

CHAPTER IV

RESEARCH FINDINGS AND DISCUSSION

A. Research Findings

This research was aimed to determine there was an impact of using flipped classroom or not on the score of students' reading. This research was deeded on SMK MAARIF NU Jatirejo Mojokerto at tenth grade. There was 30 students of experimental group and 30 students of control group.

The goal of this study was to perceive the way that effective the flipped classroom was at further developing Students' reading comprehension at SMK Maarif NU Jatirejo. The data was accumulated scores of pre-test and post-test. If the data compute that there is different score on two group, so the flipped classroom strategy was successfull. The researcher utilized the standards that embraced from H. Dauglas Brown (2003) to realize the students' accomplishment was great or not, they were:

Table 4.1 The Criteria of Students' Score

No.	Criteria	Range of Score
1.	Excellent	90-100
2.	Good	80-89
3.	Adequate	70-79
4.	Inadequate	60-69
5.	Failing	<60

The researcher investigated the reading score of experimental group and control group, to know the highest score, lower score and mean. The

researcher determined the score of post-test to identify the students get similar or not. The accompanying seen distinction in data statistic of experimental group and control group:

Table 4.2 The Statistics Result of Post-Test Control and Experimental Class

Statistics		POST_CON	POST_EXP
N	Valid	30	30
	Missing	0	0
Mean		80,63	86,00
Std. Error of Mean		1,193	1,461
Median		80,00	87,00
Mode		83	87
Std. Deviation		6,536	8,004
Variance		42,723	64,069
Range		23	27
Minimum		70	73
Maximum		93	100
Sum		2419	2580
Percentiles	25	76,00	80,00
	50	80,00	87,00
	75	87,00	93,00

The statistical data showed between experimental group and control group in post-test, the mean score of control shows the score is 80.63. That means that the average of 30 students is 80 with the lowest score of 70 and the highest score of 93. The mean score of control shows the score is 86. That means that the average of 30 students is 86 with the lowest score of 73 and the highest score of 100. The average value of the experimental class is higher than the control class.

From the result of statistical data revealed that the experimental class was taught reading comprehension by using flipped classroom

method was higher than the control class who were taught reading comprehension without using flipped classroom teaching technique. Then, it said that there was a different score between students' reading comprehension who taught by using flipped classroom and those taught by using lecture method. So, the use of flipped classroom on students' reading comprehension was effective to teach students at tenth grade of SMK Ma'arif NU Jatirejo Mojokerto.

B. Normality and Homogeneity Testing

The researcher attempted to observe the normality and homogeneity of the data. The consequences of those analyses were used to decide the accompanying step and hypothesis testing. The results of the normality and homogeneity as follows:

1. Normality

The researcher used SPSS version 26 to analyze the normality of pre-test and post-test data. The researcher used the formula of One Sample Kolmogorov-Smirnov Test. The result was as follow:

Table 4.3 Normality Testing of Control Class**Tests of Normality**

	CLASS	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	Df	Sig.
READING ACHIEVEMENT	PRE-TEST CON	,140	30	,140	,969	30	,511
	POST-TEST CON	,112	30	,200 [*]	,953	30	,209

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

a. Lilliefors Significance Correction

Table 4.4 Normality Testing of Experimental Class**Tests of Normality**

	CLASS	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	Df	Sig.
READING ACHIEVEMENT	PRE-TEST EXP	,150	30	,082	,946	30	,129
	POST-TEST EXP	,150	30	,084	,951	30	,179

a. Lilliefors Significance Correction

The result of Kolmogorov-Smirnov test revealed that the normality between experimental and control class, in pre-test, it showed that the Significance of experimental was 0.082 and control was 0.140. In the post-test, it showed that the significant of experimental was 0.084 and control was 0.200, the significance variables of pre-test and post-test demonstrated that both data were more than 0.05.

