THE EFFECTIVENESS OF ANAGRAM ON STUDENTS' VOCABULARY SIZE

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Abstract

This research was aimed at measuring the effect of anagram on the students' vocabulary size at the eight grade of MTS Islamiyah Palangka Raya. The research included in quantitative approach with Quasy Experimental Design. The population of study was the eight grade at MTS Islamiyah Palangka Raya which consisted of four classes. The writer took the sample of two classes are VIII-B as control group and VIII-A as experimental group. The sample were determined using cluster sampling technique. After getting the data from pre-test and post-test, the writer analyzed the data using SPSS 21, program to test the hypothesis stated, Based on the result of analysis, it was found that the value of t_{test} has higher than t_{table} with 2,81 and 2,02 at 5 % level of significance and t_{table} 2.71 at 1% level of significance with degrees of freedom = 40. It showed that the t_{test} was higher than the t_{table}. The result of testing hypothesis determined that the Alternative Hypothesis (Ha) stating that there was significant effect of anagram on the students' vocabulary size at the eight grade of MTS Islamiyah Palangka Raya was accepted and the Null Hypothesis (Ho) stating that there was no anagram on the students' vocabulary size at the eight grade of MTS Islamiyah Palangka Raya was rejected. It meant that there was significant effect of anagram on the students' vocabulary size at the eight grade of MTS Islamiyah Palangka Raya. This research recommended for the students, teachers, and also for the next researchers.

Keywords: *anagram, vocabulary size, effect*

Vocabulary size is more important factor in second language learners. Because, we should master in the vocabulary size to make it easy to study in every skill of English. For second language learners to achieve fluency in English, they need to gain at least 5.000 words, preferably 10.000 words. In order to understand 95% of text, readers have to know at least 4000 word families, including 2000 high-frequency word,570 general academic words, at least 1000 technical words, and

proper low-prequency word families.[36] Vocabulary size is a kind of measurement test, just like TOEFL. Most writers believe that second language learners have difficulty in understanding the next because of their limited vocabularies. there are some ways to help the students vocabulary size through effective technique.

Maimunah is study showed Anagram as a good technique in teaching vocabulary. Anagram is a kind of education game which helpfull for the student. Anagram is a type of word play. A word or phrase made by arranging in a different order the letters of another word or phrase.[37] So anagram technique very important to teach vocabulary size, there are some benefits of anagram, anagram helps the students more effective in learning and teachers easier to give the teaching of English. Here, not only can previous knowledge be consolidated, but it can be an acquisition of new forms and structures, Orthography is also an important area, since the solution to a anagram is based on the correct spelling of answers, anagram is also develop and test students' knowledge of morphology, through the use of items dealing with verb ending, prefixes, suffixes. Anagram is one way to make students enjoy in the class when the teacher teaches, cause it makes the situation be fresh. And then, the education needs a tool that make the knowledge can be developed well. In the fact, the students are poor vocabulary cause they feel boring when the teacher teachs them using the direct methode.

METHOD

This study uses quantitative design. It is quantitative design because quantitative is the data that from of number using statistic data. According to Donald Ary "Quantitave research a ginnery employing operational definitions to generate numeric data to answer predator mined hypotheses or questions."

The population in this study was all students of eight grade of MTs Islamiyah of Palangka Raya. There are four classes in the eight grade of MTs Islamiyah of Palangka Raya. There were 97 of the eight grade students that divided into three classes.

Table 1. The Population Number of Students

NO	CLASSES	NUMBER OF STUDENTS
1	VIII A	22
2	VIII B	22
3	VIII C	24
4	VIII D	25
	Total	93

There were two classes of study namely VIII-B as control group and VIII-A as experiment group with the total number student which class VIII-B the total student are 22 and class VIII-A the total student are 22. The sample of study is determined using cluster sampling technique. Both of groups were given pre-test before treatment. Then, the student of experiment group was taught using Anagram and control group was taught non-Anagram. The last, the writer gave post-test to both of groups.

RESULTS

The scores of the students both from the experimental and the control groups can be seen in Table 2.

Table 2. Experimental and Control Group

No	Code	Experimental Pre Test	Post Test	Improvement	Code	Control Pre Test	Post Test	Improvement
1	E01	65	79	14	C01	60	70	10
2	E02	65	75	10	C02	55	65	10
3	E03	60	65	5	C03	65	70	5
4	E04	69	73	4	C04	55	85	25
5	E05	80	85	5	C05	57	61	4
6	E06	65	65	0	C06	75	61	-14
7	E07	70	75	5	C07	62	65	3
8	E08	65	70	5	C08	70	75	5

