

**THE EFFECT OF STUDENT TEAMS ACHIEVEMENT DIVISION
(STAD) STRATEGY ON THE READING COMPREHENSION
OF THE SECOND YEAR STUDENTS OF SMAN 1 BENAI**

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Abstract: *This research aims to find out the significant effect of STAD strategy on the reading comprehension of the second year students of SMAN 1 Benai academic year 2018/2019. The selected sample was XI MIPA 1 students which consisted of 35 students. The sample was selected by using random sampling technique. This research used pre-experimental research design of one group pre-test post-test and collected the data by using tests on analytical exposition text. The test of this research was multiple choice test consisted of five options (A/B/C/D/E). The result of the study was found that the mean score of pre-test was 46.14 while the post-test was 61.03. Therefore, it can be concluded that there is a significant effect of STAD strategy on the reading comprehension of the second year students of SMAN 1 Benai. In other words, teaching reading comprehension through STAD strategy is an effective way to solve the students' problem on the reading comprehension.*

Keywords: *Effect, STAD strategy, reading comprehension.*

PENGARUH STRATEGI *STUDENT TEAMS ACHIEVEMENT DIVISION* (STAD) TERHADAP PEMAHAMAN MEMBACA SISWA TAHUN KEDUA DI SMAN 1 BENAI

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Abstrak: Penelitian ini bertujuan untuk mengetahui pengaruh yang signifikan dari strategi STAD pada pemahaman bacaan siswa kelas dua SMAN 1 Benai tahun akademik 2018/2019. Sampel yang dipilih adalah siswa XI MIPA 1 yang terdiri dari 35 siswa. Sampel dipilih dengan menggunakan teknik sample acak. Penelitian ini menggunakan desain penelitian pra-eksperimen dari satu kelompok pre-test post-test dan mengumpulkan data dengan menggunakan tes pada teks eksposisi analitis. Tes penelitian ini adalah tes pilihan ganda yang terdiri dari lima opsi (A / B / C / D / E). Hasil dari penelitian ini ditemukan bahwa nilai rata-rata pre-test adalah 46,14 sedangkan post-test adalah 61,03. Oleh karena itu, dapat disimpulkan bahwa ada pengaruh signifikan strategi STAD pada pemahaman bacaan siswa tahun kedua SMAN 1 Benai. Dengan kata lain, mengajar pemahaman bacaan melalui strategi STAD adalah cara yang efektif untuk memecahkan masalah siswa pada pemahaman bacaan.

Kata Kunci: Efek, strategi STAD, pemahaman membaca.

INTRODUCTION

There are four skills in English which are closely related to each other: listening, reading, writing and speaking. Reading is one of the substantial language skills in daily life to grasp the meaning of any information we read. According to Mikulecky (2008), reading is the basis of instruction in all aspects of language learning. Thus, in learning language process, she or he has to recognize about reading first. By reading, comprehension has a role to get the information of the text, finding the main idea, and develop a vocabulary. King and Stanley (1989) stated that there are five components in reading comprehension such as knowing the main idea, detail information, meaning vocabulary in context, and what the text implied. Further, reading is a very complex process where readers must be able to anticipate text information, select key information, organize and mentally summarize information, monitor comprehension and correct it and match results from comprehension to the reader so that strategies and a number of skills have a very important role in reading (Grabe, 2009).

The relation to this content, students in SMAN 1 Benai have some problems in reading. Based on the interview with some English teachers there, they said that students have to lack of vocabulary, low learning achievement, low motivation in studying English, lazy to read the texts and have difficulties in English. Also, the teachers in SMAN 1 Benai still use the conventional method in teaching, so they become a center in the learning process and the students become receiver (Kuzu, 2007). Furthermore, teachers just ask students to read a text, to look for the difficult words in the text, to answer the questions and to find the main idea of the text.

