



## The Effect of Anagram Technique Towards Students' Vocabulary Mastery at Second Grade of SMPN 2 X Koto

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**Abstract.** *This research is aimed to find out whether using Anagram Technique Towards Students' Vocabulary Mastery at Second Grade of SMPN 2 X Koto. It has been done at SMPN 2 X Koto because the students have difficulties to memorize vocabulary. The limited source in learning material. As a result, the researcher also finds out the students vocabulary is limited. This research used experimental research. To analyze the data, the researcher used the normality and homogeneity by using SPSS26 to test the hypothesis, the researcher used t-test formula and consulted the result into t-table for the first, second and third hypothesis.*

**Keywords:** Anagram Technique, Vocabulary Mastery

**Abstrak.** Penelitian ini bertujuan untuk mengetahui pengaruh teknik anagram terhadap kosakata siswa di kelas dua SMPN 2 X Koto. Hal tersebut dilakukan di SMPN 2 X Koto dikarenakan siswa mengalami kesulitan dalam mengingat kosakata. Keterbatasan sumber dalam materi pembelajaran. Akibatnya, peneliti juga menemukan kosakata siswa terbatas. Penelitian ini menggunakan penelitian eksperimen. Untuk menganalisis data, peneliti menggunakan normalitas dan homogenitas dengan menggunakan SPSS 26 untuk menguji hipotesis, peneliti menggunakan rumus t-test dan mengkonsultasikan hasilnya ke dalam t-tabel untuk hipotesis pertama, kedua dan ketiga.

**Kata kunci:** Teknik Anagram, Penguasaan Kosakata

## INTRODUCTION

In learning English, students must master vocabulary well because vocabulary was a core component in language skills. Based on Rizky and Syahrul (2020), vocabulary still becomes an important part in determining the success of learning both first and second language, because vocabulary was one of components for increasing someone language skill.

Furthermore, in the teaching and learning process, students need correct techniques, methods and media. One of techniques that can be used by the teacher is anagram technique. According to Ahdian (2017) anagram technique is a type of word play, the result of rearranging the letters of a word or phrase to produce a new word or phrase, using all the original letters exactly once.

There are several problems that occur in teaching vocabulary at SMPN 2 X Koto can be summarized is the students was difficult to memorize vocabulary, the limited source in learning material, the students vocabulary was limited and find difficult to develop new vocabulary.

Purpose of the Research is first, to find out whether there was a significant effect of Anagram Technique towards the vocabulary students at the eight grade students at SMPN 2 X Koto. Second, to find out whether there was significant difference between students' who are using Anagram Technique and verses students' who are using conventional technique. Third, to find out whether students' vocabulary mastery using Anagram Technique was better than students' who are using conventional technique.

Based on explanation above, the researcher conducted of research by tittle *The Effect of Anagram Technique Towards Vocabulary Mastery in second grade at SMPN 2 X Koto.*

## REVIEW OF RELATED THEORIES

According to Suci and Febria (2020), in producing a language, vocabulary is the main source to master for language learners. As one of the most significant aspects in the area of second language acquisition, vocabulary also plays an important role in all language skills. Susan and Jenifer (2013) stated that vocabulary is the words that are used by people, both in oral or written forms for communicating. Easterbrook (2013) also defines vocabulary as means a a word that use by people in specific language. It

means that vocabulary can help students to be easier to communicate such as oral or written.

Based on some of the definitions of vocabulary above, it concluded that vocabulary is all words used to communicate effectively, both in spoken and written form in a specific language. In addition, the more vocabulary that mastered by person, so the person will easy to understand language in listening, speaking, reading, and writing.

Anagram technique is a type of word play, the result of rearranging the letters of a word or phrase to produce a new word or phrase, using all the original letters exactly once' for example *orchestra* can be rearranged into *carthorse*. It means that anagram technique could show the students produce a new word or phrase using rearrange of the letters of a word or phrase. According to Fiafah (2016), anagram technique is the type of word play, the result of rearranging the letters of a words or phrase to produce a new word or phrase, using all the original letters exactly once for example *earth* can be rearranged into *heart*. Someone who creates Anagrams may be called an "anagrammatist". The original word or phrase is known as the subject of the anagram.

