

## **CHAPTER IV**

### **RESEARCH FINDING AND DISCUSSION**

#### **4.1 Data**

The test results are used to obtain empirical evidence about the effect of the Example Non Example Learning Model on vocabulary mastery by grade VII students of SMP Al-Washliyah Sukoharjo Medan in the academic year 2020/2021. The results of the data analysis were described based on the results of the vocabulary and treatment tests. There are two classes, namely VII-3 and VII-4. Class VII-3 consists of 32 students and class VII-4 consists of 32 students. VII-3 is the experimental class which is evaluated using Example Non Example Learning Model and VII-4 is the control class which is evaluated using conventional methods. Researcher gave tests to students to get data about students' vocabulary mastery. After getting this research data, the researcher analyzed it.

##### **4.1.1 Score of Pre-Test and Post-Test Students in Experimental Class**

In collecting data on students' abilities in mastering English vocabulary in the experimental group using Example Non Example Learning Model, the researcher gave a paper test, to test students' abilities. The test is divided into two, namely pre-test and post-test. The purpose of this study was to determine whether the English vocabulary mastery of the students of SMP Al-Washliyah Sukoharjo Medan who were taught using Example Non Example Learning Model increased

or not. The results of the study of mastery of English vocabulary in the experimental and control groups can be seen in the following table:

**Table 4.1**  
**Score of the Experimental Class Pre-Test and Post-Test**

<b>No</b>	<b>Name</b>	<b>Pre-Test</b>	<b>Post-Test</b>	<b>Gained Score</b>
1	AR	65	90	25
2	AA	65	90	25
3	A	60	85	25
4	AJR	55	80	25
5	BL	60	90	30
6	B	65	90	25
7	DR	70	80	10
8	DA	55	85	30
9	EAA	65	85	20
10	FA	60	85	25
11	FNN	55	80	25
12	F	55	80	25
13	FAK	75	90	15
14	ISI	65	90	25
15	IR	65	90	25
16	JF	55	60	5
17	MA	60	70	10
18	MDP	55	80	25
19	MRH	60	80	20
20	NM	70	100	30
21	NH	60	85	25
22	NCS	65	85	20
23	NS	75	75	0
24	PK	70	100	30
25	RS	55	80	25
26	REW	65	80	15
27	RA	65	90	25
28	SA	75	85	10
29	SN	60	80	20
30	WSN	55	75	20

31	WR	50	70	20
32	ZA	55	75	20
	Total Score	1985	2660	675
	Mean Score	62.03	83.12	21.09

From the data table above, the data shows that the value of 32 students in class VII-3. The mean value of the pretest was 62.03 where the lowest score of the pre-test was 50 and the highest score was 75. While the average score of the post-test was 83.12, the lowest score was 60 and the highest score was 100. The average score was 21.09 with a minimum score of 10 and a maximum score of 30. So it can be concluded that there is a significant difference between the pre-test and post-test scores in the experimental class.

**Table 4.2**  
**Score of the Control Class Pre-Test and Post-Test**

No	Name	Pre-Test	Post-Test	Gained Score
1	AR	85	90	5
2	APMS	75	90	15
3	AR	70	85	15
4	AS	65	85	20
5	D	45	70	25
6	FAR	55	75	20
7	HS	70	90	20
8	HH	65	80	15
9	INZ	75	80	5
10	M	80	85	5
11	MA	70	80	10
12	MH	75	90	15
13	MSS	70	80	10
14	MS	75	85	10
15	MAA	75	90	15
16	MFN	75	85	10
17	MH	65	75	10
18	MIF	55	80	25
19	MRR	70	80	10

20	MRM	55	75	20
21	NA	50	75	25
22	NAY	50	70	20
23	NJH	75	90	15
24	NH	60	80	20
25	RA	50	70	20
26	RAA	50	70	20
27	RR	45	65	20
28	RP	65	75	10
29	SH	45	60	15
30	TS	70	90	20
31	VAF	75	85	10
32	WA	55	75	20
	Total Score	2060	2555	495
	Mean	64.37	79.84	15.47

From the data table above, the data shows that the value of 32 students in class VII-4. The mean value of the pre-test was 64.37 where the lowest score of the pre-test was 45 and the highest score was 85. Meanwhile, the average score of the post-test was 79.84 where the lowest post-test score was 60 and the highest score was 90. In addition, the average score obtained is 15.47 with the minimum score obtained is 5 and the maximum score obtained is 25. So it can be concluded that the pre-test and post-test are quite significant in the control class.

#### **4.2 Fulfillment of Statistical Assumptions**

Before conducting this research, the researcher conducted a validity and reliability test. The writer tested the validity and reliability using SPSS version 25 (Statistical Package for the Social Science).

The validity test was measured from the t-table of the Pearson Product Moment Correlation to determine the level of significance. There were 20

questions that were tested on students consisting of twenty multiple choice items to measure students' vocabulary skills and to test the validity of the pre-test and post-test data.

