CHAPTER IV

RESULT OF THE STUDY

In this chapter, the writer presented the data which had been collected from the research in the field of study. The data are the description data of pre test score of experimental and control class, the description data of pre-test score of experimental and control class, testing of normality and homogeneity (normality test and testing homogeneity), result of data analysis, and discussion.

A. Data Presentation

This section describes the obtained data of the Effects of Using Multiple-Choice Test to the Students Scores in Learning vocabulary.

1. The Description Data of Pre-Test Score

The students' pre test scores is distributed in the following table in order to analyze the students' knowledge beforee conducting the treatment.

Based on KKM (Minimum Standard Scores of English subject of SMPMuhammadiyah Palangka Raya, the minimum mastery criterion (KKM) in English course is 70.

The qualifications of range score

Range Score	Classification
90-100	Excellent
80-89	Very Good
70-79	Good
60-69	Enough
0-59	Poor

Table 4.1 Pre test score of experimental and control group

Experiment Group				Control Group			
Code	Score	Correct Answer	Classification	Code	Score	Correct Answer	Classification
E-01	83	25	Very Good	C-01	33	10	Poor
E-02	70	21	Good	C-02	43	13	Poor
E-03	80	24	Very Good	C-03	43	13	Poor
E-04	83	25	Very Good	C-04	63	19	Enough
E-05	73	22	Good	C-05	63	19	Enough
E-07	73	22	Good	C-07	73	22	Good
E-08	46	14	Poor	C-08	56	17	Poor
E-09	80	24	Very Good	C-09	50	15	Poor
E-10	53	16	Poor	C-10	56	17	Poor
E-11	70	21	Good	C-11	50	15	Poor
E-12	80	24	Very Good	C-12	53	16	Poor
E-13	83	25	Very Good	C-13	60	18	Enough
E-14	86	26	Very Good	C-14	63	19	Enough
E-15	53	16	Poor	C-15	56	17	Poor
E-16	63	19	Enough	C-16	60	18	Enough
E-17	73	24	Good	C-17	60	18	Enough
E-18	90	27	Excellent	C-18	60	18	Enough
E-19	73	22	Good	C-19	56	17	Poor
E-20	83	25	Very Good	C-20	63	19	Enough
E-21	63	19	Enough				
E-22	83	25	Very Good				
E-23	53	16	Poor				
E-24	93	28	Excellent				
Total		1773		Total		1137	
Average		73,88		Average		56,85	
Lowest Score		46		Lowest Score		33	
Higher Score		93		Higher Score		73	

The table above shows us the comparison of pre-test score achieved by experimental and control group students, both class' achievement are at most the same level. It can be seen that from the students' score. The highest score is 93 and the lowest score is 46, experimental.

The highest score (H)   : 93
The lowest score (L)   : 46
The range of score (R) $= H - L + 1$
 $= 93 - 46 + 1$
                                  $= 47 + 1$
                                  $= 48$

Interval of temporary (I) $= \dfrac{R}{K} = \dfrac{48}{5} = 9.6$

     The highest score is 73 and the lowest score is 33 control group. It meant that the experimental and cintrol group have most the same level in level in learning multiple choice items by descriptive text before giving the treatment.

The highest score (H)   : 73
The lowest score (L)   : 33
The range of score (R) $= H - L + 1$
                                  $= 73 - 33 + 1$
                                  $= 40 + 1$
                                  $= 41$

