

**THE EFFECTIVENESS OF STUDENT-TEAMS ACHIEVEMENT
DIVISIONS (STAD) METHOD IN TEACHING READING OF EIGHT
GRADE STUDENTS OF SMP MUHAMMADIYAH 1 YOGYAKARTA
ACADEMIC YEAR 2016/2017**

YOSSI ADHYAKSARI

English Language Education Study Program

University of PGRI Yogyakarta

ABSTRACT

YOSSI ADHYAKSARI. 13144700056. 2017. The Effectiveness of Student-Teams Achievement Divisions (STAD) Method In Teaching Reading of Eight Grade Student of SMP Muhammadiyah 1 Yogyakarta Academic Year 2016/2017. Faculty of Teacher Training and Education. University of PGRI Yogyakarta, August 2017.

This research aimed to know the effectiveness of the use Student-Teams Achievement Divisions (STAD) method in teaching reading of eight grade student of SMP Muhammadiyah 1 Yogyakarta. Student-Teams Achievement Divisions (STAD) method is a method that provides more opportunities for students to discuss to their group freely. STAD method also extends student's reading comprehension through reading task with their group.

This research was quasi experiment and technique of sampling used simple random sampling. The population of the research was students of VIII class in SMP Muhammadiyah 1 Yogyakarta academic year 2016/2017. There were 2 classes that used in this research i.e. VIII D as control class and VIII C as experiment class. The research instruments used observation sheet, test of reading comprehension and documentation. Normality test results showed that the data has normal distribution. The test results indicated that the homogeneity of the research was not homogeneous. Then, the data were analyzed using t-test with 5% significance level.

The result of the research shows that students who were taught by using STAD method have average of posttest score was 81, 63 and who were taught without STAD method was 78, 3. The t-test was 4, 16 and t-table was 2, 03. The data shows that t-test was higher than t-table. It means that there was significant difference between the experimental class and control class. From the data, it can be concluded that the use of STAD method in teaching reading was more effective compared with student who were not taught using STAD method.

Keywords: Reading Comprehension, STAD, Effective

ABSTRAK

YOSSI ADHYAKSARI. 13144700056. 2017. The Effectiveness of Student-Teams Achievement Divisions (STAD) Method In Teaching Reading of Eight Grade Student of SMP Muhammadiyah 1 Yogyakarta Academic Year 2016/2017. Fakultas Keguruan Dan Ilmu Pendidikan. Universitas PGRI Yogyakarta, Agustus 2017.

Penelitian ini bertujuan untuk mengetahui keefektifan penggunaan metode Student-Teams Achievement Divisions (STAD) dalam pengajaran membaca pada siswa kelas delapan di SMP MUhammadiyah 1 Yogyakarta. Metode Student-Teams Achievement Divisions (STAD) adalah sebuah metode yang memberikan kesempatan lebih luas untuk siswa berdiskusi dengan kelompoknya secara bebas. Metode STAD juga memperluas pemahaman membaca siswa melalui soal latihan membaca bersama dengan kelompoknya.

Penelitian ini adalah quasi eksperimen dan teknik pengambilan sampel menggunakan simple random sampling. Populasi dalam penelitian ini adalah siswa kelas VIII di SMP Muhammadiyah 1 Yogyakarta tahun ajaran 2016/2017. Ada 2 kelas yang digunakan dalam penelitian ini yaitu VIII D sebagai kelas control dan VIII C sebagai kelas eksperimen. Instrument penelitian yang digunakan adalah lembar observasi, tes pemahaman membaca dan dokumentasi. Hasil tes normalitas menunjukkan bahwa data memiliki distribusi normal. Hasil tes mengindikasikan bahwa homogenitas dalam penelitian ini tidak homogeny. Kemudian, data di analisis menggunakan uji-t dengan level signifikansi 5%.

Hasil penelitian menunjukkan bahwa siswa yang di ajar menggunakan metode STAD memiliki nilai rata-rata postes sebesar 81,63 dan siswa yang di ajar tidak menggunakan metode STAD 78,3. Uji-t sebesar 4, 16 dan t-tabel 2, 03. Data menunjukkan bahwa nivai uji-t lebih tinggi dibanding t-tabel. Maka ada perbedaan signifikan antara kelas eksperimen dan kelas control. Dari data, dapat disimpulkan bahwa penggunaan metode STAD dalam pengajaran membaca lebih efektif disbanding dengan siswa yang tidak di ajar menggunakan metode STAD.

Kata kunci: Pemahaman Membaca, STAD, Efektif

INTRODUCTION

In reading skill for junior high school students, the standard competence expected to be achieved is to understand meanings of very simple short functional written discourses related to their environment. It is not easy to be achieved by some schools. In fact, the most of students in some schools still face difficulties in achieving this learning goal, especially when they learn individually in the classroom in completing the reading tasks (Yusuf, Y.Q., Natsir, Y. & Hanum, L., 2015). Students have difficulties in understanding and comprehending the text. It is because the text is in English that take much time to read and catch the meaning.

