# **CHAPTER IV**

# FINDINGS AND DISCUSSION

### A. Findings

### 1. Presentation of Data

The presentation of data in this study is divided into several stages, namely learning implementation and result of research.

# 1. Learning Implementation

This research was conducted from October 8, 2018 to November 27, 2018. During the implementation of learning in this study, researcher acted as a teacher. The textbook taken is the first printed English textbook in class XI 2013 curriculum.

# a. Implementation of Experimental Class Learning

The learning process in the experimental class used the Extensive Reading technique which was carried out in the XI MIA 1 class and took place in 6 meetings. For more details, it can be seen in the following table.

Meeting	Day/Date	Time	Materi
1	Monday, 08 October 2018	8-9	Pre-Test
2	Monday, 15 <sup>th</sup> October 2018	8-9	Suggest and Offer
3	Monday, 22 October 2018	8-9	Suggest and offer
4	Monday, 29 October 2018	8-9	Folklore and opinion
5	Monday, 05 November 2018	8-9	Folklore and opinion
6	Monday, 12 November 2018	8-9	Folklore and opinion
7	Monday, 19 November 2018	8-9	Folklore and opinion
8	Monday, 26 November 2018	8-9	Post-Test

Table 4.1 Schedule of Learning Implementation in Experiment Class

# b. Control Class Learning Implementation

The implementation of learning in the control class only used memorization technique, that was carried out in the XI MIA 2 class and lasted in 6 meetings. For more details, can be seen in the following table:

Tabel 4.2 Schedule of Learning Implementation in Control Class

Meeting	Day/Date	Time	Materi
1	Tuesday, 09 October 2018	8-9	Pre-Test
2	Tuesday, 16 <sup>th</sup> October 2018	8-9	Suggest and Offer
3	Tuesday, 23 October 2018	8-9	Suggest and offer
4	Tuesday, 30 October 2018	8-9	Folklore and opinion
5	Tuesday, 06 November 2018	8-9	Folklore and opinion
6	Tuesday, 13 November 2018	8-9	Folklore and opinion
7	Tuesday, 20 November 2018	8-9	Folklore and opinion
8	Tuesday, 27 November 2018	8-9	Post-Test

# 2. Result of Research

### a. Students Pre-Test Result

Before learning was carried out, the researcher first conducted a pre-test in two classes those were experimental class and control class. The test was held on Monday, October 08, 2018 and October 09, 2018.

The pre-test scores obtained by students can be seen in the appendix. Based on the values in the appendix, the pre-test values can be seen in the following table:

Score	Category	Frequency	Percentage (%)
80-100	Very good	1	4,16%
70-79	Good	0	0
60-69	Fair	0	0
50-59	Poor	5	20,83%
0-49	Very Poor	18	33,33%
Т	otal	24	100%

Tabel 4.3 Percentage of Qualifications in Experiment Class of Pre-Test Value

The table above shows different qualification. Students who got very good qualification is 1 person, poor are 5 students and very poor are 18 students. The most obtained value of students is in the range 0-49 (very poor) with a percentage of 33.33%.

The result of the Pre-test in control class is not so different from the experimental class. In summary, the pre-test value in the control class can be seen as follows.

Score	Category	Frequency	Percentage (%)
80-100	Very good	2	8,33%
70-79	Good	0	0
60-69	Fair	1	4,16%
50-59	Poor	1	4,16%
0-49	Very Poor	20	83,33%
T	otal	24	100%

Tabel 4.4 Percentage of Qualification in Control Class of Pre-Test Value

Based on the table above, students who got a very good category were only 2 persons, other were fair to very poor students. There were 1 student who got fair, 1 student who got poor, and 20 persons who had very poor score. The value most students found was 0-49 (very lacking), as well as the experimental class with a percentage of 83.33%.

#### b. Students Post-Test Result

Post-test was conducted to determine students' learning outcomes. Post-tests were carried out after students ended their learning activities. The results of the post-test in each class can be seen in the appendix (...) .Based on the result of the post-test in the attachment, the students' score of post-test can be seen in the following table.

Score Category		Experiment		Control	
Beole		Frequency	Percentage	frequency	Percentage
80-100	Very good	5	20,83%	3	12,5%
70-79	Good	8	33,33%	4	16,66%
60-69	Fair	4	16,66%	3	12,5%
50-59	Poor	0	0	9	37.5%
0-49	Very Poor	7	29,16%	5	20,83%
Т	otal	24	100%	24	100%

Tabel 4.5 Percentage of Qualification in Experiment and Control Class Post-Test Value

Based on the table above, each class ( experiment, control) had 24 students, and both classes had different qualification. The students in experimental class got very good qualification ( 5 students), good ( 8 students), fair ( 4 students), very poor ( 7 students). The most obtained value of students is 70-79 (good) with a percentage of 33.33%. Otherwise, the control class had various qualification. Qualification obtained by students in control class were, very good (3 students), good ( 4 students), fair ( 3 students), poor ( 9 students), and very poor (5 students). Therefor most obtained value of students was 50-59 (poor) with a percentage of 37.5%

To analyze the data in this study, the researcher used SPSS 22 application. Data analysis is done through several stages, as follows.