Based on explanation above, anagram is rearrange a word that can use to random all the letters in a word to make a new word. By using Anagram, it can improve the students vocabulary and also make them always remember it. By using this technique, the students will not be bored because this technique is the type of word play and appropriate to the students characteristic which is the students incline more interested to play.

#### **a. Procedure of Anagram Technique**

According to Barus in Bachtiar at Ahdian Journal (2017) , there are ways in applying anagram to the students after the teacher explaining the material, such as:

- a. Asking the students to form other words from the key word given
- b. Asking the students to rearrange the letters in bracket after that fill in each blank with the appropriate anagram to complete the sentence
- c. Asking the students to omit one or some letters of the key word and transpose the rest
- d. Asking the students to transpose the letters of the word and form another word by using those letters exactly once based on the definition

e. Asking the students to match the scramble word on the left to its arrangement on the right

Example :

*But = Tapi* (conjunction) rearranged to *Tub = Bak Mandi* (n)

*Thin = Kurus* (Adj.) rearranged to *Hint = Petunjuk* (n)

## METHOD

### A. Design of the Research

In conducting this research, the researcher used a quantitative research. According to Suharsimi Arikunto (2011), quantitative research is the research using numeral, begin for collecting of data, interpretation, and the result of the research. Quantitative research used for analyzing the statistical data of students' pre-test and post-test score.

The researcher used a quasi experimental design by using the pretest-posttest control group design. Gay (2011) also add that an experiment typically two groups, control group and experimental group. The experimental group and control group was given some test. The research described as following the table:

**Tabel 1 : The Design of the Research: Pretest and Posttest Design.**

Pre- and Posttest Design

Time



Select Control Class	Pretest	No treatment (only using teaching and presentation)	Posttest
Select Experimental Class	Pretest	Experimental Treatment (using Anagram Technique)	Posttest

*Sumber : Educational Research: Planning, Conducting, and Evaluating, Quantitative and Qualitative Research (2018)*

## **B. Population and Sample**

In this research, researcher used a purposive sampling technique. According to Sugiyono (2018), purposive sampling was a technique of determining samples with certain considerations. The researcher chose the both classes into experimental and control class by asked for recommendation from the teacher in the school.

## **C. Instrumentation**

In an experimental research, the researcher need an instrument to collect the data. In this research, the instrument that used by the researcher was a vocabulary test and form of the used matching test and simple completion where the test aims to measure the purpose of the accuracy of quantitative data. The test carry out in the experimental class and also in the control class. The first test is a pre-test that carry out to determine the ability of students before certain treatments are performe. The second test was post-test conducted to determine whether there was a score difference obtained by the experimental class with the score obtained by the control class. The total number of the test is 20 items. Then, the test would be created by considering the validity and reliability

## **D. Technique of the Data Analysis**

Analysis of the data was the process to analyze and interpret the data to get the result of the research. There were several steps that a followed by the researcher, that were:

### **1. Test The Normality Of The Data**

The researcher used collect the result of determine the normality of the data. The purpose of testing the normality of the data was to know whether the data spread out normally or not. Liliefors test used to test the normality of the data. The researcher used SPSS26 to test the normality of the data.

## **2. Test The Homogeneity Of The Data**

After knowing the normality of the data, the researcher should test the homogeneity. The purpose of homogeneity test is to know whether the sample has the homogeneous or not. The test that used is F test. The researcher used SPSS26 to test the homogeneity of the data.

## **3. Testing The Hypothesis**

In this research, the researcher used test the hypothesis by using t-test to compare the difference of the mean score between two classes. There were some hypotheses that tested. First, pre-test and post-test scores of experimental and control class that was analyzed whether there was or no significant effect of using anagram technique towards students mastery. Second, see significant the result of students' scores in vocabulary mastery after using anagram technique. The researcher used SPSS26 to testing the hypothesis.

