

## **CHAPTER IV**

### **RESEARCH FINDING AND DISCUSSION**

This chapter reviews the description of data which discusses the characteristics of each variable and the testing of the hypothesis which explains the result of the statistic computation. The description of data includes analysis of data and hypothesis testing. The next is finding and the third is discussion which discusses the finding.

#### **A. The Description of Data**

This description of data serves the data presentation which had been gotten by the researcher after conducting two kinds of test for the students. They were pre-test and post-test. The test which was used for either pre-test or post-test was same. The test was administered to class A of eighth grade students of Islamic Junior High School 2 of Blitar period 2016/2017 which consists of 44 students. To measure the effectiveness of using One Day One Word strategy, the researcher uses Wilcoxon formula for both pre-test and post-test.

First step which was done was conducting pre-test in order to measure the students' vocabulary mastery before implementing One Day One Word Strategy. The mean score of pre-test is only 57.14. This score shows that the students' vocabulary mastery is still low.

Next, the researcher implemented One Day One Word Strategy to the sample students, they were 8<sup>th</sup> A class of Islamic Junior High School 2 of Blitar. The students were demanded to engage with English everyday. They were asked to report a word of English; the equivalence of the word in Indonesian language; part of speech of the word; and contextual sentence everyday. Then, they reported their activity to the researcher in whatsapp group named One Day One Word or by texting personally to the researcher. The students reported their activity actively. Most of them reported their report consciously without the significance role of the researcher. However, there were also some students who needed to be reminded.

Then, the last step was conducting post-test which was aimed to measure the students' vocabulary mastery after being applied using One Day One Word Strategy. After implementing the treatment, the students' mean score is 77.6. The score shows that the post-test which was conducted have a higher score than the pre-test. Hence, it can be grasped whether the students' vocabulary has risen up after being treated.

a) The Description Data of Experimental Group

The data of pre-test and post-test are presented in the table below:

**Table 4.1 The Result of Pre-test and Post-Test**

No	Subject	Pre-Test Score (X)	Post-Test Score (Y)	Gained Score (D) (Y - X)
1	AMA	30	84	54
2	ANF	39	86	47
3	AIS	42	88	46
4	APA	94	90	-4
5	AF	30	82	52
6	ARN	20	80	60
7	ACA	90	88	-2
8	APS	90	86	-4
9	AES	60	80	20
10	AWRF	32	88	56
11	ARA	40	87	47
12	AL	30	90	60
13	AAT	90	94	4
14	AC	56	60	4
15	BF	90	80	-10
16	CDY	50	82	32
17	CN	89	80	-9
18	CAS	60	60	0
19	DSP	56	60	4
20	FDW	90	80	-10
21	FLAZ	53	60	7
22	FTSD	57	60	3
23	HA	94	88	-6
24	IAK	54	60	6
25	IKS	60	60	0
26	ILZ	25	60	35
27	KK	53	60	7
28	LEH	56	60	4
29	MCF	53	88	35
30	MNFA	57	60	3
31	MAP	38	82	44
32	MAA	56	60	4
33	MFA	53	88	35
34	MF	30	84	54
35	MRA	37	86	49
36	MZF	60	88	28
37	MRS	50	90	40
38	MAA	94	88	-6
39	NAZ	56	60	4
40	RS	60	60	0
41	RM	57	60	3
42	SPW	94	89	-5
43	VRP	49	87	38
44	YBR	40	88	48
Mean		57.13636	77.06818	19.93182

b) The Frequency of Data

To analyze the frequency of the data both pre-test and post-test, the researcher uses SPSS version 16.0. The description of frequency is used to see how many times the score of the students appear. The frequency of data both in pre-test and post-test displays in the table below:

**Table 4.2 Frequency of Pre-Test Score**

		Pre-Test Frequency			Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	20	1	2.3	2.3	2.3
	25	1	2.3	2.3	4.5
	30	4	9.1	9.1	13.6
	32	1	2.3	2.3	15.9
	37	1	2.3	2.3	18.2
	38	1	2.3	2.3	20.5
	39	1	2.3	2.3	22.7
	40	2	4.5	4.5	27.3
	42	1	2.3	2.3	29.5
	49	1	2.3	2.3	31.8
	50	2	4.5	4.5	36.4
	53	4	9.1	9.1	45.5
	54	1	2.3	2.3	47.7
	56	5	11.4	11.4	59.1
	57	3	6.8	6.8	65.9
	60	5	11.4	11.4	77.3
	89	1	2.3	2.3	79.5

	Frequency	Percent	Valid Percent	Cumulative Percent
90	5	11.4	11.4	90.9
94	4	9.1	9.1	100.0
Total	44	100.0	100.0	