9	E09	70	75	5	C09	70	85	15
10	E10	60	70	10	C10	80	72	-8
11	E11	64	75	11	C11	61	70	9
12	E12	70	85	15	C12	55	60	5
13	E13	72	90	18	C13	60	61	1
14	E14	75	75	0	C14	75	65	-10
15	E15	70	75	5	C15	65	70	5
16	E16	65	70	5	C16	70	77	7
17	E17	66	65	4	C17	70	75	5
18	E18	69	75	6	C18	80	74	6
19	E19	65	69	4	C19	69	76	7
20	E20	67	70	3	C20	65	70	5
21	E21	65	79	19	C21	60	65	5
22	E22	65	76	11	C22	61	69	8
	Total	**1482**	**1636**	**164**	**Total**	**1440**	**1541**	**108**
	Highest	**80**	**90**			**80**	**85**	
	Lowest	**60**	**65**			**55**	**60**	

To test the hypothesis of the study, the writer used t-test statistical calculation. Firstly, the writer calculated the standard deviation and the error of X_1 and X_2 at the previous data presentation. In could be seen on this following table 3:

Table 3. The Standard Deviation and Standard Error of X_1 and X_2

Variable	The Deviation	Standard	The Standard Error
X_1	5,133		1.55
X_2	1,048		1 .25

X_1 = Experimental Class
X_2 = Control Class

The table showed the result of the standard deviation calculation of X_1 was 18.478. and the result of the standard error mean calculation was 2.547. The result of the standard deviation calculation of X_2 was 16.111 and the result of the standard error mean calculation was 2.921

The next step, the writer calculated the standard error of the differences mean between X_1 and X_2 as follows:

Standard error of mean of score difference between Variable I and Variable II :

$SE_{M1} - SE_{M2}$ $= \sqrt{SE_{M1}^2 + SE_{M2}^2}$

$$= \sqrt{1,55^2 + 1,25^2}$$

$$= \sqrt{2,4025 + 2,1904}$$

$$= \sqrt{4,5929} = 2,143 = 2,14$$

$$t_0 = \frac{M1 - M2}{SEm1 - SEm2}$$

$$t_0 = \frac{74,55 - 68,52}{6,03}$$

$$= \frac{603}{2,14}$$

$$= 2,81$$

Which the criteria:

If t-test (t-observed) $\geq$ t-table, Ha is accepted and Ho is rejected

If t-test (t-observed) < t-table, Ha is rejected and Ho is accepted

Then, the writer interpreted the result of t-test; previously, the writer accounted the degree of freedom (df) with the formula:

Df $= (N_1 + N_2) - 2$

$= 22 + 20 - 2$

$= 40$

5%	T tes	1%
2,02	2,81	2,71

The calculation above showed the result of t-test calculation as in the table 4 follow:

Table 4. Calculation the Result of T-Test

Variable	T test	T table		Df/db
		5%	1%	
X_1-X_2	2,81	2,02	2,71	40

Where:

X_1	= Experimental Class
X_2	= Control Class
T observe	= the calculated Value
T table	= the distribution of t value
Df/db	= Degree of freedom

Based on the result of hypothesis test calculation, it was found that the value of $t_{observed}$ was greater than the value of t_{table} at 1% and 5% significance level or 2,02< 2,81>2,71. It means H_a was accepted and H_o was rejected. It could be interpreted based on the result of calculation that H_a stating that anagram give influences toward student's scores in increasing English vocabulary size was accepted and H_o stating that anagram does not give influences toward student's scores in increasing English vocabulary size was rejected. It means that teaching vocabulary using anagram gave significant effect on the students' vocabulary score of the eigth grade students at MTS Islamiyah Palangka Raya.

DISCUSSIONS

The result of data analysis showed that the students taught vocabulary using Anagram have better vocabulary size than those taught using non Anagram at the eighth grade of MTs Islamiyah Palangka Raya. It can be seen from the means score between pre-test and post test. The mean score of post test reached higher score than the mean score of Pre-test (X= 61.00< Y=57.85). It indicated that the students' score increased after conducting treatment. In other words, the students taught vocabulary using Anagram have better vocabulary size than those taught using non Anagram at the eighth grade of MTs Islamiyah Palangka Raya.

In addition, after the data was calculated using the t_{test} formula using SPSS 21.00 program showed that the $t_{observed}$ was 2.81. In addition, After the students have been taught using Anagram, the vocabulary size were higher than before implementing it. This finding indicated that Anagram was effective and supported the previous research done by Roy B. Weinstock, Maimunah and Sartika Manurung that also stated teaching vocabulary by using Anagram was effective.

In teaching learning process, taught vocabulary using Anagram technique was a tool used by the writer to teach the students. It could be seen from the score of students how the used of Anagram technique gave positive effects for students vocabulary size. It means that it has important role in teaching learning process. It was answered the problem of the study is "Do the students taught vocabulary using Anagram have better vocabulary size than those taught using non Anagram at the

eighth grade of MTs Islamiyah Palangka Raya?".

