



## THE USE OF 20-SQUARES: ADD ONE MORE WORD AND WORD CLAP GAMES TO TEACH VOCABULARY

A Quasi Experimental Study at the Seventh Graders of SMPN 5 Magelang in the Academic Year 2015/2016

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### Abstract

*The study has objectives to find out whether 20-Squares: Add One More Word can be used in teaching vocabulary to the seventh graders of SMPN 5 Magelang and to find out whether there is a significant difference of the use of 20-Squares: Add One More Word and Word Clap Games in the students' vocabulary achievement. The subjects of this study are two classes of seventh grade of SMPN 5 Magelang. One class serves as the control group and one class as the experimental group. This is a quasi-experimental research by using non-equivalent control group design. The instrument used is tests. The result shows that 20-Squares: Add One More Word improves the students' vocabulary mastery. The result of t-test analysis shows that the experimental group get better achievement than the control group. In the pre-test, the average score of the experimental group is 63 and the control group is 62.67. In the post-test, the average score of experimental group is 81,17 and the control group is 70,67. The result of the t-test is 3.895 and t-table is 1.67. It means that the t-value is higher than t-table ( $3.895 > 1.67$ ). Therefore, it can be concluded that 20-Squares: Add One More Word can be used as an alternative way in teaching vocabulary.*

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## INTRODUCTION

Language takes an important part in social relationship among human beings. People need language to express their feeling, thought and desire. People use language to communicate properly with others in many fields and places. One of the languages that are most widely spoken in the world is English. As cited by Harmer (2001:1), although English is not the largest number of native or 'first' language speakers, it is widely used by many people all over the world as their 'second' language. People have to master it well since it is one of the most widely spoken languages in the world.

Regarding to the importance of English, it has accordingly been chosen as the first foreign language to be taught in some schools in Indonesia (Ramelan, 1992:6). As stated in School Based Curriculum (2006:36), the purposes of English language teaching are to develop students' competence in spoken and written communication and to reach the informational literacy level.

Vocabulary is one of the most important components that has to be firstly learnt because people could not express what they want if they do not have enough vocabulary. "Without grammar very little can be conveyed, without vocabulary nothing can be conveyed" (Thornbury, 2002: 13). People can still understand what others try to convey by any vocabularies although the grammar is incorrect.

Dellar and Hocking in Thornbury also quotes (2002: 13):

If you spend most of your time studying grammar, your English will not improve very much. You will see most improvement if you learn more words and expression. You can say very little with grammar, but you can say almost anything with words!

Based on the writer's experience in her internship in the Junior High School, most of the seventh graders found difficulties in acquiring new vocabulary since they have not got English subject in their elementary school.

Teaching vocabulary for beginner students is different from teaching vocabulary to intermediate or advanced students. They have different characteristics, attention, and ability. By doing so, teacher should choose an appropriate technique in teaching vocabulary to those different levels of students. Teachers are expected to be creative to create enjoyable activities in order to make the students attract the learning. . If the teachers can not attract the students to enjoy the learning, it might be difficult to reach the goal of the lesson.

Teaching vocabulary to the beginners should be more fun than teaching to intermediate and advanced students because a monotonous teaching technique can make students get bored easily. Based on the explanations above, one of the problems is the students feel anxious, afraid, and bored because teachers still use the same monotonous teaching technique to teach vocabulary.

This problem existed in the seventh graders of SMPN 5 Magelang in the academic year of 2015/2016. Most of them got bad marks in doing shopping list midterm test. Thus, to overcome the problem, the writer tried to help them to learn shopping list lesson by using 20-Squares: Add One More Word.

20-Squares: Add One More Word is a kind of vocabulary game in which students are divided into and work in groups. Each group consists of 4 students. Each two students in a group will be given a piece of paper that consists lists of words in 20 squares. Every square contains three words which have the same type, for example: a group of fruit (apple, orange, grape,..., etc.), a group of flower (jasmine, rose, tulip, . . .etc.). Then, students have to try to add one extra word (in the same type) to three that are already given in every square. This game has purpose to ease the students learn vocabulary by grouping the words.

The writer chooses 20-Squares: Add One More Word because the game is practical and simple to be applied in class. The game is also suitable to teach English vocabulary for beginner students because this game is a kind of word grouping that will ease the students in learning new words. This game can also build students' self-confidence because this game is played in groups. The writer expects that by using 20-Squares: Add One More Word, students can memorize new vocabularies easily and enjoy the learning.