**Table 4.3 Frequency of Post-Test Score**

		Post-Test			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	60	15	34.1	34.1	34.1
	80	5	11.4	11.4	45.5
	82	3	6.8	6.8	52.3
	84	2	4.5	4.5	56.8
	86	3	6.8	6.8	63.6
	87	2	4.5	4.5	68.2
	88	9	20.5	20.5	88.6
	89	1	2.3	2.3	90.9
	90	3	6.8	6.8	97.7
	94	1	2.3	2.3	100.0
	Total	44	100.0	100.0	

c) The Descriptive Statistics of The Data

Besides the frequency of the data, the descriptive statistics of both pre-test and post-test are needed in describing the data. The descriptive statistics is displayed below. The researcher also uses SPSS to obtain the descriptive statistics.

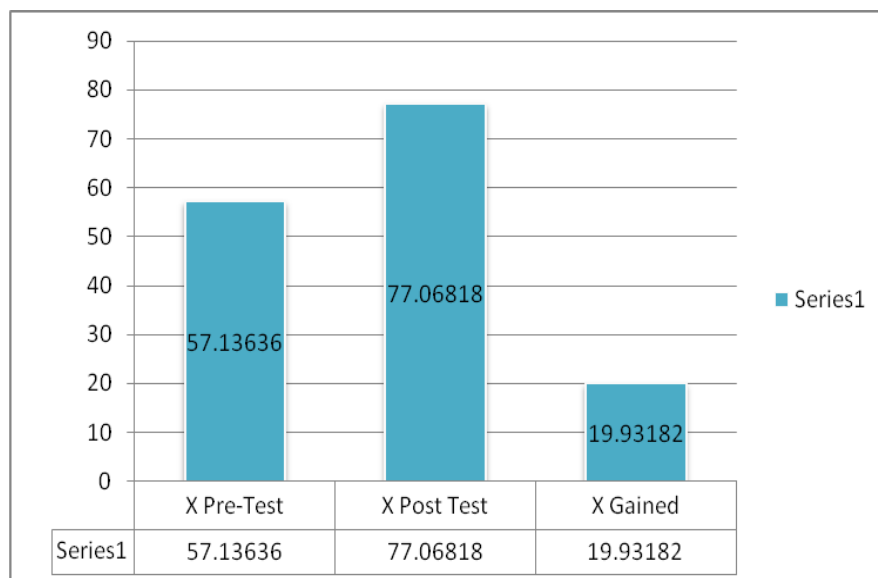
**Table 4.4 Descriptive Statistics of The Data**

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Pre-Test	44	20.00	94.00	57.1364	21.59413
Post-Test	44	60.00	94.00	77.0682	12.78152
Valid N (listwise)	44				

The data above presents whether the minimum score of pre-test is 20 meanwhile the maximum score is 94. Then, the mean is 57.1364. The mean of the students includes in low score. After manipulating students using One Day One Word Strategy, the result displays whether the minimum score of post-test is 60 meanwhile the maximum score is same, which is 94. The mean of the students' post-test is 77.0682. Furthermore, the students have an improvement score in post-test than the score in pre-test after being given a treatment.

d) Chart of The Data

After getting the data above, then the researcher made a chart to compare the mean of pre-test, post-test, and gained score of them to see the improvement score which was obtained by the students after implementing One Day One Word Strategy. The chart is shown as below:

**Table 4.5 Chart of Pre-Test, Post-Test, and Gained Score**

## B. Analysis of The Data

The analysis of data here is the researcher tries to find both of normality and homogeneity of the data. Those analyses are used to determine the next step that is testing the hypothesis. The result of measuring both normality and homogeneity are presented below.

### a) Normality

The normality of both pre-test and post-test data was measured by SPSS version 16.0. using the formula of One Sample Kolmogorov Smirnov – Test. The result is shown as below:

**Table 4.6 The Normality Result of The Data**

		One-Sample Kolmogorov-Smirnov Test	
		Pre-Test	Post-Test
N		44	44
Normal Parameters <sup>a</sup>	Mean	57.1364	77.0682
	Std. Deviation	2.15941E1	1.27815E1
Most Extreme Differences	Absolute	.220	.250
	Positive	.220	.250
	Negative	-.157	-.250
Kolmogorov-Smirnov Z		1.459	1.659
Asymp. Sig. (2-tailed)		.028	.008

a. Test distribution is Normal.

Based on the description of SPSS above, the test distribution is normal. Then, after ensuring whether the data has been normal, the next step is calculating the homogeneity of the data.

b) Homogeneity

Homogeneity is conducted after ensuring whether the data has been normal distributed. Calculating the homogeneity of the data is aimed to see whether the data includes to homogeneous or heterogeneous data.