Interval of temporary (I) $= \dfrac{R}{K} = \dfrac{41}{5} = 8.2$

The distribution of students' pretest score of experiment group can also be seen in the following figure 4.1.
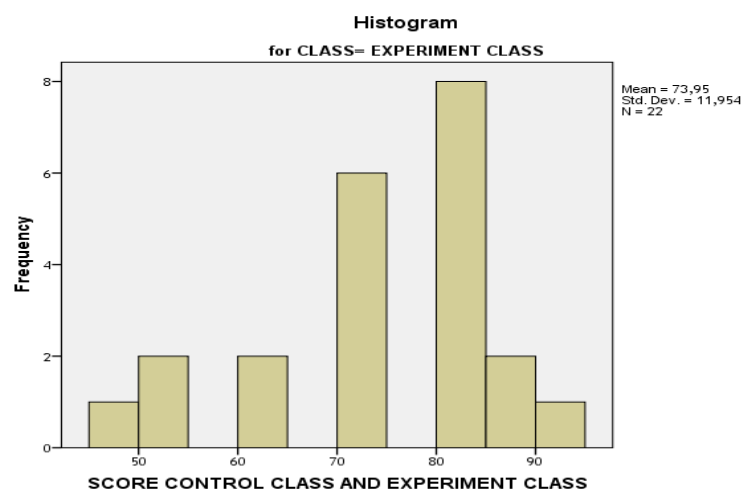
Then, the distribution of students' pre-test score of control group can
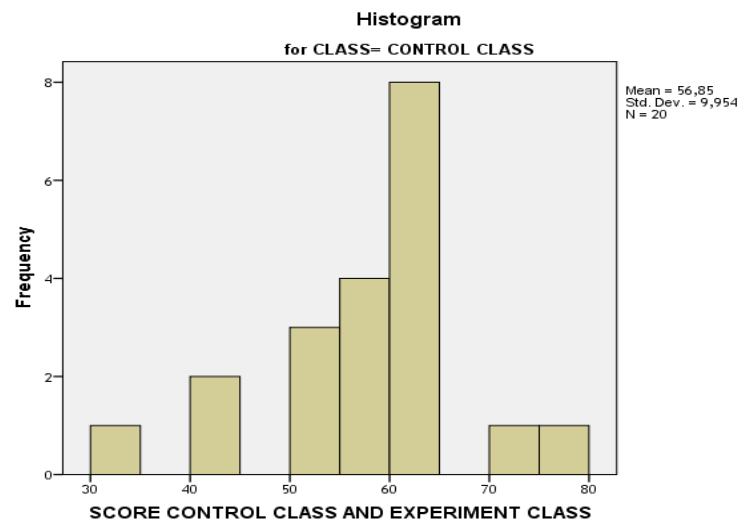
also be seen in the following figure 4.2.

Figure 4.2. the students' predicate in pre-test score of control group

2. The description Data of Post-Test Score

The students' scores are distributed in the following table in order to analyze the students' knowledge after conducting the treatment.

Based on KKM (Minimum Standard Scores of English subject of SMP Muhammadiyah Palangka Raya, the minimum mastery criterion (KKM) in English course is 70.

The qualifications of range score

Range Score	Classification
90-100	Excellent
80-89	Very Good
70-79	Good
60-69	Enough
0-59	Poor

Table 4.2 Post-test of experimental and control group

Experiment Group				Control Group			
Code	Score	Correct Answer	Classification	Code	Score	Correct Answer	Classification
E-01	86	26	Very Good	C-01	36	10	Poor
E-02	96	29	Excellent	C-02	70	21	Good
E-03	96	29	Excellent	C-03	33	10	Poor
E-04	86	26	Very Good	C-04	56	17	Poor
E-05	93	28	Excellent	C-05	66	20	Enough
E-06	100	30	Excellent	C-06	76	23	Good
E-07	80	24	Very Good	C-07	80	24	Very Good
E-08	90	27	Excellent	C-08	76	23	Good
E-09	96	29	Excellent	C-09	50	15	Poor
E-10	83	25	Very Good	C-10	83	20	Very Good
E-11	90	27	Excellent	C-11	53	23	Poor
E-12	93	28	Excellent	C-12	50	24	Poor
E-13	90	27	Excellent	C-13	76	25	Good
E-14	100	30	Excellent	C-14	66	20	Enough
E-15	83	25	Very Good	C-15	60	23	Enough
E-16	90	27	Excellent	C-16	50	20	Poor
E-17	80	24	Very Good	C-17	43	21	Poor
E-18	100	30	Excellent	C-18	76	23	Good
E-19	80	24	Very Good	C-19	76	23	Good
E-20	96	29	Excellent	C-20	76	23	Good
E-21	96	24	Excellent				
E-22	93	28	Excellent				
E-23	53	16	Less				
E-24	93	28	Excellent				
Total		2143		Total		1252	
Average		89,29		Average		62,6	
Lowest Score		53		Lowest Score		33	
Higher Score		100		Higher Score		83	

The table above shows us the comparison of post-test score
achieved by experimental and control group students, both classes'
achievement are at most the same level. It can be seen that from the

students' score. The highest score is 100 and the lowest score is 53, experimental.