Based on the problem above, the students are not interested in understanding the material, are lazy to read and are not excited during the lesson. Therefore, teachers should know the way to solve the problem, for example, teachers should modify the methods that have been applied to the instructional process. By doing so, it is expected the students can be more active in learning and can understand the material.

To solve these aforementioned problems, it is necessary to use the Student Teams Achievement Division (STAD) as a strategy in teaching. Student Teams Achievement Division (STAD) is a cooperative learning involving students working in groups and interacting with the aim to achieve maximum results in mastering the material. So, the students will be encouraged to understand the lesson, help friends in understanding the text and solving problems together that make them solid group and of course the group has a responsibility for their members. Balfakih (2003) stated that is more effective to apply STAD strategy than conventional in the teaching-learning process.

METHODOLOGY

Participants of the Research

The participants of this research were the second year students of SMAN 1 Benai. The researcher did the research on class XI MIPA 2 which consisted of 35 students. The sample was selected by using random sampling technique.

The Data Collecting Technique

To collect the data, it is necessary to use a reading test in this research. The result of the test is to find out whether the students have good comprehension or not. Arikunto (2006) states that test is a media consisting of several exercises or questions given to individuals or groups so that at the end of the activity can be known the level of intelligence, skills, knowledge, and talents owned by them.

Before the pre-test, treatment, and post-test given to students, a try out was distributed in order to know the reliability and validity of the test.

To know the difficulty level of the test, the formula that will be used as follows:

$$F.V = \frac{R}{N}$$

Where:

F.V = difficulty level

R = the number of correct answers

N = the number of the students

(Heaton, 1991)

a. To know the mean score, the writer used the formula as followed:

$$M = \frac{\sum fx}{N}$$

Where:

M = the mean score in each topic

$\sum fx$ = the sum of the respondents' scores

N = the number of the respondents

(Hatch and Farhady, 1982)

b. To know the standard deviation

$$SD = \sqrt{\frac{\sum (x-x)^2}{N}}$$

Where:

SD = standard deviation

$\sum d$ = the squared deviation of the scores of the research's object

N = the number of the students

According to Heaton (1975) reliability is a necessary characteristic of any good test. A test is said valid when it is reliable as a measuring instrument.

c. To know the reliability

$$R_{ii} = \frac{N}{N-1} \left[1 - \frac{m(N-M)}{NX^2} \right]$$

Where:

R_{ii} = the reliability of the test

N = the number of the items in the test

M = the mean score on the test for all the tests

X² = the standard deviation of all the test scores

(Heaton, 1991)

Table 1. The Classification of the Reliability of the Test

Reliability	Classification
0.71-1.00	Very High
0.41-0.70	High
0.21-0.40	Sufficient
0-0.20	Low

(Tinambunan, 1988)

A pre-test was distributed to find out students' comprehension on analytical exposition text before the treatment given to students, and after applying the treatments, the post-test given in order to know whether or not the effect of STAD strategy on comprehending analytical exposition text.

The tryout test was carried out at Class XI IPA 3 SMAN 1 Kuantan Hilir in order to measure the validity and reliability of the test. Meanwhile, the pre-test was given to students at class XI MIPA 2 SMAN 1 Benai.

Based on the calculation, it was found that there were 5 items should be revised. 3 out of them were rejected because the score of validity value below 0.30 which meant that those items were too difficult to answer. Meanwhile, 2 items were rejected because the score of validity value above 0.70 which meant that items were too easy to answer. Then, the reliability of the test calculated by the mean score and standard deviation. The result showed that the mean score was 19.55, the standard deviation is 1.8, and the reliability of the test is 0.91

The Data Analyzing Technique

This research used tests to collect data in order to find out the result of students' comprehension of analytical exposition text through STAD strategy. To catch on the effect of STAD strategy of students' comprehension on reading the analytical exposition text, the t-test was used in comparing the results of the reading test through pre-test and post-test. Besides, Microsoft Excel 2007 and SPSS 23.0 for windows was

used to establish t-test score, the mean, variance, and accurately a tested data. The following was the classification of students' scores.

