THE USE OF STUDENT TEAM ACHIEVEMENT DIVISION TO FACILITATE STUDENTS IN READING COMPREHENSION

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Abstract
This research scrutinizes how Student Team Achievement Division facilitates and affects students in reading comprehension. A pre-experimental design was applied in this research, and it was conducted in six meetings; by giving pretest, four treatments, and posttest. It involved thirty six of the tenth grade students of secondary school at Lubuklinggau, South Sumatera, in Indonesia who attended reading comprehension class. The data were collected by using reading test that was given twice for students; pre-test and post-test were given before and after treatments. The finding of this research disclosed that the students’ average in pretest was 60.00 and in posttest their average score were increased to be 75.00. Based on the result of the paired t-test calculation, it was found that t-obtained 8.196 was higher than t-table 1.684 as the critical value. It meant that the alternative hypothesis (Ha) was accepted. In other words, the use of Student Team Achievement Division was significantly effective to facilitate and affect the students in reading comprehension.

Key Words: Student Team Achievement Division (STAD), EFL secondary students, reading comprehension

Introduction
English is one of languages which was used in all over the world. It also became a crucial language to communicate with different speakers in various cultural and custom background, because almost every country uses English as a communication means. English plays totally important roles in international education scope. English in teaching and learning process has four basic skills that must be mastered by the students, they are listening, speaking, reading, and Writing. According to Harmer (2007: 13) English is a mother tongue for many people in the world, though, as people shall see, such ‘native speakers’ are increasingly out-numbered by people who have English as a second or third language.

Besides, if people learn English, they also have to master all components of the language, such as grammar, vocabulary, and pronunciation to support the fourth skills in English. In addition, people’s consideration claimed that someone could be called master a language if he or she is able to speak and read the language (Nunan, 1999: 225). Moreover, the user of English is not only used as relation for communication between countries and people, but also began to spread various other fields, for example mass media. There have been many mass media that used English in publishing news and other unique things. For this reason, people must should be able to understand the contents of the English reading text.

Kirby (2014: 1) stated that reading comprehension is the application of a skill that evolve for other purposes (listening or oral comprehension) to a new form of input (text). For other point of view, reading is an activity that people do for getting information. It is a thinking process that involves some steps, two of them such as recognizing words and leading to the development of comprehension. Moreover, comprehension is the process that occurs before, during, and after when people read a certain part of reading text. Thus, reading comprehension is the act understanding what you are reading. In addition, reading is one important way to improve your general language skills in English (Mikulecky, 1996: 1). Therefore, reading is not only understanding the word but also helping students to think in English. It can also help students to improve their vocabulary mastery, writing or speaking ability, and others.
The improvement of students’ reading comprehension could be facilitated by applying the effective strategy based on their needed in reading class. The researchers would like to introduce the Student Team Achievement Division that is able to be applied in facilitating the students in reading comprehension. According to Miller (1999: 1) Student Team Achievement Division is cooperation between two or more students, where one individual imparts knowledge to the other(s). Furthermore, Ibrahim et al (2000: 6) argued cooperative learning: Student Team Achievement Division or STAD is introduced firstly by Robert Slavin and friends in Jhon Hopkins University. It is the simplest cooperative learning model. STAD is the model for the initial stage for teachers who are just using a cooperative learning (Slavin, 2010: 143).

The material that was given, was about recount text. Recount text is a text to retell events for the purpose of informing or entertaining. The generic structure of recount text covers; orientation: it gives the reader about background information needed to understand the text, such as who was involved, where it happened, and when it happened; events: a series of events, ordered in a chronological sequence; re-orientation: a personal comment about the event or what happened in the end. Linguistic features use past tense that consist of three types: (biography recount, personal recount, and factual recount). The using of conjunctions, such as: then, before, after, etc., and the using of action verb e.g. visited, went, and moved (Handayaningrum, 2010: 22).

An interview with one of English teacher at SMA Negeri 2 Lubuklinggau was done, and there were some information found as phenomenon on students’ reading comprehension class. The phenomena were: first, students were very difficult to find the main idea from a text; second, students were difficult to determine the type of reading text; third, students had lack of vocabulary mastery; and fourth, students had thinking that reading was a difficult skill. Therefore, the researchers were going to overcome the students’ problems in reading comprehension through Student Team Achievement Division applied.