These problems are caused by some factors such as students, teacher method, material, and class atmosphere. Students may have low or high motivation in learning in the classroom. It will influence their ability understand reading text they read during the reading class. Moreover, most of students prefer reading some fun reading text, like comics, novels, and magazine to read text material. They prefer reading in a silent way and quiet condition. They do not try to read a text loudly and share to their friends to get better understanding. When they do that, the difficulties appear caused limited vocabularies, sentence construction within paragraph, difficulties in finding the main idea and difficulties in making conclusion of the text.

Another factor is teacher's method. Some teacher use ordinary method by explaining the material through slide presentation, ask them to some questions about the material, and require them to do the students' exercise book (LKS). The material contains unfamiliar vocabularies which is not interesting, because only uses slide presentation and whiteboard. The other factor is class atmosphere. The unsupported classroom condition makes students are not interested to learn.

LITERATURE REVIEW

Reading is a fluent process by combining what the reader's get from the text with their own background knowledge to catch the meaning (Nunan, 2003:68). While Soedarso (2002:4) states that reading is a complex process by focus on the amount of activities separately. It can be concluded that reading is a complex process aims to get the meaning of a text appropriately.

In this research, the researcher use basic competence for eight grade class of junior high school which expected to respond the meaning and rhetorically way in the form of short functional text accurately, smoothly and accepted related to around environment in the form of recount and narrative text. Therefore, the researcher takes functions of reading by Grabe and Stoller in Arini (2013) as the guidelines to arrange indicators in teaching reading skill of recount text material using STAD method.

Table 2
The Functions of Reading

Functions of Reading	Aspects of Reading
1. Reading to find information	Scanning for word, phrase, or information
2. Reading for general understanding	Getting the: 1. main ideas 2. topics 3. supporting ideas and information
3. Reading to learn	1. Understanding references 2. Synonym 3. Antonym
4. Reading to critique and evaluate	Identifying the communicative purpose of the text
	Making inferences based on related topic

(Adopted from: Grabe and Stoller in Arini (2013))

The indicators are: identifying topic, identifying communicative purpose, identifying main idea, identifying synonym, identifying specific information, and making inferences based on related topic of recount text. Student-Teams Achievement Divisions (STAD) method is a method which contributes students' improvement in reading skill through learning group. The structures of STAD method are:

1) Class Presentation

In this part, teacher explains the material in the form of class presentation one or two period of teaching based on the unit of STAD. The unit STAD is emphasis on meaning not memorizing.

2) Team

Team is the important part in STAD. In each team, consist of four to five students in different gender, ethnicity, and achievement. Students given group-work to do together before they working in quiz.

3) Quiz

Quiz is conducted after student learning with their teammate. In this research, quiz conducted in two sessions. But, it can be applied as the teacher's decision.

4) Score of the Individual Progress

After students working in a group-work then they work with individual quiz. The score from group-work is assumed as the basic score, while individual quiz 1 and 2 are the score 1 and 2. The students' improvement score then calculate based on their basic score in group work.

5) Team Recognition

The best team with has the highest improvement score will get the reward in the form of certificate and voucher free lunch in the school's canteen for once.

RESEARCH METHODOLOGY

This research is a quasi-experimental. This research conducted in SMP Muhammadiyah 1 Yogyakarta, on English reading skill of eight grade students on recount text material. Design used in this research is Nonequivalent Control Group Design.

Table 3.1
The Design of Experimental Research
Nonequivalent Control Group Design

Class	Pretest	Treatment	Posttest
Experiment	O ₁	X	O ₂
Control	O ₃	-	O ₄

Note :

- O₁ : *Pretest* result of experiment group
- O₂ : *Posttest* result of experiment group
- X : Treatment of experiment group
- O₃ : *Pretest* result of control group
- O₄ : *Posttest* result of control group

The population of this research are students of eight grade. The sample of this research took two classes of VIII C as control class and VIII D as experiment class. In experiment class was given STAD method, while in control class was given learning by using Lecturer method. Variable used in this research are :

1. Independent variable

Independent variable is variable which has influence or cause of the dependent variable's change (Sugiyono, 2011). The independent variable in this research is Student-Teams Achievement Divisions (STAD) method.

2. Dependent variable

Dependent variable is variable which appears because of independent variable treatment (Sugiyono, 2011). The dependent variable of this research is students' reading comprehension in recount text. The factors controlled are included the following descriptions:

- a. Class learning activities in experiment and control class conducted by the teacher and researcher.
- b. The subject material controlled by giving the same concept for both of the class.
- c. The duration in the both of the class are same.