Research Findings

A pre-test was conducted to measure students' ability in reading comprehension before applying STAD strategy in the instructional process. The test was composed of three texts with 30 questions. Each text provided ten questions. The test was a multiple-choice type with five options. After collecting the data, the results of pre-test shown that students' comprehension was still low in comprehending each aspect of reading. It was found out that the average score of the students' reading comprehension in the pre-test was 46.14.

The data of students' score in pre-test is shown in Table 2 as in the following.

Table 2. The Students' Comprehension in Pre-test

No.	Range Score	Frequency	Percentage	Category
1	81-100	0	0	Excellent
2	61-80	2	5.7	Good
3	41-60	19	54.3	Mediocre
4	21-40	14	40	Poor
5	0-20	0	0	Very Poor
	Total	35	100	

The table 2 shown the highest category was in "Good" level with 2 students and the lowest category was in "Poor" level with 14 students. Further, the data of students average achievement on the eight aspects of reading is shown in Table 4.2

Table 3. The Students' Comprehension in Each Aspect of Reading in Pre-Test

No	Aspects of Reading	Average
1	Factual Information	40
2	Main Idea	49.14
3	Identifying Restatements	46.67
4	Reference	47.62
5	Inference	47.14
6	Generic Structures	40
7	Language Features	42.86
8	Identifying Purposes	36.19
An average total score of		46.14

Table 3 exposed the average score in the aspects of 'Factual Information' (40), 'Main Idea' (49.14), 'Identifying Restatements' (46.67), 'Reference' (47.62), 'Inference' (47.14), 'Generic Structures' (47.14), 'Language Features' (42.86), and 'Identifying Purposes' (36.19). Based on the description above, the lowest score of the eight aspects of reading was 'Identifying Purposes' and the highest one was 'The main Idea'. The students got the low score on identifying purposes because they did not really

understand about the issues on the text and the highest was the main idea because they understood the ideas in each paragraph. Further, the mean score of the students in pre-test is 46.14

Table 5. The Frequency of Pre-Test

	Frequency
Valid 33.00	3
36.00	3
37.00	5
40.00	2
43.00	3
47.00	4
50.00	5
53.00	4
57.00	2
60.00	2
63.00	1
67.00	1
Total	35

Table 5 it shows that the student who gets score 33, 37, 40, 43, 47, 50, 53, 57, and 60 were categorized as mediocre. The students who got scores of 63 and 67 were categorized as good. Briefly, there were no students who reached an excellent score.

Before post-test was given to the students, the treatment was applied in five meetings. The post-test was conducted in order to know students' reading comprehension after being taught by applying Student Teams Achievement Division (STAD) strategy. Then, the results were found and presented in Table 6.

Table 6. The Students' Comprehension in Post-test

No.	Range Score	Frequency	Percentage	Category
1	81-100	0	0	Excellent
2	61-80	15	43	Good
3	41-60	20	57	Mediocre
4	21-40	0	0	Poor
5	0-20	0	0	Very Poor
	Total	35	100	

Table 6 shows that the highest score was in “Good” level with 15 students and the lowest score was in “Mediocre” level with 20 students. Further, the data of students average achievement on the eight aspects of reading is shown in Table 7.

Table 7. The Students' Comprehension in Each Aspect of Reading in Post-Test

No	Aspects of Reading	Average
1	Factual Information	60
2	Main Idea	62.86
3	Identifying Restatements	60
4	Reference	59.05
5	Inference	58.1
6	Generic Structures	64.76
7	Language Features	60.95
8	Identifying Purposes	64.76
An average total score of		61.03

Table 7 points that the average score in aspect of 'Factual Information' (60), 'Main Idea' (62.86), 'Restatements' (60), 'Reference' (59.05), 'Inference' (58.1), 'Generic Structures' (64.76), 'Language Features' (60.95), and 'Purposes' (64.76). The average score of students' reading comprehension is in 'average' level with the total score in reading aspect was 61.03. As a means, it increases from the average total score in pre-test which was 46.14.

