

USING WORD SQUARE GAME TO TEACH VOCABULARY TO THE SECOND GRADERS OF SMP NEGERI 2 PAKEL

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Abstract: One of the games used in teaching vocabulary is word square game. Word square game is one of games which is used to the teacher in learning goal. Word square game is a set of words arranged so it can be read left to right, right to left, top to bottom, and bottom to up. It is used to be easier the students absorb materials in their learning process and it is a one of review and assesses new vocabulary. It will help teacher easier to teach vocabulary and it will help the students get new word easier to mastery vocabulary. The research design was pre experimental design with one group pretest and posttest with quantitative approach. The population of this research was all students of second grade at SMP Negeri 2 PAKEL. The sample was VIII^C class consisting of 26 students through random sampling. The research instrument was test. The data analysis was T-test. The research finding in this research showed that the difference between the averages of students' vocabulary score before they are taught using word square game was 56.69. While the students' vocabularies score after they are taught using word square game was 73.46. Statistical calculation using T-test showed that significance value < 0.05 . The T_{count} was -12.637. This means that H_0 which states that there is no significant effect in using word square game to teach vocabulary to the VIII^C grade at SMP Negeri 2 PAKEL is rejected. In other words, word square game can be used as an alternative to teach vocabulary to the students at Junior High School level.

Keywords: word square game, vocabulary

In learning English, we usually need four skills like listening, speaking, reading, and writing. Vocabulary is a one of primary factors after grammar, spelling, and pronunciation in learning English. Richard and Renandya (2002: 255) said that Vocabulary is core component of language proficiency and provides much of the basis for how well the students speak, listen, read, and write. Therefore, vocabulary is important basic to learn English.

In the Junior High School, English is not the new something for students. Many students find difficulty to enrich their vocabulary or to memorize that new word given by teacher. In teaching vocabulary, the teacher must have creativity in teaching and learning process with creates the interesting of teaching media in their classroom activities. This media can be created through game. This game is used to make the students catch easily about what they have learned.

Games are seen as merely time-fillers and their potential for real learning is not recognized (Brewster, Ellis with Girard, 2010:172). This game is given to give the new atmosphere for students. Word Square game can make teaching English especially in improving vocabulary to be more interest. Word square game is a set of word game arranged in a square such that they read same horizontally, vertically, or diagonally.

Using of Word Square game can make the students to be active because this game is always followed by discussion or teacher' explanation. Besides, it can make the students be independent because they are asked to be discipline with their task, can more understanding about material because they can remember and understand the teacher' concept easily, and can give motivate for students to study more.

Based on the above advantages of word square game, this research was conducted to know whether there is any significant difference in the students' mastery of vocabulary between before and after being taught by using word square game.

METHOD

In this research, the researcher used pre experimental with one group pretest-posttest design. So, the researcher used pre experimental design by comparing between the experimental group (x) and the control group (y). Experimenter used the same subject as control group and experimental group by giving different treatment phases to the different time. The class before taught using word square game was indicated as a control group. Thus, this class after being taught using word square game was indicated as an experimental group. Both an experimental group and a control group in this research were taken from the same students.

The procedures of pre experimental with one group pretest-posttest design involve pretest, treatment, and posttest. In pretest and posttest group the observation do two times, before giving treatment called pretest and after giving treatment called posttest. The class before taught using word square game was functioned as pretest. Thus, the class after being taught using word square game was functioned as the posttest. All gained data were treated and analyzed. For the data, it would be treated and interpreted in a form of description. While the

other, data that was the students' scores obtained from the pretest and posttest would be analyzed statistically using the paired T-Test.

The population of this research were second grade in SMP Negeri 2 PAKEL, which consists of four classes from A class until D with C class students who consisted of 26 students as sample. Meanwhile, random sampling was chosen as a technique of choosing sample, because the random sampling is the best single way to obtain a representative sample. Besides, the researcher also admits that all subjects were homogeny in their skills especially in their vocabulary.

The Null Hypothesis (Ho) used in this research was there are no different significant scores of students before and after being taught by using word square game towards the mastery of vocabulary of the second grade at SMP Negeri 2 PAKEL. Meanwhile, the Alternative Hypothesis (Ha) was there are different significant scores of students before and after being taught by using word square game towards the mastery of vocabulary of the second grade at SMP Negeri 2 PAKEL.

