading comprehension. Therefore, Ho2 was rejected and Ha2 was accepted.

In accordance the third statement of the problem, the mean score of pre-test of high achievement students who were treated using TGT were 60.5385. Meanwhile, the post-test mean was 76.4615. The t-count was 13.380. It was higher than t-table. 13.380 > 1.782. Therefore, Ho3 was rejected and Ha3 was accepted which meant TGT was effective to enhance narrative text reading comprehension for students with high achievement.

According the fourth statement of the problem, the mean score of the pre-test of the low achievement students who were treated using TGT was 45.0000 and the post-test was 65.0769. The t-count was 9.967 and t-table was 1.782. So 9.967 > 1.782. It meant TGT was effective to enhance narrative text reading comprehension of the low achievement students. So Ho4 was rejected and Ha4 was accepted.

Related to the fifth statement of the problem, the mean score of the students with high achievement was 82.0000 and for the low achievement students were 79.000. The means score's range were not high enough. The mean score for each variable was also high. On the other hand, the t-count was -0.923 while the t-table was 1.706 at the significant level of 0.05. So the t-count was lower than t-table. -0.923 < 1.706. Then, P value was higher than α . 0.365 > 0.05. It meant that STAD was not effective for high and low achievement students to boost narrative text reading comprehension, therefore Ho5 was accepted and Ha5 was rejected.

In relation with the sixth statement of the problem, the mean score of low achievement students was 65.0769. Meanwhile, the mean score of high achievement students were 76.4615 which meant that the means score range was high. On the other hand, t-count was -2.962 and the t-table was 1.706 at the significant level 0.05. So the t-count was higher than t-table. -2.962 > 1.706. Then P value was lower than α . 0.007 < 0.05. It indicated TGT was effective for high and low achievement students to boost narrative text reading comprehension. So Ho6 was rejected and Ha6 was accepted.

Based on the last statement of the problem, it was stated that there was no interaction between technique, achievement and narrative reading comprehension. The result of F-count of achievement was 8.167. The second, F-count of technique was 14.950. The last, F-count of achievement*technique was 2.775. Meanwhile, the F-table was 3.42. It meant that F-count for achievement*technique was lower than F-table. It did not need to differ the students to high and low achievement.

From the whole result, it can be stated that actually STAD and TGT gave the enhancement for the students with high and low achievement. However, it can't be concluded that by dividing students based on the achievement can succeed these techniques to be implemented since the result of STAD was not effective for high and low achievement. It was shown by the range of mean score of high and low achievement which was not high. High and low achievement students got high score.

CONCLUSION

The findings of this study showed that *STAD* and *TGT* have significant effect for enhancing narrative text reading comprehension. However, the techniques given for enhancing narrative text reading comprehension and student's achievement did not have any interactions.

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