Table 8. The Frequency of Post-Test

	Frequency
Valid 40.00	2
43.00	3
50.00	2
53.00	3
57.00	4
60.00	6
63.00	2
67.00	3
70.00	3
73.00	2
77.00	2
80.00	2
83.00	1
Total	35

Table 8, shows that the students who got a score of 40, 43, 50, 53, 57, 60 were categorized as Mediocre. The students who got scores of 63, 67, 70, 73, 77, 80 categorized as Good. While the students who get a score of 83 was categorized as Excellent.

'T' test formula was used to compare the pre-test and the post-test results in determining whether or not the hypothesis was accepted or rejected.

In carrying out the pre-experimental research, the hypothesis was required to see whether there is a significant difference after the activities were completely

accomplished. The mean of pre-test score (X) was 46.14. Next, when the treatment had been given to the students, the improvement of students' reading comprehension occurred. The improvement could be seen in their mean score as shown in post-test (Y) 61.03. The margin of pre-test and post-test achieved was 14.89. In addition, the results of 't' test formula were also required in order to know the hypothesis could be accepted or rejected. The 't' test formula was presented in Table 9.

$$\begin{aligned}
 t \text{ table} &= n-1; \alpha/2 \\
 &= 1; 0,05/2 \\
 &= 34; 0,025 \\
 &= 2.032
 \end{aligned}$$

Table 9 The T-Test Table

	Mean	N	Std. Deviation	Std. Error Mean
Pair Posttest	61,0286	35	11.78605	1.99221
1 Pretest	46,1429	35	9.32152	1.57562

According to Table 9, the mean score of pre-test was 46,1429 and in the post-test was 61,0286. The difference of the mean score between pre-test and the post-test was 14.89. The distance of mean score shows an effect of students' comprehension in reading test. The spread of values in the sample of pre-test is 9.321 while standard error of the mean was 1.575 and the standard deviation was 11,786 and standard error of mean is 1,99.

Table 10. The Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair Post-test – Pre-test	14.88571	12.60665	2.13091	10.55518	19.21625	6.986	34	.000

Table 10 shows that the results of the test were 14.88, meanwhile, the t-test table was 2.032, that is $14.88 > 2.032$. Hence, it can be concluded that there is a significant difference between pre-test and post-test. In other words, the alternative hypothesis of this research, "There is a significant effect of Student Teams Achievement Division (STAD) Strategy on the reading comprehension of the second year students of SMAN 1 Benai" is accepted and the null hypothesis is rejected.

Table 11. Improvement in Each Aspect of Reading in the Pre-Test to Post-Test

Aspect of Reading	Average Score	
	Pre-Test	Post-Test
Factual Information	40.00	60.00
Main Idea	49.14	62.86
Identifying Restatements	46.67	60.00
reference	47.62	59.05
Inference	47.14	58.1
Generic Structures	40.00	64.76
Language Features	42.86	60.95
Identifying Purposes	36.19	64.76

Discussions

From the results and explanation above, it can be said that Students Teams Achievement Division (STAD) strategy is a practical way to teaching reading comprehension. It can be seen from the improvement of students' score in the pre-test and in the post-test.

This research is focused on eight components of reading comprehension: factual information, the main idea, identifying restatements, reference, inference, generic structures, language features, and identifying purposes. In the factual information, students asked to observe the whole text. Then, in the main idea, students would find the key of what writer offers. Further, in identifying restatements, students in analyzing the relationship of ideas within a single sentence. Next, in reference, students asked to find what is the words in the text refers to. Moreover, the inference is expected to make an accurate prediction can be made by correctly interpreting the indicators a writer gives. In addition, generic structures and language features are very important in the text in order identifying it. The researcher found that the students' score in post-test better than the students' score in the pre-test.