TECHNIQUE OF DATA COLLECTION

The technique of data collection was obtained through the following steps:

1. Observation

Observation is observation and entry systematically toward visible elements in an indication in the object of education (Widyoko, E.P., and 2014:46). Observation is conducted by observing directly of teaching reading skill by using STAD method in the classroom.

2. Test of students' reading comprehension

In this research the test is aimed to get the result of students' reading comprehension in recount text. The reading comprehension should be mastered by student are: identifying topic, identifying communicative purpose, identifying synonym, identifying specific information (scanning), identifying inferences based on related topic of recount text.

3. Documentation

Documentation method was conducted by taking students' picture in the learning process to give representation concretely of learning process using Student-Teams Achievement Division (STAD).

TECHNIQUE OF DATA ANALYSIS

Firstly, the data obtained in trial out class test the validity, reliability, difficulty level, and differentiation level before given to experiment and control class. Validity and reliability test is used to know the validity and credibility of the question instrument. Second, after obtained pretest the data test normality and homogeneity in experiment and control class. Normality test conducted to know whether the data has normal distribution or not, while homogeneity test to know whether the sample group comes from the same variance.

The level of validity tested use correlation of *product moment*, as in the following formula:

$$r_{xy} = \frac{N \sum xy - (\sum x)(\sum y)}{\sqrt{\{(N \sum x^2 - (\sum x)^2)(N \sum y^2 - (\sum y)^2)\}}}$$

(Suharsimi, 2006:170)

Note :

r_{xy} : coefficient correlation of product moment

$\sum X$: total score of each item

$\sum y$: total score of all items

N : respondent quantity

In this research, the test of reliability instrument used technique of coefficient Alpha Cronbach. The formula to count the instrument's reliability is as the following description (Suharsimi, 2006:109) :

$$r_{11} = \left(\frac{n}{n-1} \right) \left(1 - \frac{\sum \sigma_i^2}{\sigma_t^2} \right)$$

Note:

r_{11} : the reliability seek

n : total item

$\sum \sigma_i^2$: the quantity of variance score of each item

σ_t^2 : total variance

A notion shows difficult and easy of a question is called difficulty index. The formula used to count the difficulty level of multiple choice question in Karunia (2015:224)

Table 3.7

The Category of Difficulty Level

Difficulty Level (DL)	Criteria
$0,00 \leq DL < 0,30$	Difficult question
$0,30 \leq DL < 0,70$	Average question
$0,70 \leq DL \leq 1,00$	Easy question

(Adopted from :Arifin, 2013:134-135)

The differentiation of instrument is an ability of a question to differentiate between high ability student with low student. According to Karunia (2015 :217) to interpret the coefficient of differentiation can use the following criteria.

$$DP = \frac{\bar{X}_A - \bar{X}_B}{SMI}$$

Note :

DP : Index of differentiation level of items

\bar{X}_A = the average of upper group

\bar{X}_B = the average of lower group

SMI = maximum score

Based on the posttest data, it was obtained the result as in the following calculation.

$$\bar{X}_1 = 89,50556; s_1^2 = 21,868; n_1 = 27$$

$$\bar{X}_2 = 78,30618; s_2^2 = 109,194; n_2 = 34$$

According to Karunia (2015: 283), the calculation of posttest data which has homogeneous variance and which not has homogeneous variance used the different formula. Because the data of this research was not has homogenous variance, so used the following formula i.e.:

$$\begin{aligned} t_{hitung} &= \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}} \\ &= \frac{89,50556 - 78,30618}{\sqrt{\frac{21,868}{27} + \frac{109,194}{34}}} \\ &= \frac{11,19938}{\sqrt{0,809925926 + 3,211588}} \\ &= \frac{11,19938}{0,8995885 + 1,79209} \\ &= \frac{11,19938}{2,692049} \\ &= 4,160169 \end{aligned}$$

To find the value of t-table which has not homogeneity variance, so used the following formula.

$$\begin{aligned} t'_{(\alpha)} &= \frac{\frac{(t_1 s_1^2)}{n_1} + \frac{(t_2 s_2^2)}{n_2}}{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}} \\ &= \frac{\frac{t(0,05;26) s_1^2}{27} + \frac{t(0,05-33) s_2^2}{34}}{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}} \\ &= \frac{\frac{(2,055553)21,868}{27} + \frac{(20,345)(109,194)}{34}}{\frac{21,868}{27} + \frac{109,194}{34}} \\ &= \frac{\frac{44,95083}{27} + \frac{222,1552}{34}}{0,809926 + 3,211588} \\ &= \frac{1,664846 + 6,533976}{4,021514} \\ &= \frac{8,19882193}{4,021514} \\ &= 2,03874 \end{aligned}$$

FINDINGS AND DISCUSSION

Observation Sheet

The observation conducted to observing learning process by using STAD method. The result of the observation in experimental class, i.e :

Table 4.1
The Result of the Implementation of Learning Observation
by Using Student-Teams Achievement Divisions (STAD) method

Meeting	1	2
The Average Percentage	83%	96%
Criteria	Very Good	Very Good

Therefore, from the table 4.1 above, can be concluded that learning by using Student-Teams Achievement Divisions (STAD) method was 89,5%. It includes “very good” category. The following table is the score of student in experimental and control class in pretest and posttest.