### 1. Description of Student Pre-Test Result

# a. Mean and Standard Deviation

The description of the pre-test result is based on calculations through the SPSS 22 application. The scores of the students' pre-test completely result can be seen in the appendix, but briefly it can be seen in the following table.

Tabel 4.6 Description of Students' Score

	Experiment	Control
Mean	37,08	35,20
Standard Deviation	16,14	19,80

Based on the table above, it is known that the value obtained by the students in experimental class was 37.08, in mean with the standard deviation of 16.14. The value obtained by students in the control class was 35.20 in mean with the standard deviation of 19.80. The table above also shows that the mean pre-test scores of students in the experimental class and the control class were not so different if it is seen from the difference of 1.88.

# b. Normality Test

The normality test is done to determine the normal distribution of data. The results of the normality test from the student's pre-test result can be briefly seen in the following table.

Tabel 4.7 SPSS Output One-Sample Kolmogrov-Smirnov Test of theNormality of Student Pre-Test Result

		v Bhilliov Tee	-
		Experiment_	Control_Clas
		Class	S
Ν		24	24
Normal Parameters <sup>a,b</sup>	Mean	37.0833	35.2083
	Std. Deviation	16.14585	19.80773
Most Extreme	Absolute	.190	.254
Differences	Positive	.190	.254
	Negative	105	112
Test Statistic		.190	.254
Asymp. Sig. (2-tailed)		.026 <sup>c</sup>	.000 <sup>c</sup>

**One-Sample Kolmogorov-Smirnov Test** 

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Based on the above data, it is known, the Sig. in the Test of Normallity table in the Kolmogrov-Smirvon column. So, its Sig. (2 tailed) data value

of students in experiment class was 0.026. Thus, 0.026 < 0.05, which means the data is not normally distributed. Whereas Sig. for the control class was 0.00,. Thus, 0.00 < 0.05, which means the data was also not normally distributed. The full calculation can be seen in the attachment.

# c. Homogeneity Test

The calculation of the homogeneity test results of students' pre-test can be briefly seen in the following table.

Tabel 4.8 SPSS Output Anova of Homogeneity of Students' Pre-Test Result.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	42.188	1	42.188	.129	.721
Within Groups	15019.792	46	326.517		
Total	15061.979	47			

ANOVA

Pre Test

a = 0,05

Based on the table above, it is known that at a significant level a = 0.05, the significant value in the Test of Homogenety of Variance table in the Between Group column is 0.721, which means 0.721 is bigger than 0.05 so Homogeny concludes the two data. This means that the results of the pre-test of the experimental class and the control class are homogeneous.

## d. U Test (Mann-Whitney)

If the data is not normally distributed, then the Mann-Whitney test or the U test is used. The data can be seen in the following table.

Tabel 4.9 Mann-Whitney Test Output (U Test) of the Student Pre-Test result.

Test Statistics <sup>a</sup>			
	Score of		
	Students		
Mann-Whitney U	251.500		
Wilcoxon W	551.500		
Z	757		
Asymp. Sig. (2- tailed)	.449		

a. Grouping Variable: Group

Based on the table above, it is known that the value of Sig (2 tailed). on the results of the student Pre-Test is 0.449 is bigger than 0.05( 0.449 > 0.05). Therefore, H<sub>a</sub> is accepted and H<sub>0</sub> is rejected. Finally it can be concluded that there is a significant difference in the learning outcomes of class XI MIA 1 and XI MIA 2 MAN 2 Pulang Pisau.

The full calculation can be seen in the attachment.

#### 2. Description of Student Post-Test Results

# a. Mean and Standard Deviation

The description of the student's post-test result can be seen in the appendix. Brief description of it can be seen in the following table.

Tabel 4.10 Description of Student Post-Test

		Minimu	Maximu		Std.
	Ν	m	m	Mean	Deviation
Experiment_Class	24	20.00	90.00	62.29	20.69337
Control_Class	24	30.00	85.00	57.50	16.55032
Valid N (listwise)	24				

**Descriptive Statistics** 

Based on the table above, the mean value of the students post test result in experiment class was 62.29 with the standard deviation of 20.69337. While the mean value of the control class Post-test result was 57.50 with the standard deviation of 16.55032. This shows that the difference in comparison of the mean experiment class and control class is not high, namely 4.79.

# b. Normality Test

The normality test is carried out to determine the normal distribution of data. The results of the normality test of student post-test can be seen in the following table.