The writer was helped by SPSS version 16.0 to calculate the homogeneity of the data. The formula which is used is Homogeneity of Levene Statistic. The result is presented as below.



**Table 4.7 The Homogeneity of The Data****Test of Homogeneity of Variances**

Levene Statistic	df1	df2	Sig.
5.068	7	34	.001

The description of the homogeneity data above is the significance value shows in number 0.001. This means whether the data is heterogeneous because of the significance value is lower than  $\alpha$  (0.05). The data is called as a homogeneous data when significance of value is higher than 0.05 ( $\alpha > 0.05$ ). However, the result above shows that the significance value is  $0.001 < 0.05$ . Thus, the data includes in heterogeneous data. Because of the data is heterogeneous, then, to test the hypothesis, the researcher uses non-parametric test within the formula of Wilcoxon.

**C. Hypothesis Testing**

The writer analyzed the significant difference of data by using the formula of Wilcoxon. This is aimed to prove statistically whether there is any significant difference between students' vocabulary mastery both in pre-test and post-test. The hypothesis was stated whether:

$H_0$  : There is no significant difference of students' score before and after implementing One Day One Word (ODOW) Strategy.

$H_1$  : There is a significant difference of students' score before and after implementing One Day One Word (ODOW) Strategy.

Hence, to get significant difference between pre-test and post-test score, the calculating result should show whether  $H_0$  is rejected meanwhile  $H_1$  is accepted. To analyze the significant difference, the writer used SPSS version 16.0 using Wilcoxon formula. The result is shown as below:

**Table 4.8 The Wilcoxon Signed Ranks Test**

		N	Mean Rank	Sum of Ranks
PostTest – PreTest	Negative Ranks	9 <sup>a</sup>	13.44	121.00
	Positive Ranks	32 <sup>b</sup>	23.12	740.00
	Ties	3 <sup>c</sup>		
	Total	44		

a. Post-test < pre-test

b. Post-test > pre-test

c. Post-test = pre-test

The description of the table above is, the rank of the students whose post-test score is lower than pre-test score are 9 students. Then, the students whose post-test score higher than pre-test score are 32 students. Next, tied means that there is no different score between pre-test and post-test. There are 3 students whose score are tied score.

Besides, it shows that the sum ranks of positive rank shows 740.00. Meanwhile, the sum ranks of negative ranks displays 121.00. The sum of positive ranks is higher than the sum of negative ranks ( $\sum R^+ > \sum R^-$ ). It means whether the median of pre-test is higher than the median of post-test.

The next analysis is determining whether there is any significance difference between pre-test and post-test. The researcher uses SPSS version 16.0 of Wilcoxon formula to calculate the result. The outcome is presented as below:

**Table 4.9 The Result of Wilcoxon Test Statistics**

Test Statistics <sup>b</sup>	
	PostTest – PreTest
Z	-4.015 <sup>a</sup>
Asymp. Sig. (2-tailed)	.000

a. Based on negative ranks.

b. Wilcoxon Signed Ranks Test

To analyze the result of calculating data above, it should be matched to the rule that is, if  $P_{\text{value}} > 0.05$ ,  $H_0$  is accepted automatically,  $H_1$  is rejected. Then, if  $P_{\text{value}} < 0.05$ ,  $H_0$  is rejected and automatically,  $H_1$  is accepted. Based on the result above,  $P_{\text{value}}$  (sig) is 0.000. Thus,  $0.000 < 0.05$ , means whether  $H_0$  is rejected, automatically,  $H_1$  is accepted. In conclusion, there is any significant difference between students' score before and after implementing One Day One Word Strategy toward their vocabulary mastery.

#### **D. Finding**

In the finding, the researcher interprets the calculated data. Based on the data description, the mean score of pre-test is 57.13636 meanwhile the mean score of post-test is 77.06818. The mean score of post-test is higher than the mean score of pre-test within the gained mean score is 19.93182. In other word, after implementing One Day One Word strategy, the mean score of the students significantly raises up. This can be concluded that One Day One Word Strategy is an effective strategy to be implemented toward students' vocabulary mastery. However, it just cannot be judged in such condition. The next calculating must be interpreted to ensure that the strategy is truly effective to improve students' vocabulary mastery.

In the analysis of data, the researcher used SPSS version 16.0 by using the formula of One-Sample Kolmogorov-Smirnov Test to find the normality of the data. The result shows that the data includes to normal distribution. This means whether the next analysis, which is finding the homogeneity of the data, should be continued. The researcher used SPSS version 16.0 to find the homogeneity of data by using the formula of Levene Statistics. However, the significant value of the data results 0.001. The finding of significant value is under  $\alpha$  ( $0.001 < 0.05$ ). It means whether the data is not homogenous, but it is heterogeneous data. Hence, the data includes to non-parametric data. Because of the data is

heterogeneous, the researcher decided to use Wilcoxon formula to test the hypothesis.