This issue motivates the writer to conduct a research on the students' vocabulary achievement to the seventh graders in SMPN 5 Magelang. The writer is interested in conducting a research to find out the student's achievement in learning shopping list lesson by using 20-Squares: Add One More Word game.

## METHODOLOGY OF THE RESEARCH

This study uses a quasi-experimental as the research design. According to Creswell (2009: 154), quasi-experimental is a form of experimental research in which individuals are not randomly assigned to groups. In this study, non-equivalent control group design was used. A non-equivalent groups design includes an existing group of participants who receive a treatment and another existing group of participants to serve as a control group. The subject of this study was seventh graders of SMPN 5 Magelang in the academic year 2015/2016. The writer divided the subject of the study into two groups, VII H assigned to experimental group and VII G as control group. During the treatment, students in experimental group used *20-Squares: Add One More Word* in teaching vocabulary, while students in control group used *word clap game*.

In order to collect data about students' vocabulary mastery improvement between the two groups and to compare the effectiveness of two games in improving students' vocabulary mastery, the writer used vocabulary test as a main instrument.

The research design of the study can be described as follows:

R	01	X	02
R	<b>03</b>	<b>Y</b>	<b>04</b>

in which,

R: respondents,

01 : pre-test for the experimental group

02 : post-test for the experimental group

03 : pre-test for the control group

04 : post-test for control group

X : treatment using 20-Squares: Add One More Word

Y : treatment using Word Clap

In this study, the writer divided the subjects of the study into two groups, an experimental group and a control group. Before and after the experiment, both groups were given pre-test and post-test of vocabulary knowledge. Both groups took pre-test (01) and (03) to check the equivalence between the two groups before getting the experiment. During the experiment, the experimental group was taught by using *20-Squares: Add One More Word* (X), while the *Word Clap* (Y) was performed to the control group. After the experiment, the same post-tests (02) and (04) were administered to investigate whether any significant differences in learning vocabulary between the two groups.

The result of test was analyzed using t-test formula to make sure whether there was a significant difference between pre-test and post test of the experimental and control groups and to know which strategy was more effective to improve students' vocabulary mastery. However, the standard deviation should be computed before counting the t-test. The formula of standard deviation is as follows:

$$S = \sqrt{\frac{(n_1-1)s_1^2 + (n_2-1)s_2^2}{n_1 + n_2 - 2}}$$

In which,

s = standard deviation of both groups

$n_1$  = students amount of experimental group

$s_1$  = standard deviation of experimental group

$n_2$  = students amount of control group

$s_2$  = standard deviation of control group

To find out the t-value of the significant difference between the two means of the pre-test and post-test, the formula is as follows:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{s \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

In which,

t = t-value

s = standard deviation of both groups

$\bar{X}_1$  = mean of experimental group

$n_1$  = students amount of experimental group

$\bar{X}_2$  = mean of control group

$n_2$  = students amount of control group

## RESULT AND ANALYSIS

### Pre Test Findings

The writer first gave pretest to control and experimental classes. In the instrument of pretest, there were 20 multiple choice items about vocabulary related to Shopping List. In doing the test, the writer gave 40 minutes to complete the test. Based on the result of the pretest, the total scores of the experimental group is 1890 and mean score of this group was 63.00. Different from the experimental group that the total scores of pretest in control group was 1880 and the mean score was 62.67. The result of pretest in control group was slightly different from the experimental group. So, the writer concluded that two groups had equal level vocabulary mastery before getting the treatment, therefore, the experiment could be continued.

### Implementation of the Experiment

After conducting pretest to both classes, VIIG and VIIH as control group and experimental group, the next step is giving treatment. The control group, VII G was taught using *Word Clap Game*,

and the experimental group, VII H was taught by using *20-Squares: Add One More Word*. Both classes were taught with the same topic and materials: Shopping List, but different in learning technique.

### **First Treatment**

The first treatment for the control group was done on May 23th, 2016, while the first treatment of the experimental group was conducted on May 27th, 2016. After teaching about the material, the writer gave *20-Squares: Add One More Word* game in the experimental group and *Word Clap Game* in the control group. The writer told the students how to play the games in short explanation. After playing the game, the writer reviewed about the vocabulary that had been taught related to the material.

### **Second Treatment**

The second treatment for the control group was conducted on May 30th, 2016 and the second treatment of the experimental group was performed on June 3rd, 2016. The writer asked the students some questions about the material which had been learned in the previous meeting. The writer asked them to explain the difference between countable and uncountable nouns in items of shopping list. The writer's purpose was to check whether students still memorized the material which they had learned in the previous meeting or not.