The validity testing of this research used content validity. Content validity is the degree to which a test measures an intended content area (Gay, 1992: 156). Besides, reliability is the test can be used to know that test is dependable, trustworthiness and consistent. Arikunto (2010: 221) stated if the instrument has been reliable automatically the data is reliable. Based on this research, the researcher used split half method by using spearman-Brown prophecy formula as reliability testing. Split half method required test administration only one once correct answer was given point 1, while incorrect answer was given 0. The formula is $r_{11} = \frac{2 \times r}{1+r}$. Moreover, the test was calculated by using SPSS "20" program.

Pretest was done before treatment process (teaching vocabulary by using word square game). The researcher would do the pretest to know ability's student before giving treatment. The pretest was given on 1 April 2013. This test consisted of vocabulary items with 50 words. The students had to find, arrange, and circle the word randomly in the square vertically, horizontally, or diagonally which was consider as the correct word or good arranging. Then, those words were written again below random word. There were total of 50 words. The time allocated was 60 minutes with 20 minutes to practice this game and 40 minutes to discuss related with topic.

The posttest was done after treatment process (teaching vocabulary by using word square game). It was done to know the final score and to know the students' difference competence before and after they getting treatment. Posttest was given on 13 April 2013. This test consisted of vocabulary items with 50 words. The students had to find, arrange, and circle the word randomly in the square vertically, horizontally, or diagonally which was consider as the correct word or good arranging. Then, those words were written again below random

word. There were total of 50 words. The time allocated was 60 minutes with 20 minutes to practice this game and 40 minutes to discuss related with topic.

The two variables investigated in this research are Word Square Game and vocabulary mastery. The researcher conducted test to know whether there is different result between the students before and after taught by using Word Square Game. The researcher analyses the collected by using the paired T-Test through SPSS program. The analysis of the data would use SPSS program with the following stages: The researcher opened the SPSS program, the researcher computed the mean of data with got into the pretest and posttest data to be analyzed through compare means with chosen paired-samples T-Test, those data got again into paired variables columns, before getting the result, the researcher would choose option to decide confidence interval percentage 95%, after those processing, the researcher click "ok" to get the result, before finishing, the researcher looked up in the degrees of freedom. The number of degrees of freedom (df) was the number of observations free to vary around a constant parameter. The formula according Ary, et. al (2010: 177) is $df = N - 1$. The t value has to greater than the significance levels two-tailed 5%, because this showed if this research could be accepted or rejected the null hypothesis (H_0).

In the hypothesis testing, we as researcher always referred to the null hypothesis. The null hypothesis is a statistical hypothesis, because it states that there is no relationship between the variables in the population. The basic formula of null hypothesis is $H_0: \mu_1 = \mu_2$, meanwhile the alternative hypothesis is $H_0: \mu_1 \neq \mu_2$. The criteria for accepting or rejecting the null hypothesis as follows: H_0 is rejected if significant value < 0.05 and H_0 is accepted if significant value > 0.05 .

FINDINGS

To know whether there is different result between the students before and after taught by using Word Square Game. The researcher observes the condition of the students' vocabulary mastery by using word square game through the test. This test is called pretest. After the researcher getting the result of pretest, the researcher gives treatment to the students by using word square game to improve their vocabulary. When treatment has finished, the researcher gives test again to know students' ability after being taught by using word square game. This test is called posttest. This group consists of 26 students who learned vocabulary using word square game. The result of test will be presented below.

Table 1. The percentages of students' vocabulary before using word square game

Grade	Criteria of score	Frequency (f)	Percentage (p) %
A	80-100	-	0 %
B	70-79	-	0 %
C	60-69	8	31%
D	50-59	16	61%
E	40-49	2	8%
		$\Sigma f = 26$	$\Sigma p = 100\%$

From above table, we can conclude that the students' achievement before using word square game is 31% with good criteria where the students get score range from to 60-69 with grade C, 61% with sufficient criteria where the students get score range from to 50-59 with grade D, and 8% with insufficient criteria where the students just get score range from to 40-49 with grade E. It means that the students' achievement still needs to improve again.

The data of students' posttest also will be arranged by the researcher in the form of frequency and percentages through score's criteria to know whether the students get good result or not.

Table 2. The percentages of students' vocabulary after using word square game

Grade	Criteria of score	Frequency (f)	Percentage (p) %
A	80-100	3	12%
B	70-79	18	69%
C	60-69	5	19%
D	50-59	0	0%
E	40-49	0	0%
		$\sum f = 26$	$\sum p = 100\%$

From above explanation, we can conclude that the students' achievement after using word square game is 12% with excellent criteria where the students get score range from to 80-100 with grade A, 69% with very good criteria where the students get score range from to 70-79 with grade B, and 19% with good criteria where the students get score range from to 60-69 with grad C. It means that the students' achievement in their vocabulary increases.