This pre-experiment research has a role in order to get some improvement in teaching reading comprehension. The discussions of the findings are as follows:

1. Teaching reading comprehension by using STAD strategy is an effective way to the Second Year Students of SMAN 1 BENAI in the academic year 2018/2019. STAD strategy is aided can help the teacher in the instructional process. Teachers tend to be more active and more focuses as a facilitator, mediator, motivator, and evaluator (Isjoni, 2010).
2. The students tend to be more active in teaching learning process since STAD strategy had been applied. Every student in their group have two roles; learn for themselves and help group members to learn in order to get the improvement score (Rusman, 2011). Students have tomaster the material because, at the end of the learning process, the teacher would give them a quiz that must be done on their own. Further, in this strategy, the students have a good interaction between them because of their sharing in their own group.
3. The implementation of STAD strategy in the learning process, students are involved to share the problem and their ideas together. If members of the group could not find the solution to the problem, then the other members would help to gain the problem of the text. After all of the group members could figure the problem up, the teacher

would give them the quiz in order to see they are comprehending in analytical exposition text, but the quiz has to do by them individually. Further, the teacher would give the reward to the students whom their score improved from their basic score.

CONCLUSIONS AND SUGGESTIONS

Conclusions

This research is a pre-experimental research is used to find out the improvement of students reading comprehension through STAD strategy. Based on the result of the data analysis, the mean score of students on pre-test is 46.14 while the mean score of students on post-test is 61.03. Briefly, the mean score of the post-test was higher than the mean score of the pre-test. Further, the result of t-test found that the value of t-test was 14.88 and t-table was 2.032. In other words, the t-test was higher than t-table. So, it can be concluded that STAD strategy gave significant effect on students' reading comprehension of SMAN 1 Benai. The use of STAD strategy made the students got easy to comprehend analytical exposition texts. Moreover, the effect of STAD strategy gave the positive contribution and better outcomes to students.

Suggestions

Based on the results of this research, the researcher offers some recommendations to English teacher to use STAD strategy as an effective strategy especially in teaching reading comprehension that makes the students understand the text given to them by sharing the ideas or opinion, works in a group and helps friends in understanding the text in order to make it clear. Further, by using STAD strategy, students can get information, find the main idea, identifying restatements, reference, inference, generic structures, language features and identifying purposes. However, the researcher realizes that this research is far from being perfect. Hence, she recommends that further research needs to conduct.

REFERENCES

- Arikunto, S. 2006. *Prosedur Penelitian: Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta
- Balfakih, M.A. N. 2003. The effectiveness of students-team achievement division (STAD) for teaching high school chemistry in the United Arab Emirates. *International Journal of Science Education* 25(5), 605-624. <http://dx.doi.org/10.1080/09500690110078879>

- Grabe, W. 2009. *Reading in a second language: Moving from theory to practice*. New York, NY: Cambridge University Press.
- Hatch, J.B., & Farhady, H. 1982. *Research design and and statistics for applied linguistics*. Rowley, Mass.: Newbury House
- Heaton, J.B. 1975. *English Language Tests: A Practical Guide for Teachers of English as second or Foreign Language*. London: Longman.
- Heaton, J.B. 1991. *Writing English language test*. New York: Longman Inc.
- King, Carol and Stanley, nancy. 1989. *Building for TOEFL*. Binaaksara: Jakarta.
- Kuzu, Abdullah,. “Views of Pre-Service Teachers on Blog Use for Instruction and Social Interaction” *Turkish Online Journal of Distance Education-TOJDE* July 2007 Volume: 8 Number: 3 Article: 2. Eric. (retrieved date May 23-2018)
- Mikulecky, B.S. 2008. Teaching Reading in a second language. Availabe from: <http://www.longmanhomeusa.com/content/FINAL-LO%20RES-Mikulecky-Reading%20Monograph%20.pdf>.
- Tinambunan, W. 1988. Evaluation of Students’ Achievement P2LTK, Jakarta.