The highest score (H)   : 100
The lowest score (L)   : 53
The range of score (R) $= H - L + 1$
$\qquad = 100 - 53 + 1$
$\qquad = 47 + 1$
$\qquad = 48$
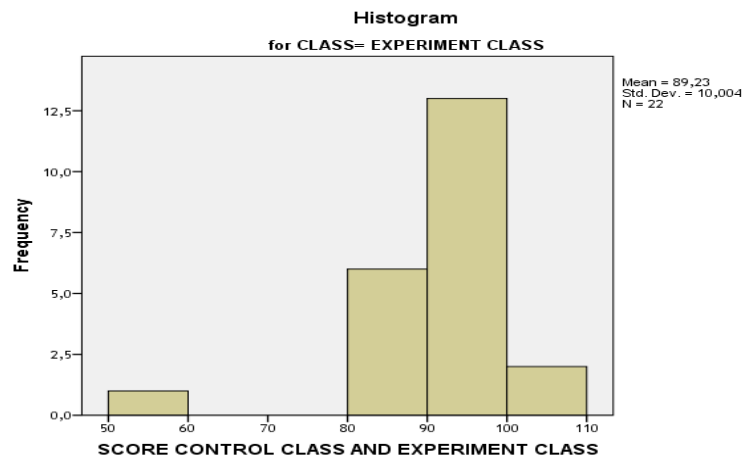Interval of temporary (I) $= \dfrac{R}{K} = \dfrac{48}{5} = 9.6$

The highest score is 83 and the lowest score is 33 control group. It meant that the experimental and control group have different level in learning multiple choice test by descriptive text after getting the treatment.

The highest score (H)   : 83
The lowest score (L)   : 33
The range of score (R) $= H - L + 1$
$\qquad = 83 - 33 + 1$
$\qquad = 50 + 1$
$\qquad = 51$
Interval of temporary (I) $= \dfrac{R}{K} = \dfrac{51}{5} = 10.2$

The distribution of students' post-test score of experiment group can
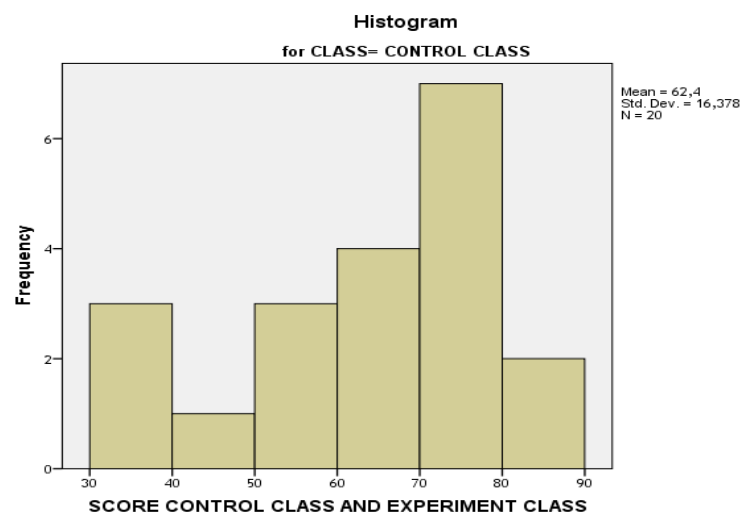
also be seen in the following figure 4.2

Histogram

For group = experimental

Histogram
for CLASS= EXPERIMENT CLASS

Mean = 89,23
Std. Dev. = 10,004
N = 22

Y-axis: Frequency
X-axis: SCORE CONTROL CLASS AND EXPERIMENT CLASS

The distribution of students' post-test score of control group can

also be seen in the following figure 4.3.

Histogram

For group = control

Histogram
for CLASS= CONTROL CLASS

Mean = 62,4
Std. Dev. = 16,378
N = 20

Y-axis: Frequency
X-axis: SCORE CONTROL CLASS AND EXPERIMENT CLASS

B. Testing of Normality and Homogeneity

1. Normality Test

The testing of normality test used SPSS 20.0 program. It is divided into two parts, testing of normality of pre test and post-test both experimental and control group.