#### 4.2.1 Validity

In this research, the writer uses multiple choice test to measure students' mastery ability in vocabulary test. This test can be said to be valid in terms of content validity. Content validity in this study can be shown in the following table:

**Table 4.3**  
**Validity Pre-Test**

No. Item	R.Count	R. table ( N-2)	Interpretation
1	.587	0,349	Valid
2	.631	0,349	Valid
3	.696	0,349	Valid
4	.700	0,349	Valid
5	.549	0,349	Valid
6	.440	0,349	Valid
7	.594	0,349	Valid
8	.383	0,349	Valid
9	.807	0,349	Valid
10	.763	0,349	Valid
11	.436	0,349	Valid
12	.550	0,349	Valid
13	.673	0,349	Valid
14	.730	0,349	Valid
15	.406	0,349	Valid
16	.649	0,349	Valid
17	.696	0,349	Valid
18	.638	0,349	Valid
19	.476	0,349	Valid
20	.370	0,349	Valid

**Table 4.4**  
**Validity Post-Test**

No. Item	R.Count	R. table ( N-2)	Interpretation
1	.499	0,349	Valid
2	.405	0,349	Valid
3	.440	0,349	Valid
4	.409	0,349	Valid
5	.433	0,349	Valid
6	.458	0,349	Valid
7	.443	0,349	Valid
8	.397	0,349	Valid
9	.445	0,349	Valid
10	.490	0,349	Valid
11	.360	0,349	Valid
12	.423	0,349	Valid
13	.415	0,349	Valid
14	.463	0,349	Valid
15	.541	0,349	Valid
16	.391	0,349	Valid
17	.363	0,349	Valid
18	.442	0,349	Valid
19	.392	0,349	Valid
20	.427	0,349	Valid

Validity test was measured from the t-table of the Pearson Product Moment Correlation to determine the level of significance. This value is compared with the r-table value in the significant table of 5% and the r table is 0.349. Based on the table above, there was 20 multiple choice questions that have been tested on students. And from 20 questions there was 20 questions in the pretest table that are valid and in the post-test table there was 20 questions that are valid. The results of data analysis of each test score can be obtained with the total score. T-table shows that the level of significance to the validity of the study is t-count 0.349. It can be concluded that the instrument used in this study is valid.

#### 4.2.2. Reliability Test

In this study, the researcher used SPSS version 25 to determine the reliability of the test instrument. The results of reliability testing using SPSS version 25 can be seen in the following table:

**Table 4.5**  
**The Result of Reliability of Pre-Test**

<b>Reliability Statistic</b>	
<b>Cronbach's Alpha</b>	<b>N of Items</b>
<b>.902</b>	<b>20</b>

From the results of the analysis, it can be stated that there are significant results in the pre-test where the reliability of Cronbachs Alpha must be above 0.60. The statistical result of Cronbachs Alpha on the pre-test was 0.902. This means that the data can be trusted.

**Table 4.6**  
**The Result of Reliability of Post-Test**

<b>Reliability Statistic</b>	
<b>Cronbach's Alpha</b>	<b>N of Items</b>
<b>.767</b>	<b>20</b>

From the results of the analysis, it can be stated that there are significant results in the post-test where the reliability of Cronbachs Alpha must be above 0.60. The statistical result of Cronbachs Alpha on the post-test was 0.767. This means that the data can be trusted.

### 4.2.3 Result of Normality and Homogeneity Test

#### 4.2.3.1 The Normality Test

Normality test was performed before calculating the t-test. This is done to find out whether the data from the two classes are normally distributed or not. The writer uses Kolmogorov-Smirnov and Shapiro-Wilk to test for normality. Following are the steps to analyze the normality of the data. The results can be seen as follows:

**Table 4.7**  
**The Result of Normality Pre-Test and Post-Test**  
**Test of Normality**

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
<b>Experiment</b>	.165	32	.026	.916	32	.016
	.166	32	.025	.939	32	.071
<b>Control</b>	.188	32	.006	.915	32	.016
	.145	32	.087	.925	32	.029

Based on the data above, the test results show that the pre-test significance value of Kolmogorov-Smirnov for the experimental class is  $0.026 \geq 0.05$  and that of Saphiro Wilk is  $0.016 \geq 0.05$  and the pre-test significant value of Kolmogorov-Smirnov for the control class is  $0.006 \geq 0.05$  and that of Shapiro-Wilk is  $0.016 \geq 0.05$ . So, it can be concluded that the data from Kolmogorov-Smirnov and Shapiro-Wilk, namely the pre-test of the experimental class and the pre-test of the control class are normally distributed. Meanwhile, the post-test significance value of Kolmogorov-Smirnov for the experimental class was  $0.025 \geq 0.05$  and that of

Shapiro Wilk was  $0.071 \geq 0.05$  and the post-test significant value of Kolmogorov-Smirnov for the control class was  $0.087 \geq 0.05$  and of Shapiro-Wilk is  $0.029 > 0.05$ . If the data is higher at significance = 0.05 then the data is normally distributed. It can be concluded that the data is normally distributed because the significance of both classes is above 0.05.