Based on the explanation above, there were several steps to analyze the data that were, testing normality of the data, homogeneity of the data, and the testing the hypothesis of the data. T-test was compare between t-obtained to the value of "t" in the table at the level of significance ( $\alpha$ ) 0,05. In addition, hypothesis was be accepted if  $t\text{-obtained} > t\text{-table}$ . While, the null hypothesis ( $H_0$ ) was be accepted if  $t\text{-obtained} < t\text{-table}$ .

## **FINDING AND DISCUSSION**

### **A. Findings**

#### **a) Pre-test and Post-test Data of Experimental**

Pre test was the data analysis that have been given by the researcher at the first meeting before conducting the treatment for experiment class by Anagram Technique and treatment for control class by using conventional technique. The data obtained showed that the lowest score of the pre-test that was gained by the experimental class was 40 and the highest score was 90.

### b) The Pre-test and Post-test in Control Classes Score

From the data that the lowest score for the pre-test that was gained by the control class was 10 and the highest score was 70. Meanwhile, from the post-test, the lowest score of post-test that was gained by the control class was 40 and the highest score was 75.

#### 1. Analysis of the Data

In analyzing the data of this research, the researcher used two kinds of data analysis pre-test and post-test from the experimental and control classes. The researcher used the Liliefors test to find out whether the data were distributed normally or not and used F-test to obtain whether the data of the two classes were homogenous or not.

#### a. Normality Test of Pre-test Score of Experimental Class and Control Class

**Tabel 2: Normality Test of Pre-test Score**

##### Tests of Normality

	Class	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	df	Sig.
students' score	Pretest experiment	,155	31	,056	,956	31	,225
	pretest-control	,145	31	,097	,943	31	,103

*Source : Lilliefors Significance Correction*

Based on the result above, the significant value shows that result of the control class and experiment class was normal on Kolmogorov-Smirnov (0,56 and 0,097) then also on Shapiro-Wilk (0,225 and 0,103) test since it all was higher than alpha value (0,05). It means that the normality Test of Pre-test Score of the Experimental Class and Control Class was normal.

**b. Normality Test of Post-test Score of Experimental Class and Control Class**

**Table 3 : Normality Test of Post-test Score**

**Tests of Normality**

	Class	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	df	Sig.
students' posttest-experiment score		,150	31	,072	,951	31	,171
	posttest-control	,140	31	,127	,949	31	,147

Source : Lilliefors Significance Correction

Based on the result above, the significant value shows that result of the control class and experiment class was normal on Kolmogorov-Smirnov (0,072 and 0,127) then also on Shapiro-Wilk (0,171 and 0,147) test since it all was higher than alpha value (0,05). It means that the normality Test of Post-test Score of the Experimental Class and Control Class was normal.

**c. Homogeneity Test of Pre-test Score of Experimental Class and Control Class**

**Table 4 : Homogeneity Test of Pre-test Score**

**Test of Homogeneity of Variance**

		Levene Statistic	df1	df2	Sig.
students' score	Based on Mean	3,102	1	60	,083
	Based on Median	2,871	1	60	,095
	Based on Median and with adjusted df	2,871	1	57,552	,096
	Based on trimmed mean	3,047	1	60	,086

Based on the result above, the result of the homogeneity test shows that the pre-test of the classes was homogeneity which had a significant value that was bigger than alpha (0,083 > 0,05).



**d. Homogeneity Test of Post-test Score of Experimental Class and Control Class**

**Table 5 : Homogeneity Test of Post-test Score  
Test of Homogeneity of Variance**

	Levene Statistic	df1	df2	Sig.
students' score Based on Mean	3,624	1	60	,062
Based on Median	2,636	1	60	,110
Based on Median and with adjusted df	2,636	1	51,366	,111
Based on trimmed mean	3,369	1	60	,071

Based on the result above, the result of the homogeneity test shows that the post-test of the classes was homogeny which had a significant value that was bigger than alpha ( $0,062 > 0,05$ ).