After analyzing the data, the researcher tested the hypothesis using the formula of Wilcoxon helped by SPSS version 16.0. The result shows that the students whose post-test score is higher than pre-test score are 32 students. Then, the students whose post-test score is lower than pre-test score are 9 students. Next, the students whose both post-test and pre-test score is same (tied) are 3 students. It means that the strategy is effective to improve the students' vocabulary mastery indicated by the students' mean score of post-test is higher than the students' mean score of pre-test.

The data was calculated by the formula of Wilcoxon of SPSS version 16.0, the  $P_{\text{value}}$  (sig) showed 0.000. It means whether  $P_{\text{value}} < 0.05$ . Thus, it can be concluded whether there is a significant difference between pre-test and post-test score.

In conclusion, there is an effect of using One Day One Word Strategy for the students' vocabulary mastery. It is proven by the difference students' mean score before and after being implemented using One Day One Word Strategy. The mean score of pre-test is 57.1364; meanwhile the mean score of post-test is 77.0682. Besides, the significant difference of students' score both in pre-test and post-test also was found after being calculated using Wilcoxon formula. Then, it can be concluded whether One Day One Word Strategy is an effective strategy toward vocabulary mastery.

## **E. Discussion**

The calculated data showed that there is a significant difference between pre-test score and post-test score of the students. Hence, it can be grasped whether implementing One Day One Word Strategy toward vocabulary mastery of eighth grade students of Islamic Junior High School 2 of Blitar is an effective strategy to be applied.

This strategy is modified from explicit teaching vocabulary. The effectiveness of this strategy has been proven by the previous researchers. Goerss et al., (1999, as cited in Taylor et al, 2009) supports the notion that, in order to learn and retain new vocabulary, students need to be involved in active learning that requires them to make associations between word learning and their experiences, as well as opportunities to practice, apply, and discuss their word knowledge. One Day One Word strategy offers the students to involve actively with English. It also requires the students to contextually make a sentence a day. Besides, Taylor et al (2009) adds whether students need to go beyond memorizing definitions. They must be taught strategies that will allow them to integrate new word meanings with their existing knowledge in order to build strong conceptual representations of vocabulary across multiple contextual settings. One Day One Word Strategy gives chance to the students to integrate their new word with their experience. So, contextually, they can represent their knowledge by implementing this strategy. For addition, Nichols & Rupley (2004, Taylor et al, 2009)

explicit instructional activities that visually display new words while allowing students the opportunity to compare and contrast these new words to already known words, can provide a beneficial means for increasing the vocabulary knowledge of struggling readers. Further, using explicit teaching vocabulary is a good strategy to build strong conceptual representation of vocabulary and impact to improve the students' vocabulary mastery.

The nature of One Day One Word Strategy also implicates to the theory of Self-Regulated Learning. It is caused by this strategy demands the students to learn vocabulary by themselves regulatory. Besides, the teacher also plays a significant role to monitor the students' progress. This activity is suitable to the statement of Zimmerman (1990), who states whether a self-regulated learning perspective on students' learning and achievement is not only distinctive, but it has profound implications for the way teachers should interact with students and the manner in which schools should be organized.

To emphasize the theory above, Boekaerts (1996) asserts whether self-regulated learning has emerged as a powerful new learning theory that is able to promote the transfer of knowledge and skills to real-life situations and make students more independent of their teachers in extending and updating their knowledge base. This theory is also applied in One Day One Word Strategy. The students can learn new knowledge independently without depending totally to the teachers. However, the role

of the teacher in One Day One Word Strategy is still necessary for supporting the students' progress.

For addition, Pintrich (1995, as quoted in Boekaerts, 1996) directs the term Self-regulated learning as teacher should create powerful learning environments in which students can learn to steer and direct their learning, control their effort expenditure, and manage their emotions. This One Day One Word Strategy also manages the teacher to create an independent learning environment for the students. The students can train themselves to learn independently by applying this strategy. Furthermore, besides implementing explicit teaching vocabulary, One Day One Word Strategy also applies the theory of Self-Regulated Learning.

Based on the finding and the previous research above, then, implementing One Day One Word Strategy is an alternative strategy that can be applied in teaching and learning English. The students can easily take advantage of nowadays sophisticated gadget, and so improve their vocabulary mastery by implementing One Day One Word Strategy. Besides, the teacher also can monitor the students' to engage within English everyday, everywhere because this strategy is applied out of class.