After several minutes in repeating the previous material, they were given singular and plural material, then the writer administered the games related to the material. The students were excited playing the games. The game proved that the competition atmosphere made students put much effort and explored all their ability in order to win the game.

### **Third Treatment**

After conducting two times treatments, the writer conducted the last treatment. The treatment for the control group was conducted on June 6th 2016 and the treatment of the experimental group was performed on June 10th, 2016. In this last treatment, the students were still excited to play the game. They were always asking for the next games.

The writer then reviewing the last two materials that have been learned in the previous meeting. Afterwards, the writer gave the last games treatment to the students. The students were still excited to play the game. After playing the game, the writer reviewed the three materials in the treatments.

### **Post Test Findings**

After the treatments were conducted, the writer gave the posttest for both groups on June 13<sup>th</sup>, 2016. The purpose of the posttest is to find out the students' improvement in vocabulary mastery after receiving the treatments.

Based on the posttest result, the total score of experimental group was 2435, whereas total score of control group was 2120. The experimental group got mean score 81.17 while the control group got mean score 70.67. It meant the students' improvement of experimental group was higher than control group. In rather simple observation, there was a significant difference in vocabulary mastery between students of experimental group and control group after getting the treatment by using *20-Square: Add One More Word*. Based on the post test results, it can be concluded that *20-Square: Add One More Word* was more effective to improve students' vocabulary mastery than *Word Clap*.

### **Mean Scores Differences between Pre Test and Post Test of Experimental Group and Control Group**

The significant difference of the experiment could be seen through the difference of means scores in two groups.

the mean score of the pretest of the experimental group

$$M_x = \frac{1890}{30} \\ = 63$$

the mean score of the pretest of the control group

$$M_y = \frac{1880}{30} \\ = 62,67$$

the mean score of the post test of the experimental group

$$M_x = \frac{2435}{30} \\ = 81,17$$

the mean score of the post test of the control group

$$M_y = \frac{2120}{30} \\ = 70,67$$

The results above showed that the mean score of the pre-test in the experimental group was 63. Meanwhile, the mean score of the post test was 81,17. The percentage of the students' improvement of this group was 18,17%. Therefore, there was a significant improvement between the pretest and the post test scores achieved by the students of the experimental group.

The mean scores of control group also showed an improvement. It was 62,67 in the pretest and 70,67 in the post test. In this group, there was less improvement than the experimental group. The improvement was only 8%. It means that the difference mean score on the experimental group was higher than in the control group. In short, the writer concluded that there was better improvement of the experimental group's achievement after they received the treatment by using *20-Square: Add One More Word* to teach vocabulary.

The clear comparison of mean scores between two groups can be seen in the following table:

Mean Scores Comparison

Group	Pre-test	Post-test	Progress
Experimental	63	81,17	18,17%
Control	62,67	70,67	8%

**Table 3.1** Comparison of mean scores between two groups

The table above demonstrated that there were improvements in both groups. However, the progress of the experimental group which was taught by *20-Square: Add One More Word* was higher than the control group which was taught using *Word Clap Game*. Then, the results were tested by using t-test to prove the significant improvement of both groups.

### T-Test Statistical Analysis

The result of the t-test becomes the quantitative proof whether there is a significant difference of the pre-test and post-test between two groups or not. The following is the result score of posttest between both groups:

	Experimental Group	Control Group
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$\Sigma$ (the total score)	2435	2120
N	30	30
Mean	81,17	70,67
Variance ( $s^2$ )	94,2816	123,6782
Standard deviation (s)	9,71	11,12

Hypotheses :  
Ho :  $\mu_1 = \mu_2$   
Ha :  $\mu_1 \neq \mu_2$

Ho is accepted if  $t_{\text{value}} < t_{\text{table}}$

Before analyzing the scores by using t-test formula, firstly, the standard deviation should be counted. The formula of standard deviation is as follows:

$$s = \sqrt{\frac{(n_1-1)s_1^2 + (n_2-1)s_2^2}{n_1 + n_2 - 2}}$$

In which,

s = standard deviation of both groups

$n_1$  = students amount of experimental group

$s_1^2$  = variance of experimental group

$n_2$  = students amount of control group

$s_2^2$  = variance of control group

To find out the t-value of the significant difference between the two means of the pre-test and post-test, the formula used is as follows:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{s \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