Data analysis is done to know the different before and after test by researching the gain "d" (score after test – score before test) and then total of the gain score ($\sum d$).

Table 3. The pretest and the posttest scores analyzed to (d) and d (Y-X)²

No	Student	Pretest (X)	Posttest (Y)	Gain (d)	d (Y-X) ²
1.	UL	54	78	24	576
2.	AF	56	74	18	324
3.	ST	58	78	20	400
4.	IT	54	78	24	576
5.	CI	50	64	14	196
6.	TR	58	78	20	400
7.	SN	58	72	14	196
8.	WA	58	68	10	100
9.	RK	58	72	14	196
10.	FS	56	64	8	64
11.	HR	50	76	26	676
12.	YS	64	74	10	100
13.	NZ	64	78	14	196
14.	RN	54	76	22	484
15.	FR	64	76	12	144
16.	EN	60	80	20	400

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 pretest - posttest	-1.67692	6.76643	1.32701	-19.50225	-14.03621	-12.637	25	.000

From the result above that difference of the mean score between pretest and posttest is -1.676. Then for the purpose of the analysis, the null hypothesis is also made. The null hypothesis: $H_0: \mu_1 = \mu_2$. The null hypothesis is stated as follows: There are no different significant scores of students before and after being taught by using word square game. Meanwhile, alternative hypothesis: $H_0: \mu_1 \neq \mu_2$. The alternative hypothesis is stated as follows: There are different significant scores of students before and after being taught by using word square game.

Then, the researcher interpretations that t_{count} is -12.637 with significance value is .000. Because, significance value < 0.05 , so the alternative hypothesis is accepted and null hypothesis is rejected. It means that there is any significant difference in the achievement of the students before and after being taught using word square game.

DISCUSSION

Based on this research finding, the game provides a nonthreatening environment for coping with new learning. When students are having fun, they are more likely to take risks, make mistakes without having feelings of failure, and try to overcome their initial flings of confusion when they encounter new words and patterns (Paul, 2007: 49). Moreover, games help to create a context in which students' attention is focused on the completion of a task without necessarily realizing that language items are being practiced (Toth, 1995: 6). The one of games are word square game.

Word square game is the real effectiveness to improve vocabulary ability. It is because word square game can encourage the students to study vocabulary more active, effective and enthusiastically. Word square game also gives fun activities in study vocabulary. Because, the word square strategy includes visualization of the words (Porte and Herczog, 2010: 23). This activity can make the more understanding about their materials. In addition, this activity can make the student be a discipline. This discipline means that the students are asked to do this work regularly.

So that ways, the implementation of word square game in teaching and learning process gives a positive effect on the students' achievement, because they can study vocabulary easily and relax without hard feeling. The situation that conducive and comfort for their sense, it will make them enjoy to learn and getting good result. It can be done because by fun learning, information can be understood and maintained in memory well.

CONCLUSION AND SUGGESTION

Based on the research finding discussed in the previous chapter, it can conclude that there is any significant difference in the achievement of the students' before being taught using word square game and after being taught using word square game. The results of pretest and posttest with presented in Table 4.9 and Table 4.10 support this finding. Therefore, from the result of the data analysis above, it can be concluded that there is any significant difference in the achievement of the students before and after being taught using word square game. Moreover, word square game is more effective and interesting than the conventional teaching in teaching English about vocabulary to the students, especially junior high school.

Referring to the finding, discussion, and conclusion, some suggestions are recommended for English teacher in general, the students, and other researchers. Firstly, the suggestion goes to English teachers of junior high school. In teaching English, especially vocabulary at junior high school, English teachers should be more creative in selecting a teaching method. They should vary the way they teach by using a method like game which provides joyful class and interest in the students instead of a merely teacher-centered teaching in which the students are passively involved in class activities. Secondly, the suggestion is directed to the students. The students should be more active and creative in doing exercise like read, learn by heart, and remember of vocabularies of text books or any other English book continually, so as to they learn English easily, because learning English without vocabulary, it is impossible. Thirdly, the suggestion is addressed to other researchers doing randomization in taking sample for research to conduct more through research on the implementation of the teaching game in junior high school.

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