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THE EFFECTIVENESS OF STUDENT TEAM ACHIEVEMENT DIVISION (STAD) AND GROUP INVESTIGATION (GI) TECHNIQUEsTO TEACH READING COMPREHENSION TO STUDENTS WITH HIGH AND LOW MOTIVATION

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Article Info

Abstract

This study aims to describe the significant difference between STAD and GI techniques to teach reading comprehension to students with high motivation, to describe the significant difference between STAD and GI techniques to teach reading comprehension to students with low motivation, to explain which one is more effective between STAD and GI techniques to teach reading comprehension to students with high and low motivation and to describe whether there is interaction among the teachniques, motivation, and teaching reading comprehension in this study. This study wass a quasi-experimental study. There were 26 students in the experimental and control group. They were divided into students with high and low motivation in each group. Test, questionnaire, and observation were used as the instruments of this study. The findings of this study are: there is significant difference between STAD and GI techniques to teach reading comprehension to students with high motivation, Student Team Achievement Division (STAD) technique is effective to teach reading comprehension to students with high and low motivation than Group Investigation (GI) technique, and there is no interaction among the techniques, motivation, and teaching reading comprehension. In conclusion, teaching reading comprehension of narrative text with Student Team Achievement Divivsion (STAD) technique is effective for students with high and low motivation. Thus, it is recommended that STAD technique be implemented in teaching reading comprehension.

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INTRODUCTION

According to school based curriculum (KTSP 2006), reading is an essential basic skill which needs to be learnt by junior high school students in Indonesia. However, students seem to often meet difficulties in comprehending the text given. It indicates that their reading comprehension needs to be improved. Dealing with that statement, it can be said that it is significant to make junior high school students accustomed to reading English texts. In view of this, it is necessary for the teacher to choose the appropriate methods that can be used for teaching English at secondary school in order to improve students' reading ability.

Snow (2003) stated that reading is an activity to get the written information.It has many advantages such as broading 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 texts. Whereas, most of the students got difficulties in comprehending English reading text, especially in narrative text. A narrative text is the text to amuse, entertain and to deal with factual or various experience in different ways. Moreover, he states that the schematic structure of narrative textis orientation, evaluation, complication, resolution and re-orientation (p.xiii).

Regarding with those problems, it needs a solution to overcome the problem. One of the solutions is by implementing an appropriate teaching method or technique. This can develop students' interest and motivation in learning language especially in mastering reading skill. Furthermore, it can improve students reading skill achievement. That is way the teacher should implement cooperative learning technique. Jacobs, et al (1995) said 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 (p.16).

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) 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 (p.32).

Beside improving the students reading skill, cooperative learning is also one of the important things in inspiring the students' motivation in language learning. Students' motivation is dealing with their psychological attitude toward something (they want or they do not want to do). Motivation involves the attitudes and affective states that influence the degree of effort that learners make to learn. Students' motivation becomes teachers' problem influencing the achievement of the teaching and learning process. Enhancing the students' motivation in reading is not an easy task for the teachers as their need to know the best way on how to tackle the students' interest especially for the foreign language class.

Considering the benefits of two teachniques, Student Team Achievement Division (STAD) and Group Investigation (GI) and the characteristics of the students above, this research attempts to shed light on the effectiveness of STAD and GI to teach reading comprehension to students with high and low motivation.

Reading Comprehension

Many experts have given their definition about what reading really means. According to Nunan (2003), reading is a fluent process of readers combining information from a text and their own background knowledge to build meaning (p.68). Mikulecky (1996) states that

reading is a complex conscious and unconscious mental process in which the reader uses a variety of strategies to reconstruct the meaning that the author is assumed to have intended, based on data from the text and from the reader's prior knowledge (p.5).

Reading is an interactive and a thinking process of transferring printed letters into meaning in order to communicate certain message between the writer and the reader. Reading also process to knowing the information from the text and to understanding the meaning of the text. In comprehending a topic, a reader should have knowledge about understanding the topic. The reader interacts with the text relates to the questioning of the text to prior experiences of construct meaning which can be found in the text. Skimming and scanning are two very useful techniques that will help the reader to catch the meaning, getting information, or messages effectively from the reading texts.