Table 4.2 The Result of Pretest in Control and Experiment Class

Statistic	Control Class (VIII D)	Experiment Class (VIII C)
Variance	43,55	39,99
Standard Deviation	6,6	6,32
Mean	59,53	58,63
The Lowest Score	50	50
The Highest Score	71	71

Table 4.3 Posttest Result of Control and Experiment Class

Statistic	Control Class (VIII D)	Experiment Class (VIII C)
Variance	109,194	79,149
Standard Deviation	10,450	8,897
Average	78,31	81,63
The Lowest Score	54,16	66,66
The Highest Score	91,67	95,83

Based on the table above, can be concluded that score of posttest in experimental class was higher than posttest in control class. Therefore, the use of STAD method is effective to use in teaching reading of eight grade students of SMP Muhammadiyah 1 Yogyakarta.

CONCLUSION

Based on the research and finding, therefore, it can be concluded some of the following descriptions:

1. There are difference significant average of the results test of student reading

comprehension of student VIII grade of SMP Muhammadiyah 1 Yogyakarta, between student who were taught by using Student-Teams Achievement Divisions (STAD) method and Lecturer method in improving reading comprehension.

It can be proved from the result of statistic calculation, whereas the value of t_{hitung} in the rejection area H_0 because $t_{hitung} > t_{table}$ or $4,160169 > 2,03874$ so H_0 is rejected. It means that in the credibility level of 95%, there are differences average of student reading comprehension ability between experiment class which used Student-Teams Achievement Divisions (STAD) method and control class which used Lecturer Method.

2. The Student-Teams Achievement Division (STAD) method is better than

Lecturer Method toward the student's reading comprehension ability of VIII grade student of SMP Muhammadiyah 1 Yogyakarta. It can be seen from the result of statistics calculation which credibility level amount 95%. The value of t_{hitung} in the rejection area H_0 because $t_{hitung} > t_{table}$ or $4,160169 > 2,03874$. Therefore H_0 is rejected.

3. The average ability of student's reading comprehension which is given

Student-teams achievement division (STAD) in experiment class is better than control class which given Lecturer Method. It can be seen from the mean score of posttest which used STAD Method is 81, 63 whereas which used Lecturer Method is 78, 30.

REFERENCE

- Ayu Arini. 2013. *Improving Students' Reading Comprehension of Narrative Text Through Jigsaw Technique*. Jakarta: Universitas Islam Negeri Syarif Hidayatullah
- Eko Putra Widyoko. 2014. *Teknik Penyusunan Instrumen Penelitian*. Yogyakarta: Pustaka Belajar
- Grabe, W., Stoller, F.L. 2002. *Teaching and Researching Reading*. London: Longman Press
- Lestari, E.K, Yudhanegara, R.M. 2015. *Penelitian Pendidikan Matematika*

(*Panduan Praktis Menyusun Skripsi, Tesis, dan Karya Ilmiah dengan Pendekatan Kuantitatif, Kualitatif, dan Kombinasi Disertai dengan Model Pembelajaran dan Kemampuan Matematis*). Bandung: PT. Refika Aditama

Nunan, David (Ed). 2003. "*Practical English Language Teaching*". New York: The McGraw-Hill Companies, Inc

Slavin, R. E. Tanpa Tahun. *Cooperative Learning: Teori, Riset, dan Praktik*. Terjemahan oleh Narulita Yusron, 2015. Bandung: Penerbit Nusa Media

Soedarso. 2002. *Speed Reading: Sistem Membaca Cepat dan Efektif*. Jakarta: PT Gramedia Pustaka Utama

Sugiyono. 2011. *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: Penerbit Alfabeta

Suharsimi Arikunto. 2010. *Prosedur Penelitian Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta

Yusuf, Q.Y., Natsir, Y. & Hanum, L. 2015. "*International Journal of Instruction: A Teacher's Experience in Teaching with Student Teams-Achievement Divisions (STAD) Technique*". *Jurnal Ilmu Pendidikan*, vol. 8, No. 2: 99

Zaenal Arifin. 2013. *Evaluasi Pembelajaran*. Bandung: PT Remaja Rosdakarya