**1. Hypothesis Testing**

After calculating the data from pre-test and post-test in experimental and control classes, the researcher tested the hypothesis in this research. There were three hypotheses in this research as follow:

**a. The First Hypothesis**

**Table 6 : The first hypothesis**

**Paired Samples Statistics**

	Mean	N	std. Deviation	Std.Error Mean
Pair 1 pretest- experiment	59,35	31	11,456	2,058
posttest-experiment	71,77	31	12,487	2,243

In the calculation of pre-test and post-test scores of the experimental class, the mean score of the post-test ( $\bar{X}_2$ ) was 71.77. It was greater than the mean score of the pre-test ( $\bar{X}_1$ ), 59.35. Then it could be analyzed by using a T-test in SPSS 26. The output could be viewed in table 4.6:

**Table : 7 Paired Samples Test**

**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 1 pretest-experiment - Posttest-experiment	-12,419	11,823	2,123	16,756	8,083	5,849	60	,000	

It was found that the t obtained was 5.849 and the t table for degrees of freedom 60 with  $\alpha=0.05$  was 0.2500. By comparing the t obtained (5.849) and t table (0.2500), it was found that the (-) t obtained was bigger than the (-)table.

From the data above, it shows that the alternate hypothesis ( $H_a$ ) was accepted and the null hypothesis ( $H_0$ ) was rejected because the (-)t obtained was bigger than the (-) t table. From the data, it means that there is a significant effect of using Anagram Technique towards students' vocabulary mastery which is alternate hypothesis ( $H_a$ ) is accepted because the - t obtained is bigger than the t table.

### b. The Second Hypothesis

From the calculation of post-test scores of both classes, the mean score of the post-test ( $\bar{X}_2$ ) of the experimental class was 71.77. It was higher than the mean score of post-tests of the control class ( $\bar{X}_1$ ), 61.29. Then it could be analyzed by using a T-test in SPSS 26. The output could be viewed in table 4.7:

**Table : 8 The second hypothesis**

#### Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-test control	61,29	31	8,657	1,555
	Post-test control	71,77	31	12,487	2,243

#### 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 1	Post-test control - Post-test experiment	-10,484	15,671	2,815	-16,232	-4,736	3,725	60	,001

It was found that the t obtained was 3.725 and the t table for degrees of freedom 60 with  $\alpha=0.05$  was 0.2500. By comparing the t obtained (3.725) and t table (0.2500), it was found that the t-obtained was bigger than the t-table.

From the data above, it shows that the alternate hypothesis ( $H_a$ ) was accepted and the null hypothesis ( $H_0$ ) was rejected because the (-) obtained was bigger than the (-) t table. So, it can be said that there was significant difference of the students' test result in the students vocabulary between the students who are taught by using Anagram technique and the students who are not taught by using Anagram technique.

**c. The Third Hypothesis**

The third hypothesis was the students test result of the students who are taught by using Anagram technique was better than the students' test result of the students who are not taught by using Anagram technique or was the students' test result of the students who are taught by Anagram technique was not better than the students' test result who are not taught by using Anagram technique. From the calculation of post-test scores of both classes, the mean score of the post-test ( $\bar{X}_2$ ) of the experimental class was 71.77. It was higher than the mean score of post-tests of the control class ( $\bar{X}_1$ ), 61.29. It means that the alternative hypothesis ( $H_a$ ) was accepted and it can be concluded that the vocabulary test result of the students who were taught by using Anagram Technique was better than the vocabulary test result of the students who were not taught by using Anagram technique.

## CONCLUSION AND SUGGESTION

This finding was supported by the theories, the Anagram is considered as an effective, enjoyable, interesting way to teach vocabulary because it can give the student enjoyment or challenge in studying language and encourage them to look carefully at words, students can practice to form other words from the given clues, match word with definitions, provide spelling practice, show the students how the letters of many words can be manipulated to form other words, emphasize the importance of letter position in relation to word meaning.

In conclusion, using Anagram technique can increase the students' ability in vocabulary mastery. Anagram technique has advantages for students

vocabulary. This can be proven from the score of post-tests in experimental class of this research, the vocabulary test result of the students who were taught by using Anagram technique was better than the vocabulary test result of the students who were not taught by using Anagram technique.

Based on the conclusion above, the researcher would like to purpose some sugestion That is the english teacher can used anagram technique toward the students vocabulary and hope more guiding students in using anagram to help students more mastering in vocabulary. After that, the students also need towards there vocabulary using anagram technique in order towards their vocabulary.

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