To overcome the students problem in comprehending a text, it is advisable that the teacher changes their technique the teaching process and should consider the most effective and creative language teaching technique in teaching reading skill. A teacher is one the most influencing factor in obtaining the success of learning English. An appropriate pproach would be the solution to improve the teaching process. Approach is a correlative assumptions dealing with the nature of language teaching and learning. In doing their profession as an educator a teacher always gives the best for their student.

Teaching reading as a foreign language for students, especially Junior High School students, the role of teaching strategies or teaching techniques are very important. There are many techniques can be used to teach reading. The two of them is Student Team Achievement Division (STAD) and Group Investigation (GI) techniques.

Cooperative learning using STAD type consists of four steps cycle: teach, team study, test, and recognition. The teaching phase begins with presentation of materials, students should be told what it is they are going to learn and why it is important. In the team study, group members work cooperatively with teacher providing worksheet and answer sheet. Next, each student individually takes a quiz. Furthermore, Group Investigation (GI) is an organizational approach that allows a class to work actively and collaboratively in small groups and enables students to take an active role in determining their own learning goals and processes. Group investigation method requires the students to form small groups, plan and implement their investigation, synthesize the group members' findings, and make a presentation to the entire class.

Adopting these two techniques, the writer is expected to be able to run the teaching learning process effectively, especially teaching of reading. They will work in groups by explaining given materials. Thus, when teacher put the students in groups he or she has to ensure that the students whose levels are different are put together. The activity offered in group investigation is interesting so that the students will feel the new atmosphere in classroom and are interested in learning reading.

As Gadner (1985) points out that a simple definition of motivation is not possible. He also explains his socio-educational model of second language acquisition and some characteristics of motivated individuals. However a simple definition of the concept is not provided. Gadner (1985) refers to Keller's (1983), motivation refers to the choices people make as to what experiences or goals they will approach or avoid and the degree of effort they will exert in this respect. Nevertheless this definition is not accurate, since it does not identify all the elements that characterize motivation (p.193).

Cooperative Learning

Cooperative learning is a teaching method that facilitates pupils to work together in team to assist each other in experiencing learning activities. There are some techniques which have been developed based on these methods. The two of the techniques in this teaching model is

Student Teams-Achievement Divisions (STAD) and Group Investigation (GI).

In STAD technique, Wichadee (2006) states that students are assigned to four or five members learning teams that are mixed in performance level, gender, and ethnicity. In addition, according to Slavin (1995), STAD has five major components, which include: (1) class presentations, (2) teams, (3) quizzes, (4) individual improvement scores, and (5) team recognition.In planning a lesson, teacher designs lesson plan by using STAD technique. The lesson plan refers to standard competence and basic competence of KTSP curriculum for junior high school. Besides, teacher uses some media which suitable for the materials, such as recount texts, pictures, and worksheet.

Group Investigation (GI) is an organizational approach that allows a class to work actively and collaboratively in small groups and enables students to take an active role in determining their own learning goals and processes. Group investigation method requires the students to form small groups, plan and implement their investigation, synthesize the group members' findings, and make a presentation to the entire class.

In the context of teaching English, McGroarty (1989, cited in Olsen and Kagan, 1992) presents six primary benefits of CL for learners acquiring English, as follows:

1. Possibility for developing the first language in ways that support cognitive development and increased second language skills;

2. The opportunities to integrate language with content-based instruction;

3. The opportunities to include a variety of curricular materials to stimulate language as well as concept learning; and

4. The opportunities for students to perform as resources for each other, thus assuming a more active role in their learning.

Moreover, Eric (2000) says that CL encourages pupils to perform better than in individualistic competitive environments. Further, he states some advantages for students, as follows:

1. CL helps the pupils in improving better performance.

2. CL helps high and low-achieving learners achieve their academic goals more effectively.

3. CL has positive effects on self-esteem, social skills, attitude and confidence of students who work in a cooperative learning environment.