Table 4.2 Testing normality of post-test experimental and control group

Tests of Normality							
Control Class and Experiment Class		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	Df	Sig.
Score	Control Class	,197	20	,041	,883	20	,020
	Experiment Class	,213	22	,011	,771	22	,000
a. Lilliefors Significance Correction							

The table shows the result of test of normality calculation using SPSS 20.0 program.

To know the normality of data, the formula can be seen as follows:

If the number of sample. > 50 = Kolmogorov-Smirnov

If the number of sample. < 50 = Shapiro –Wilk

Based on the number of data the writer was $42 < 50$, so to analyzed normality data the writer used Shapiro-Wilk. The next step, the writer analyzed normality of data by using formula as follows:

If significance $> 0,05$ = data is normal distribution

If significance $< 0,05$ = data is noot normal significance

Based on data above, significant data of experiment and control group used Shapiro-Wilk is $0,020 > 0,05$ and $0,000$. It can be concluded

that the data is normal distribution for control class and experiment class is not normal distribution.

2. Testing Homogeneity

Testing homogeneity used SPSS 10.0 program. The result of testing homogeneity of post-test of experimental and control group can be seen on the table 4.4.

The table 4.4. Testing Homogeneity and Independent samples test of

Post-Test of Experiment and Control Group

Independent Samples 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**
Score of Students Post-test	**Equal variances assumed**	8,898	,005	-6,473	40	,000	-26,827	4,145	-35,204	-18,450
	Equal variances not assumed			-6,330	30,863	,000	-26,827	4,238	-35,473	-18,182

The table shows the result of Homogenity test calculation using SPSS 20.0 program. To know the Homogenity of data, the formula can be seen as follows:

If Sig. > 0,01 = Equal variances assumed or Homogenity distribution.

If Sig. < 0,01 = Equal variances not assumed or not Homogenity distribution.

Based on data above, significant data is 0,005. The result is 0,005 <0.01, it mean the t-test calculation used at the equal variances assumed or data is Homogenity distribution.

C. The Result of Data Analysis

1. Descriptive Calculation of Data Analysis

An analysis of descriptive calculation of data analysis used SPSS 20.0 program to show mean, median, standart deviation, ranges and variances it is showed on table 4.7. and 4.8.

Table 4.5. Descriptive Calculation of data analysis of pre-test of control and experiment group.

Descriptives				Statistic	Std. Error
Group of Students				Statistic	Std. Error
Score of Pre-test Control and Experiment	Control	Mean		56,85	2,226
		95% Confidence Interval for Mean	Lower Bound	52,19	
			Upper Bound	61,51	
		5% Trimmed Mean		57,11	
		Median		58,00	
		Variance		99,082	
		Std. Deviation		9,954	
		Minimum		33	
		Maximum		76	
		Range		43	
		Interquartile Range		12	
		Skewness		-,432	,512
		Kurtosis		,952	,992
	Experiment	Mean		73,95	2,549
		95% Confidence Interval for Mean	Lower Bound	68,65	
			Upper Bound	79,25	
		5% Trimmed Mean		74,60	
		Median		76,50	
		Variance		142,903	
		Std. Deviation		11,954	
		Minimum		46	
		Maximum		90	
		Range		44	
		Interquartile Range		15	
		Skewness		-,951	,491
		Kurtosis		,156	,953

The table shows first, the descriptive calculation of data analysis of pre-test control group. The result of mean calculation is 56,85, the result of median calculation is 58,00, and the result of ranges calculation is 43. The result of standard deviation is 9,954. The result of standard error of mean calculation is 2,226. Second, the result of descriptive result of data

analysis of pre-test of experimental group. The result of mean calculation

is 73,95, the result of median calculation is 76,50 and the result of ranges

calculation is 44. The result of standard deviation is 11,954. The result of

standard error of mean calculation is 2,549.

Table 4.6. Descriptive Calculation of data analysis of post-test of

control and experiment group.