#### 4.2.4. The Homogeneity Test

After the normality test, the researcher conducted a homogeneity test to determine the similarity of the values of the two classes. The researcher uses the SPSS version 25 statistical test to calculate the homogeneity test. The results can be seen in the following table:

**Table 4.9**  
**The Result of Homogeneity Variences Test**

Test of Homogeneity of Variance					
		Levene Statistic	Df1	Df2	Sig
The Result Of The Test	Based on Mean	.004	1	62	.950
	Based on Median	.014	1	62	.906
	Based on Median and with adjusted df	.014	1	60.290	.906
	Based on trimmed mean	.006	1	62	.936

Based on the data above, significance was obtained from two classes, namely pre-test and post-test. The significance is  $0.936 \geq 0.005$ . Therefore, the data becomes homogeneous. From the results of the analysis above, the value obtained from the pre-test contributes to normality. And in the homogeneity test the value is homogeneous.

### 4.3 Hypotheses Testing

After calculating the normality test and homogeneity test, the researcher calculated the hypothesis test to find out whether there was a significant difference between the results of the pre-test and post-test after being given treatment. The researcher uses SPSS version 25 which was selected and used to test the hypothesis of this study. The data is inputted and calculated using the formula for the average value of the experimental class and the control class. Furthermore, the significance value or alpha ( $\alpha$ ) of 5% or 0.05 was obtained. Then the results of the t-test can be seen as follows:

**Table 4.10**  
**T-test**  
**Independent Sample T-test**

Independent Samples T-Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
The result of the test	Equal variances assumed	0.04	.950	-1.602	62	.114	-3.281	2.048	-7.376	.813
	Equal variances not assumed			-1.602	61.954	.114	-3.281	2.048	-7.376	.813

Based on the above data obtained the value of sig. (2-tailed) is 0,114>0.05.

So it can be concluded that there is a significant difference between the scores of

students who are taught with Example Non Example Learning Model and students who are taught by conventional methods. To see how big the difference in student learning outcomes is based on the average score. Look at the following table:

**Table 4.11**  
**Group Statistic**

Group Statistics					
	Class	N	Mean	Std. Deviation	Std. Error Mean
The Result Of The Test	Post-test Experimental Class	32	83.13	8.304	1.468
	Post-test Control Class	32	79.84	8.081	1.428

After looking at the statistical group table above, the average value of the experimental class from the post-test was  $83.13 > 79.84$  in the control class post-test. This shows that the T-test is higher than the T-table. Therefore: The null hypothesis ( $H_0$ ) is rejected and the alternative hypothesis ( $H_a$ ) is accepted.

This means that there is a significant difference between the students' English vocabulary skills in the experimental group using Example Non Example Learning Model and the students' abilities in English using Example Non Example Learning Model in the control group using the conventional method.

#### **4.4 Research Findings**

In this study, there was two classes that the researcher use as research samples. There are two classes, namely VII-C which is an experimental class that is taught using the Example Non Example learning model. The control class in

this study was class VII-D which was taught using conventional methods. In this study, the writer found many differences in results between the pre-test and post-test scores for the experimental and control classes which included the Gained score test, validity, reliability, normality, homogeneity, and independent sample T-test. The results of the average Gained score of the experimental class students were higher than the average Gained score of the control class ( $21.09 > 15.47$ ). This shows that there is a significant difference between the two classes.

From the results of the average value obtained the average value of the experimental class is 21.09 and the average value of the control class is 15.47. So, the average value of the experimental class is higher than the control class, which is  $21.09 > 15.47$ . This means that there is a significant difference between students' English vocabulary mastery in the experimental group using the Example Non Example learning model and students' English vocabulary mastery in the control group using conventional methods.

#### **4.5 Discussion**

In the teaching and learning process, the learning model can affect student learning outcomes. Actually, there are many learning models that can be applied in the classroom. Teachers must be able to choose the right learning model that can make students understand the material being taught. The learning model that can be used is the Example Non Example learning model.

The Example Non Example learning model is a cooperative learning model. By doing this learning model in the classroom, students will be easy to convey

their ideas or some information in their daily environment. The statistical data shows that the sample group data of students' ability in English vocabulary in the experimental group using the Example Non Example learning model shows that the average value is (21.09). And the data of the sample group of students' ability in English vocabulary in the control group with the conventional method showed the average was (15.47). This means that there is a difference in the effect between the use of Example Non Example learning model and using conventional methods on students' English vocabulary mastery skills. And the students' ability in English vocabulary using the Example Non Example learning model is better than the students' ability in mastering English vocabulary using conventional methods.