**Methods**

Pre-experimental design was applied. The researcher used one group pre-test and post-test design as show on the following table:

<table>
<thead>
<tr>
<th>Pretest</th>
<th>Treatments</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>X</td>
<td>O</td>
</tr>
</tbody>
</table>

In which:

O = Pretest
X = Treatments
O = Posttest

(Fraenkle and Wallen (2009: 269).

Pre-Experimental design is not true experiment, not full condition of experiment and does not follow certain rules. The using of pre-experimental design was because of the elimination upon the researchers’ ability to select subjects and manipulate the conditions.

The population in this research was all of the tenth grade students of Secondary School in academic year 2019/2020. There are 360 students from ten classes. Cluster random sampling was the technique used to take the sample. The result was that class X MIA 4 which consisted of 36 students. In this research, the researchers used multiple choice as objective test for collecting the data. Before giving the test to the students, the researcher tried out the thirty test items to get the validity and reliability, whereas it was given to different class. The result was only twenty five items that were valid and 5 items were not valid. Therefore, the researchers gave the test for the sample that consist of 25 items for 40 minutes in pre-test and post-test.
In addition, for analyzing the data obtained from the test, the researchers applied three techniques. They were:

1. Individual Score
   
   To get the students’ individual score, the formula used was:
   
   \[ S = \frac{R \times 10}{N} \]
   
   Where:
   
   IS : Individual Score
   SO : Score Obtained
   TS : Total Score

2. Conversion of Individual Score based on Minimum Mastery Criteria
   
   To identify the score which was converted, Minimum Mastery Criteria of SMA Negeri 2 Lubuklinggau was used. The students’ score are categorized into PASSED, if the scores are in range 70 – 100; and the students’ score are categorized in FAILED, if the scores are in range 0 – 69.

3. Normality Testing
   
   Investigation of the internal consistency normal is estimated by Subana and Sudrajat (2005:153). The following is the formula of normality testing:
   
   \[ X^2 = \sum \frac{(O_i - E_i)^2}{E_i} \]
   
   Where:
   
   \( O_i \) : The observation frequency
   \( E_i \) : The expectation frequency
   
   The result of normality calculation then was compared to the \( \chi^2 \) table with the degree of freedom = number of interval class – \( (df = j - 1) \) and significance level 5. If \( \chi^2 \) obtained \(< \chi^2\) table, it could be concluded that the data distribution considered as “normal”.

4. Paired t-test
   
   The formula of paired t-test was used to find out the effectiveness of Student Team Achievement Division (STAD) in teaching reading comprehension. The formula is:
   
   \[ t_{\text{obt}} = \frac{\bar{X}_1 - \bar{X}_2}{S \overline{D}} \]
   
   Where:
   
   \( t_{\text{obt}} \) : t obtained
   \( \bar{X}_1 \) : mean score in posttest
   \( \bar{X}_2 \) : mean score in pretest
   \( S \overline{D} \) : standard error of differences

   The formula of \( S \overline{D} \) is:
   
   \[ S \overline{D} = \frac{SD}{\sqrt{N}} \]
   
   Where:
   
   \( S \overline{D} \) : standard error of differences
   \( SD \) : standard deviation
   \( N \) : number of the students

   To find the calculation of \( S \overline{D} \) (standard error of differences), firstly must be calculated SD.

   (Hatch and Farhady, 1982:116).

   In testing hypothesis, the researcher used \( t \)-table with 5% significance level for one-tailed test and the degree of freedom (df) = \( N - 1 \) (36 – 1) = 35 is 1.684 (Hatch and Farhady, 1982:272). If \( t_{\text{obtained}} \) was less than \( t_{\text{table}} \), the null hypothesis (Ho) was accepted. On the other hand, If \( t_{\text{obtained}} \) equals or exceeded than \( t_{\text{table}} \), the null hypothesis was rejected and consequently alternative hypothesis (Ha) was accepted.

**Research Findings and Discussion**

**Findings**

This chapter described the result of test distributed to the sample (the tenth grade students) before and after treatments. The findings of the research involved four aspects; they were (1) the
students’ score in the pre-test, (2) the students’ score in the post-test, (3) the comparison students’ score in the pre-test and post-test, (4) the result of paired t-test.