4. CL Improves peer skills without feel peer pressure.

In addition to social advantages, CL results in greater academic achievement when compared with formal teaching-learning activities. Furthermore, Slavin (1995) implies three benefits in implementing cooperative learning: STAD technique and GI technique in the class, as follows:

1. Motivate students to learn,

2. Gain confidence while learning as a result of peer support,

3. Improve student achievement.

In line with the statements proposed by some experts above, Slavin (1995) believes that the benefits of cooperative learning can have important effects on the learning of all students.

Motivation

Gadner (2010) refers to Keller's (1983), motivation refers to the choices people make as to what experiences or goals they will approach or avoid and the degree of effort they will exert in this respect. Motivation makes students give the reason why they decide to do something or not to do something. Next, they will also decide how long they will do it.

In learning process, students may have highly and lowly motivation depends on their desire or attitude toward something that students

like or dislike. Gass and Selinker (2008:426) stated that effort consists of a number of factors, including an inherent need to achieve, good study habits, and the desire to please a teacher or parent.

METHODS

This study is a quasi experimental research which uses purposive sampling technique and factorial design (2 by 2 factorial design) since it uses more than one independent variable (Cooperative Learning methods and motivation). There are three variables in this research. They are; the independent variable, it is the use of teaching techniques (STAD and GI tecniques) in teaching reading comprehension; the dependent variable, it is reading skill of grade VIII students of Junior High School, the data was gain from pre-test and post-test score; the moderator variable, it is the motivation of the students in reading comprehension.

The population of the research was grade VIII at Diponegoro Private Junior High School. The researcher used two classes of grade VIII. One class was for experimental group and one class was for control group. In deciding the two classes for the research, the researcher chose the classes which were parallely-balance by having normality and homogeneity test of the last test. The two classes were considered for the similar characteristics or homogeny. In each group, there were students with high and low motivation.

The first type of data was collected by applying two testing sessions, pre-test and post test. They were conducted by the researcher in both classes; experimental group, and control group. They were in the form of multiple choice test. It was conducted to measure the students' ability in reading before and after the treatment. It was done to experimental and control groups.

To categorize the students into students with high and low motivation, the research applied a questionnaire of motivation before doing the experiment. The questionnaire was distributed to experimental and control group. The questionnaire was adapted from Wigfield

and Guthrie (1997). The researcher only took 10 questions from 53 questions because only the ten question were suitable to the concept of reading for Junior High School students and related to the study (pp. 420-432).

Observation was done by the researcher to observe the activities of teaching and learning process. The observation was for teacher whether she had done the STAD and GI techniques or not done during the teaching and learning process.

Generally, the researcher had pre-observation, preparing instruments, doing the experiment. The procedure of experiments was conducted as follows: choosing two classes of the research considering the same characteristics both of them, choosing the students with high and low motivation through the questionnaire, conducting the experiment, conducting the post-test, and analyzing the data.

To answer the research questions, the researcher used ANOVA (Analysis of Variance). The steps of analyzing data are in the following explanation. The first is conducting normality test of the pre-test and post test of the experimental group and control group, Normality analysis was to find out that the data were distributed normally. This research used Kolmogorov-Smirnov analysis. The significance level is 0.05. If the significance value is higher than 0.05 means the data are distributed normally. The next is conducting homogeneity test of the pre-test and post-test of the experimental group and control group. Homogeneity test was for measuring the similarity variants of the data. The significance value is 0.05. If the significance value is higher than 0.05, means the variants of the data is homogeny. The differences mean score of the pre-test and the post-test is also calculated.The differences mean score of the pre-test and the post-test is to compare the result of the mean of the score. If the significance value is lower than 0.05 means the data has significance difference. The last was analyzing the data by using ANOVA to calculate the interaction among the cooperative learning techniques, motivation, and teaching reading comprehension. If the

significance value is higher than 0.05 means there is no interaction among the cooperative learning techniques, motivation, and teaching reading comprehension.

RESULTS AND DISCUSSION

The researcher conducted pre-test to know the students' ability before treatment. The mean score of experimental group is 54.23 and control group is 51.35. After the pre-test, the researcher conducted normality and homogeneity test to decide the experimental group and control group have the similar characteristics or homogeny. Next, the experimental research was done by the researcher. The teaching activities was done by other teacher with the lesson plan had designed.