In which,

t = t-value (t-test)

s = standard deviation of both groups

—  $\bar{X}_1$  = mean of experimental group

$n_1$  = students amount of experimental group

—  $\bar{X}_2$  = mean of control group

$n_2$  = students amount of control group

The computation of standard deviation of post test scores was as follows:

$$S = \sqrt{\frac{(30-1)94,28 + (30-1)123,68}{30 + 30 - 2}}$$

$$= 10,4393$$

After getting the standard deviation score, then t-test formula was applied in order to find  $t_{\text{value}}$ . Next,  $t_{\text{value}}$  was consulted with  $t_{\text{table}}$ . If the number of participants of both groups were 30 students,  $dk = 30+30 - 2 = 58$  and significance level ( $\alpha$ ) = 5%, so  $t_{\text{table}}$  was 1,67. Based on the criteria, if  $t_{\text{value}}$  exceeded  $t_{\text{table}}$  ( $t_{\text{value}} > t_{\text{table}}$ ), it meant that there was a significant difference in vocabulary mastery between students of experimental group and students of control group. On the contrary, if  $t_{\text{value}}$  was less than  $t_{\text{table}}$  ( $t_{\text{value}} < t_{\text{table}}$ ), the vocabulary achievement between experimental and control groups were not significantly different.

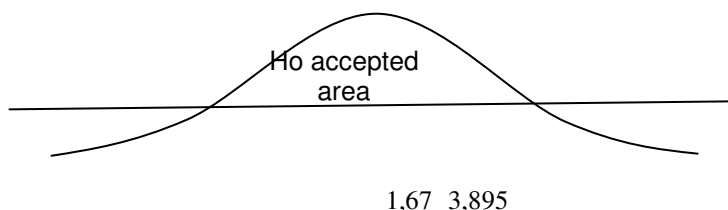
From the computation above, it can be seen that standard deviation of post test scores was 10.4393. Next, the standard deviation was applied in t-test formula to get  $t_{\text{value}}$ . The computation of  $t_{\text{value}}$  by using t-test formula was as follows:

$$t_{\text{value}} = \frac{\bar{X}_1 - \bar{X}_2}{S \sqrt{\frac{1}{N_1} + \frac{1}{N_2}}}$$

$$t_{\text{value}} = \frac{81,17 - 70,67}{10,4393 \sqrt{\frac{1}{30} + \frac{1}{30}}}$$

$$t_{\text{value}} = 3,895$$

For  $\alpha = 5\%$  and  $df = 30 + 30 - 2 = 58$ ,  $t_{(0.95)(58)} = 1,67$



Based on the computation above, it showed that there was a significant difference on post test result between experimental and control groups because  $t_{\text{value}}$  exceeds  $t_{\text{table}}$  ( $3,895 > 1,67$ ).

Since  $t_{\text{value}} > t_{\text{table}}$ , the null hypothesis ( $H_0$ ) is rejected and the alternative hypothesis ( $H_a$ ) that there is a significant difference in vocabulary achievement between the students who were taught by using *20-Square: Add One More Word* and those who were taught by using *Word Clap*, is accepted. It means, teaching vocabulary by using *20-Square: Add One More Word* is more effective to improve students' vocabulary mastery of the seventh grade of SMP N 5 Magelang in the academic year of 2015/2016 than *Word Clap Game*.

The result proved that the working hypothesis or the alternative hypothesis ( $H_1$ ), "There is significant effect in the use of *20-Squares: Add One More Game* to teach vocabulary" is accepted.

## CONCLUSIONS

*20-Square: Add One More Word* was well-accepted by the students. During the activity, they looked active and enthusiastic. *20-Square: Add One More Word* enriched the participants' vocabulary. It was proven by the participants' improvement of vocabulary knowledge after the treatment of *20-Square: Add One More Word*. The result of t-test analysis showed that the experimental group got better achievement than the control group. In the pre-test, the average score of the experimental group was 63 and the control group was 62.67. In the post-test, the average score of experimental group was 81,17 and the control group was 70,67. The result of the t-test was 3.895 and t-table was 1.67. It means that the t-value was higher than t-table ( $3.895 > 1.67$ ). It can be concluded that *20-Squares: Add One More Word* is effective to be used as a vocabulary teaching technique and it can be used as an alternative way in teaching vocabulary.

Furthermore, based on the data findings and analysis, the writer concludes that there is a significant difference in the students' achievement of their vocabulary mastery between the experimental and the control groups after they got the treatments. In addition, the t-test analysis resulted the students' improvement in mastering vocabulary has been determined which suggests that *20-Square: Add One More Word* is an effective technique which contributes to the students' vocabulary mastery. The treatment given to the experimental group affects the students' vocabulary mastery. It can be applied easily in the teaching and learning process and make the students participate in the learning activities actively.



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