1. *The Students’ Score in the Pre-test*

Pre-test was given before treatments and after try out. The pre-test consisted of 25 item in the form of multiple choices, and the material tested was about recount text with time allocation 40 minutes. The number of the students who took in pre-test was 36 students. The score had been tabulated based on the Minimum Mastery Criteria, it was found that there was 29 students who were categorized into “Failed”, and there was 7 students who were categorized into “Passed” criteria. The highest score was 80 that was achieved by four students, and the lowest score was 40 that was achieved by two students. The average of the students’ score in pre-test was 60.00.

2. *The Students’ Score in the Post-test*

In the post-test the students were tested after treatments. The treatment was done four times after pre-test given. In the treatments, the researchers taught the students about recount text through Student Team Achievement Division. The post-test items tested were similar to the pre-test items. The students did the post-test as well as they could do based on the information which they got from the treatments. Based on the Minimum Mastery Criteria, it was found that there was 11 students who were in the “Failed”, and there was 25 students who were categorized into “passed” criteria. The highest score was 96 that was achieved by two students, and the lowest score was 48 that was achieved by only one student. The average of the students’ score in post-test was 75.00.

3. *The Comparison of the Students’ Score in the Pre-Test and Post-Test*

The progress of the students’ achievement on reading comprehension could be shown by comparing the students’ score in pre-test and post-test. The researchers presented in detailed scores on the table below.

<table>
<thead>
<tr>
<th>No</th>
<th>Categories</th>
<th>The Recapitulation of Pre-Test and Post-test Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Average Score</td>
</tr>
<tr>
<td>1</td>
<td>Pre-Test</td>
<td>60.00</td>
</tr>
<tr>
<td>2</td>
<td>Post-Test</td>
<td>75.00</td>
</tr>
</tbody>
</table>

Referred to the comparison of the students’ score in the pre-test and post-test above, it showed that the student’s score between pre-test and post-test was increased. It meant that the treatments given was significantly effective to be used by the students in improving their reading achievement. Moreover, the pre-test data showed that $x^2_{obtained}$ was 4.63 with degree of freedom (df) = 5 (6-1). Since level was 95% ($a= 0.05$) and the $x^2_{table}$ was 11.1. It meant that the data was normal because $x^2_{obtained} < x^2_{table}$. In addition, the post test data that $x^2_{obtained}$ was 10.71 with degree of freedom (df) = 5 (6-1). Since level was 95% ($a= 0.05$) and the $x^2_{table}$ was 11.1. It meant that the data was normal because $x^2_{obtained} < x^2_{table}$.

4. *The Result of Matched t-test*

The result of $t_{obtain}$ was 8.196, and the compare to the $t_{table}$ with df= 36-1 =35 in the significance level 5% was 1.684. So, $t_{obtain}$ was higher than $t_{table}$ (7, 58 > 1.684). Based on the criteria of testing hypothesis when $t_{obtained}$ was higher than $t_{table}$ so the alternative hypothesis (Ha) was accepted, and the null hypothesis (Ho) was rejected. The other statement, teaching reading comprehension by using Student Team Achievement Division was significantly effective to facilitate and affect the EFL secondary students in reading comprehension.
Discussion

The analyzed the data got from the test, the writer interpreted the result of the data analysis. The result of the pre-test and post-test showed that there was a significantly different between the students’ score before and after treatment. Based on the data, before treatments given the students’ average score in the pre-test was 60.00. It could be interpreted that their ability in reading comprehension was categorized “failed”. Almost all students still had some problems and weaknesses in reading comprehension; the students had difficulty to identify the main ideas, to find out the meaning, and to comprehend the whole of reading text. Besides, they also had difficulty to identify the kinds of the text as they read.

To identify the students’ problems in reading, and the students’ reading score. The researchers had to apply a better treatments. In this case, the researchers taught reading by using Student Team Achievement Division for improving students’ reading comprehension. According to Miller (1999:1) argued that peer tutoring is cooperation between two or more students, where one individual imparts knowledge to the other(s).

Several features of peer tutoring have the greatest effect on student achievement and attitude.
1. Structured tutoring is more effective than tutoring on an incidental basis.
2. Tutoring of shorter (zero to four weeks) duration appears to produce the best results. When tutoring continues past four weeks, there is a diminishing return.
3. Tutoring where lower level skills are taught and tested produces the best student outcomes.
4. Greater results occur in math, followed by reading, than in other subject areas matched in skill level.