Students' motivation refers to the choices to make as to what experiences or goals they will approach or avoid and the degree of effort they will exert in this respect, is part of psychological attitude of a human. In learning process, students may have high and low motivation. Gass and Selinker (2008: 426) stated that effort consists of a number of factors, including an inherent need to achieve, good study habits, and the desire to please a teacher or parent.

To classify the students into highly and lowly motivated students, the researcher distributed a questionnaire of reading motivation. The questionnaire was distributed in English, spoken translated into Indonesian, and gave the example as well. The validity, the reliability and the practicality of the questionnaire were tested. The result, there are 13 students of experimental group categorizing as highly motivated students. There are 13 students of experimental group categorizing as lowly motivated students. There are 13 students of control group categorizing as highly motivated students. There are 13 students of control group categorizing as lowly motivated students.

The researcher observed the activities of teaching and learning in the classroom. By using an observation list, the researcher observes whether the classroom activity based on the lesson plan or not. The experimental group was taught by using STAD technique and control group was taught by using GI technique. Mainly, the activities of understand the concept of reading narrative text was the same. After finishing the experiment, the researcher conducted the post-test to the experimental and control group. The post-test was in the form of multiple choice test. The aim of conducting the post-test was to compare the students' ability in reading narrative text between experimental group which was taught by STAD technique and control group which was taught by GI technique. The post-test mean score of experimental group (VIIIC) is 77.88 and the control group (VIIIA) is 67.12. Moreover, the normality test of the post-test showed that the data normally distributed.

To know the significant difference between STAD and GI techniques of students with high motivation, the researcher compared the post test scores of students with high motivation in experimental and control group. The mean score of students with high motivation in experimental group is 86.54 and in control group, it is 70.38. It means that the mean score of students with high motivation in experimental group is higher than in control group. From the output data, the data has significant difference. The probability (sig. value) is lower than 0.05 (0.000 < 0.050). Meaning that applying STAD technique to students with high motivation is better than applying GI technique.

The researcher compared the post test scores of students with low motivation in experimental and control group to know the significant difference between STAD and GI techniques. The mean score of students with low motivation in experimental group is 69.23 and in control group, it is 63.85. It means that the mean score of experimental in experimental group is higher than in control group. The significant probability is 0.011. The probability is lower than 0.05 (0.018 < 0.050). It means that the data has significant differences. Meaning that applying STAD technique to students with low motivation is better than GI technique

Finding which one is more effective between STAD and GI techniques for students with high and low motivation becomes the next question in research questions. Based on the finding in analyzing the data, STAD technique is more effective than GI technique. The mean score of post-test of experimental group is 77.88 and the mean score of post-test of control group is 67.12. It also has significant difference since the probability is lower than 0.05 (0.06 < 0.050). Furthermore, the mean score of students with high motivation of experimental group is 86.54 and the mean score of students with low motivation of experimental group is 70.38. The mean score of students with high motivation of control group is 69.23 and the mean score of students with low motivation of control group is 63.85. It means that the mean score of post test of students with high motivation in experimental group is higher than control group and the mean score of post test of students with low motivation in experimental group is also higher than control group. It means that applying STAD technique is better than applying GI technique especially for grade VIII at the Diponegoro Private Junior High School Sleman.

To calculate the interaction among the cooperative learning techniques, motivation, and teaching reading comprehension, the researcher used ANOVA (Analysis of Variance). From the calculation the probability (0.240) is higher than the significant level (0.05). It means that there is no interaction between motivation and technique in teaching reading comprehension.As result, STAD technique is better than GI technique, and it does not depend on the level of motivation. It means that the STAD technique is better for both groups; students with high and low motivation than GI technique. In other words, the technique applied in experimental group is better than technique applied in control group.

CONCLUSION

The conclusions of the research are as follow: there is significant difference between STAD and GI techniques to teach reading comprehension to students with high motivation, there is significant difference between STAD and GI techniques to teach reading comprehension to students with low motivation, Student Team Achievement Divivion (STAD) technique is more effective than Group Investigation (GI) technique, and there is no interaction between motivation and technique in teachingreading comprehension in narrative text.

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