Descriptives					
Group of Students				Statistic	Std. Error
Score of Post-test Control and Experiment	Control	Mean		62,40	3,662
		95% Confidence Interval for Mean	Lower Bound	54,73	
			Upper Bound	70,07	
		5% Trimmed Mean		62,89	
		Median		66,00	
		Variance		268,253	
		Std. Deviation		16,378	
		Minimum		33	
		Maximum		83	
		Range		50	
		Interquartile Range		26	
		Skewness		-,675	,512
		Kurtosis		-,873	,992
	Experiment	Mean		89,23	2,133
		95% Confidence Interval for Mean	Lower Bound	84,79	
			Upper Bound	93,66	
		5% Trimmed Mean		90,51	
		Median		91,50	
		Variance		100,089	
		Std. Deviation		10,004	
		Minimum		53	
		Maximum		100	
		Range		47	
		Interquartile Range		11	
		Skewness		-2,375	,491
		Kurtosis		7,775	,953

The table shows first, the descriptive calculation of data analysis of

post-test of control group. The result of mean calculation is 62,40, the result

of median calculation is 66,00, and the result of ranges calculation is 50. The

result of standard deviation is 16,378. The result of standart error of mean

calculation is 3,662. Second, the descriptive result of data analysis of p0st-

test of experiment group. The result of mean calculation is 89,23, the result

of median calculation is 91,50 and the result of ranges calculation is 47 . the result of standart deviation is 10,004. The result of standard error of mean calculation is 2,133.

2. Testing Hypothesis Using Calculation of T-Test used SPSS 20.0 Program.

The last step on data analysis was testing hypothesis using calculation of T-test used SPSS 20.0 program.

Table 4.6. Testing Hypothesis Using Calculation of T-test used SPSS 20.0 program.

Independent Samples 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
Score of Students Post-test	Equal variances assumed	8,898	,005	-6,473	40	,000	-26,827	4,145	-35,204	-18,450
	Equal variances not assumed			-6,330	30,863	,000	-26,827	4,238	-35,473	-18,182

The table above shows score on "T" on equal variances assumed is 6,330 with sig. (.000) two tailed. To know the testing hypothesis of data used SPSS 20.0 program, the formula can be seen as follows:

Ho   : If score sig. (2-tailed) > 0,05 it means Ho was accepted and Ha was rejected.

Ha   : if score sig. (2-tailed) < 0,05 it means Ha was accepted and Ho was rejected.

Based on the data above, significant probability (sig. 2-tailed) is 0,000. The result is 000 < 0,05, it means Ha was accepted and Ho is rejected. From the result of testing hypothesis using calculation of t-test, it is shows that multiple-choice test is effective to the students' scores in learning vocabulary of the Eighth Grade students of SMP Muhammadiyah Palangka Raya.

D. Discussion

The result of analysis shows that there is significant effect of using multiple-choice test to the students' scores in learning vocabulary for the eighth grade students at SMP Muhammadiyah Palangka Raya.

The aim of the test is to know the students' scores in reading descriptive and recount text by using multiple choice test as the media for the eight grade student of SMP Muhammadiyah palangka Raya.

In the pretest, the average scores of the experimental group and the control group were 73.88 and 56.85.

From the pre-test it can be said that the ability of the two groups was relatively the same. After they received the treatment, the average score of the experimental group was higher than the control group. The experimental group got 89.29 and the control group got 62.6.From the scores it can be concluded that the two groups were homogenous, because there was only slight difference in result between the experimental group and the control one. After receiving the different treatments the score of the experimental group and the control group was different. The average scores of the experimental group were higher than the score of the control group. In

teaching descriptive and recount text to the experimental group the writer used multiple choice test as the media where in the control group, the writer taught the students by using the cloze test.

The test could prove that teaching reading descriptive and recount text using multiple choice test as the media to the eight grade students of SMP Muhammadiyah Palangka Raya was more effective.

Those are the result of post-test for experimental group and control group of students of SMP Muhammadiyah. Based on the writer's result and the theory, multiple-choice test gave significance effect for the students' scores in learning vocabulary of the eighth grade students of SMP Muhammadiyah Palangka Raya. It supported the previous study by Anak Agung Gede Hendra in chapter II page 9 stated that "reading comprehension of the seventh grade students of SMPN 2 Tampaksiring was considered to be good enough and their ability in comprehending reading text which were assessed by using multiple choice test were categorized to be successful.