Although Student Team Achievement Division (STAD) is done with pairs of learners, sometimes having learners work in groups of three better meets the needs of both the learners and the learning task. In addition (Miller, 1999: 18). Student Team Achievement Division (STAD) had been shown to improve student performance for the tutor and the learner in a number of important areas such as self-esteem, academics, and motivation. As other information, this method not only could be used in learning English material, but also others. There is effect from Student Team Achievement Division method to the student tolerance character in IPS learning (Habsiah, 2017: 1). Student Team Achievement Division (STAD) has been shown to improve student performance (Bates, 2012: 14) teaching might be the action of someone who is trying to assist other and to teach their fullest potential in all aspect of development. It means that teaching process done by the teacher gives some efforts, such as to use a strategy, technique or media as a way or a simulation to facilitate the students in increasing their knowledge, attitude, and skill. It is very important to identify and pay attention on students’ problems and needs in learning English, especially reading skill.
According to Johnson (2008:16) reading is the practice of using text to create meaning. The two keywords here are creating and meaning. If there is no meaning being created, there is no reading taking place. To teach reading, a teacher needs the students that beyond reading for entertainment purposes, and comprehension is the ultimate goal in reading. Based on the process of teaching reading by using Student Team Achievement Division in this research, the researcher assumed that Student Team Achievement Division could be accepted to reach the entertainment purposes and the ultimate goal in reading comprehension. As the result of paired t-test calculation showed that $t_{obtained}$ was higher than $t_{table}$. Therefore, the null hypothesis (Ho) was rejected automatically and the alternative (Ha) was accepted. It meant that it was significantly effective to facilitate and affect the EFL secondary students in reading comprehension.

By mastering reading comprehension, students had strong foundation to improve another skills (writing, listening, and speaking) in learning English including as well to build the important component of English such as vocabulary, grammar, spelling, or pronunciation. Montgomery et al (1992:8) wrote that reading also has a positive effect on the students’ vocabulary knowledge, on their spelling or their writing. In addition, reading comprehension is a cognitive or behavioral action that is enacted under particular contextual conditions, with the goal of improving some aspect of comprehension (McNamara, 2007:4). Comprehension is a part of the communication process getting the thoughts that were in the author’s mind into the reader’s mind. Comprehension is the essence of reading because the goal of written language is communication of massage.

**Conclusion and Suggestions**

**Conclusion**
Based on the findings presented in the previous chapter, the researcher could share some conclusions:
1. It was significantly effective to facilitate and affect the EFL secondary students in reading comprehension. It was proved by the differences between the two means score in pre-test and post-test. There was improvement of the students’ average scores from the pre-test (60.00) to the post-test (75.00). The students made progress because in the pre-test there was only 7 students who could pass the minimum mastery criteria, while in the post-test there was 25 students could pass the minimum mastery criteria.
2. The progress could also be known based on the paired t-test analysis. The result of the paired t-test calculation as higher than t-critical value. The $t_{obtained}$ was 7.58 was higher than $t_{table}$ was 1.684 as the critical value. It meant the alternative hypothesis (Ha) was accepted and the null hypothesis was rejected (Ho). In simple words, Student Team Achievement Division (STAD) was significantly effective to facilitate the EFL Secondary students in reading comprehension.

**Suggestions**
The researcher through this research would like to give some suggestions to the English teacher, especially who teach in EFL Secondary level, to the students, and to further researchers.
1. The English teachers should motivate the students by giving much attention toward all the activities when the process of learning in going on, they also suggested to use this learning model: Student Team Achievement Division (STAD) in improving their students’ reading comprehension.
2. The students should be serious and discipline by paying attention on teacher’s instruction and explanation during in teaching and learning process takes place. They also have to involve their selves in classroom discussion by sharing their ideas, opinion, understanding and knowledge to other students in classroom.
3. Further researchers, Student Team Achievement Division (STAD) is one of method that could be used to facilitate the EFL students in improving their reading comprehension. The reseacher suggests to furher researchers that they should investigate other research by using similar learning model: Student Team Achievement Division (STAD) with other method such as think-pair-share, numerical heads together, Jigsaw, or group investigation. They also could conduct a
research by using other learning model or method to facilitate the students’ reading comprehension at Primary, Secondary or tertiary level.

References
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