Anagram as means for language learning, effectively enhanced the vocabulary size at eighth grade of MTs Islamiyah Palangka Raya. The students vocabulary size was enhanced after the treatment when they were given opportunities to use Anagram in the learning process. They made new word or new vocabulary using Anagram in the treatment and the vocabulary size was enhanced within post-test.

The results supported theory by Collins and Richard, stated that Anagram technique is type of word play, rearrangement the letter of word, name, phrase, sentence, title, or to produce new word. The students gave their attention to the material because the writer used different technique than usual. Using Anagram as a technique in vocabulary size encourages collaborrative environment, increases motivation and the students participation.

Next results supported theory by Barus, stated that Anagram is a good technique in teaching vocabulary, there are many ways in applying anagram to the students, such as: the students form other word from the key word given, the students rearrange the letters in bracket after that fill in each blank with the appropriate anagram to complete the sentence, the students omit one or some letters of the key word and transpose rest, the students transpose the letters of the word and form another word by using those letters exactly once based on the definition, the students match the scramble word on the left to its arrangement on the right. In line with it, the writer gave the students the assignment of vocabulary size and asked them to found new word or vocabulary with meaning not only vocabulary so that the students had antusiasm on produce new vocabulary.

The result of t-test using SPSS 21.0 program, it was found the t test was greater than the t table at 1% and 5% significance level or 2,81< 2,02>2,71. It means that H_a was accepted and H_0 was rejected. It could be interpreted based on the result of calculation that Ha stating that Anagram technique was effective for teaching vocabulary size at the eighth grade of MTs Islamiyah Palangka Raya was accepted and Ho stating that Anagram Technique was not effective for teaching vocabulary size at the eighth grade of MTs Islamiyah Palangka Raya was rejected. It meant that teaching vocabulary size with anagram technique was effective for teaching vocabulary size at the eighth grade of MTs Islamiyah Palangka Raya.

CONCLUSION AND SUGGESTION

Conclusion

After obtaining the data analysis from the scores obtained of English test, it could answer the problem of the study is "Do the students taught vocabulary using anagram have better vocabulary size than those who taught vocabulary using non anagram at the eighth grade of MTs Islamiyah Palangka Raya?". Based on the result of data analysis, the students' obtained scores from the experiemental group (taught using Anagram) and the students' obtained scores from the control group (taught without using Anagram) were significantly different.

The main purpose of the study is to measure the effect of Anagram on students' vocabulary size at the eighth grade of MTs Islamiyah Palangka Raya. The type of study was quasi-experimental especially non-randomized control group, pre-test post-test design and the writer used quantitative approach in finding out the answer of the problem of the study, the data collecting technique used test. There were two classes of study namely VIII-B as control group and VIII-A as experiment group with the total number student which class VIII-B the total student are 22 and class VIII-A the total student are 22. The sample of study is determined using cluster sampling technique. Both of groups were given pre-test before treatment. Then, the student of experiment group was taught using Anagram and control group was taught non-Anagram. The last, the writer gave post-test to both of groups.

In the result of hypothesis was using calculation of T-test with SPSS 21.0. The result of t-test with SPSS 21.0 calculation found the calculated value ($t_{obseved}$) was greater than t_{table}) at 1% and 5% significance level or 2.81< 2.02>2.71. It was interpreted than alternative hypothesis (h_a) stated that the students taught vocabulary using Anagram have better vocabulary size than the students taught using non Anagram at the eighth grade of MTs Islamiyah Palangka Raya was accepted and the null hypothesis (h_0) the students taught vocabulary using Anagram do not have better vocabulary size than the students taught vocabulary using non Anagram at the eighth grade of MTs Islamiyah Palangka Raya was rejected. It meant that the students taught vocabulary using Anagram have better vocabulary size than those taught vocabulary using non Anagram at the eighth grade of MTs Islamiyah Palangka Raya.

Suggestions

In line with the conclusion, the writer would like to propose some suggestions for the students, teachers there and the writer as follow. For students, It is clear that Anagram technique has potential to be used as very useful increase the

vocabulary size. It could help students to develop vocabulary size in English learning as a foreign language. Therefore, the writer recommended to the students to practice their English as much as possible in or out the class. And also, the writer recomended to students could use the Anagram technique in language learning.

For the English Teachers, It is give contribution to the English teachers about the important of technique in support teaching learning process especially vocabulary size. It is recommended to the teacher that teaching vocabulary size by anagram technique can motivate the students. The used of anagram as a technique of teaching was more effective. A teacher should help the students to find a good and enjoyable anagram which is appropriate to the way the students think and the students' age.

For Future Researcher, In this thesis, the writer realized that design of the study was very simple. There are still many weaknesses that could be seen. The other researchers can improve this study with better design and different object in order to support the result finding. In other word, the other writer can use this research as the reference for conducting their research.

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