Tabel 4.11 SPSS Output Normality Test for Student Post-Test Results

		Experiment_ Class	Control_Clas s
Ν		24	24
Normal Parameters <sup>a,b</sup>	Mean	62.2917	57.5000
	Std. Deviation	20.69337	16.55032
Most Extreme	Absolute	.302	.143
Differences	Positive	.113	.143
	Negative	302	117
Test Statistic		.302	.143
Asymp. Sig. (2-tailed)		.000 <sup>c</sup>	.200 <sup>c,d</sup>

**One-Sample Kolmogorov-Smirnov Test** 

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Based on the table above, it is known that Sig 2 tailed data on the value of students in the experimental class is 0.00. Thus, 0.00 is smaller than 0.05 ( 0.00 < 0.05) the data is not normally distributed. While the Sig 2 tailed data value of the control class is 0.200. So, 0.200 is greater than

0.05 (0.200 > 0.05) therefore, the data is normally distributed. The full calculation can be seen in the attachment.

## c. Homogeneity Test

The calculation of the homogeneity test result of students' pre-test can be briefly seen in the following table.

Tabel 4.12 SPSS Output Test Homogeneity of Student Post-Test Result

**Test of Homogeneity of Variances** 

Post\_Test

Levene Statistic	df1	df2	Sig.
.978	1	46	.328
a = 0,05			

Based on the table above, it is known that at a significant level  $\alpha = 0.05$  a significant value is obtained in the Test of Homogenety of Variance table in the Sig. is 0.328. Thus 0.328 is greater than 0.05 ( 0.328> 0.05), and that both data can be concluded Homogeny. This means that the results of the post-test in experiment class and control class are homogeneous. Complete data can be seen in the attachment.

### d. U Test (Mann Whitney)

If the data is not normally distributed, then the Mann-Whitney test or the U test is used. The data can be seen in the following table.

Tabel 4.13 Mann-Whitney Test Output (U Test) of Student Post-Test Result

Test Statistics <sup>a</sup>	
	Post_Tes
	t
Mann-Whitney U	226.000
Wilcoxon W	526.000
Z	-1.285
Asymp. Sig. (2- tailed)	.199

a. Grouping Variable: Group

Based on the table above, it is known that the value of Sig (2 tailed) is 0.199, which is 0.199 is greater than 0.05 (0.199 > 0.05). Therefore, H<sub>a</sub> is accepted and H<sub>0</sub> is rejected. Finally, it can be concluded that there significant difference in students score who used extensive reading technique in class MIA 1 and MIA 2 between pre-test and post-test in their vocabulary mastery skill at MAN 2 Pulang Pisau.

The differences in student learning outcomes in the experiment class and control class for more details can be seen in the diagram below, and the full calculation can be seen in the appendix.

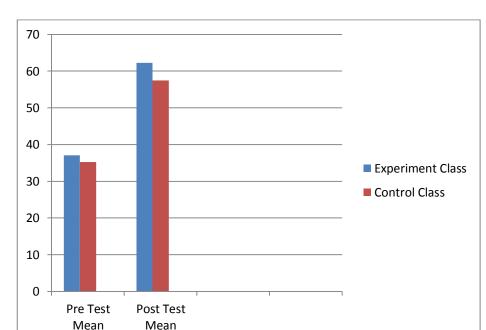


Diagram 4.1 Learning Outcomes of the Experimental Class and the Control Class

The graph above shows that the mean score between experiment class and control class are different. However, the experimental class using extensive reading techniques experienced a higher level of improvement compared to the control class in teaching improving students' vocabulary. The mean score of pre-test in experiment class is 37.08, which in class control is 35.20. Also the mean score of post-test in experiment class is 62.29, but only 57.50 in control class.

### **B.** Discussion

Ahmad Susanto (2016, p 5) said learning outcomes were the level of success achieved by students after learning activities. To find out the learning outcomes achieved should be in accordance with the intended goals, and they can be known through evaluation. In this case, the evaluation used was the evaluation of vocabulary learning outcomes through an objective type test.

However, based on the calculation of the Mann Whitney test (U Test) using the SPSS application, it was found that there were significant differences in the learning outcomes in the experimental class taught using extensive reading techniques and control classes taught in conventional models MAN 2 Pulang Pisau.

From the two types of treatment above, learning English using the extensive reading technique has more influence on student learning outcomes when compared to language learning with conventional learning models. This can be seen from the mean value obtained by each group of students who were subjected to treatment at each meeting and from the mean value of the final test. The learning outcomes in the experimental group showed better results than the control group result.

Based on the result of description that have been stated in the data analysis, it is known that the mean of the experimental class learning

outcomes using the extensive reading technique in increasing vocabulary mastery is 62.29 with sufficient criteria. While mean of the control class learning outcomes using only memorization techniques is 57.50 with poor criteria. The difference of mean in the two classes is 4.79. however, the offersources were significant.

Also that the two classes experienced an increase in learning outcomes but had a range that was not so different between the two classes, experiment class that used extensive reading techniques and control class using the conventional models. However, the experimental class obtained higher learning outcomes both during the pre-test and post-test compared to the control class.

The percentage of qualification of post-test learning outcomes in experiment class by using extensive reding technique shows that students were in very good qualification are (5 students or 20.83%), good (8 students or 33.33%), which is fair (4 students or 16.66%), and very poor (7 students or 29.16%).