2. Homogeneity

Homogeneity testing was completed and it was normally distributed to guarantee that the data. To surveyed that the data is homogeneous or heterogenous. The researcher used SPSS 26 version

to decide the homogeneity. The result of the Levene Statistics is follows:

Table 4.5 Result of Homogeneity Test

Test of Homogeneity of Variance		Levene Statistic	df1	df2	Sig.
READING ACHIEVEMENT	Based on Mean	1,115	1	58	,295
	Based on Median	,727	1	58	,397
	Based on Median and with adjusted df	,727	1	54,067	,398
	Based on trimmed mean	1,147	1	58	,289

The significance value was 0.295 described the data was homogeneity because the significance value was greater than, it indicated if the data was homogeneous α (0.05). When the significance of a value was greater than 0.05 ($\text{sig} > 0.05$), the data was said to be homogeneous. The significance value was $0.295 > 0.05$, as show in the table of result. Thus, the data was homogeneous. The researcher used parametric test to test hypothesis testing because the normality data are normally distributed. To test the hypothesis testing, the researcher used Independent Sample T-test.

C. Hypothesis Testing

Based on the result of normality and homegeneity test, the researcher used the following parametric test using Independent Sample T-Test. The hypothesis of this research could be seen as follows:

1. H_0 (Null Hypothesis): There is no significant influence of using flipped classroom towards students' reading ability on narrative text at the tenth grade of SMK MAARIF NU Jatirejo.
2. H_a (Althernative Hypothesis): There is significant influence of using flipped classroom towards students' reading ability on narrative text at the tenth grade of SMK MAARIF NU Jatirejo.

The hypothesis testing of this research was if the significant value is less than 0.05, the null hypothesis (H_0) is rejected and alternative hypothesis (H_a) is accepted. Then, if the significant value was more than 0.05, the null hypothesis (H_0) is accepted and alternative hypothesis (H_a) is rejected. The researcher used SPSS 26 by using formula of Independent Sample Test. The result was shown as below:

Table 4.7 Independent Sample Test

Independent Samples Test										
				t-test for Equality of Means						
				T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
READING ACHIEVEMENT	Equal variances assumed	1,115	0,295	-2,844	58	0,006	-5,367	1,887	-9,143	-1,590
	Equal variances not assumed			-2,844	55,772	0,006	-5,367	1,887	-9,147	-1,587

From the Table 4.17 that the Significant value (sig-2 tailed) was 0, 006 and it was less than 0, 05 ($0,006 < 0, 05$). It means that H_1 was accepted. Therefore, it can be interpreted that there is significant influence of using flipped classroom towards students' reading ability on narrative text at the tenth grade of SMK MAARIF NU Jatirejo. The conclusion was flipped classroom method could improve the students' reading ability at the tenth grade of SMK MAARIF NU Jatirejo.

D. Data Analysis

1. The students' Score of Control Class

a. Pre-test of Control Class

The researcher used Lecture Method in the control class. The researcher given a pre-test for the control class, before doing learning process. The pre-test was followed by X-BDP-1, consists of 30 students. Time for doing the test was 60 minutes. The pre-test was given a multiple choices. The reason of the pre-test was to decide the students' reading comprehension before learning process using lecture method. The pre-test held on Thursday, 3rd of February 2022. The result of the data was:

Table 4.9 Descriptive Statistic of Pre-Test

Statistics		
X_BDP_1		
N	Valid	30
	Missing	0
Mean		73,33
Std. Error of Mean		1,234
Median		73,00
Mode		73
Std. Deviation		6,759
Variance		45,678
Range		27
Minimum		60
Maximum		87
Sum		2200
Percentiles	25	67,00
	50	73,00
	75	77,75

a. Multiple modes exist. The smallest value is shown

The descriptive statistic table above shown that the mean score shown the score was 73.33. That means the average of 30 students was 73 with the lowest score of 60 and the highest score of 87. This concluded that the students' reading comprehension ability on narrative text need enhancement.

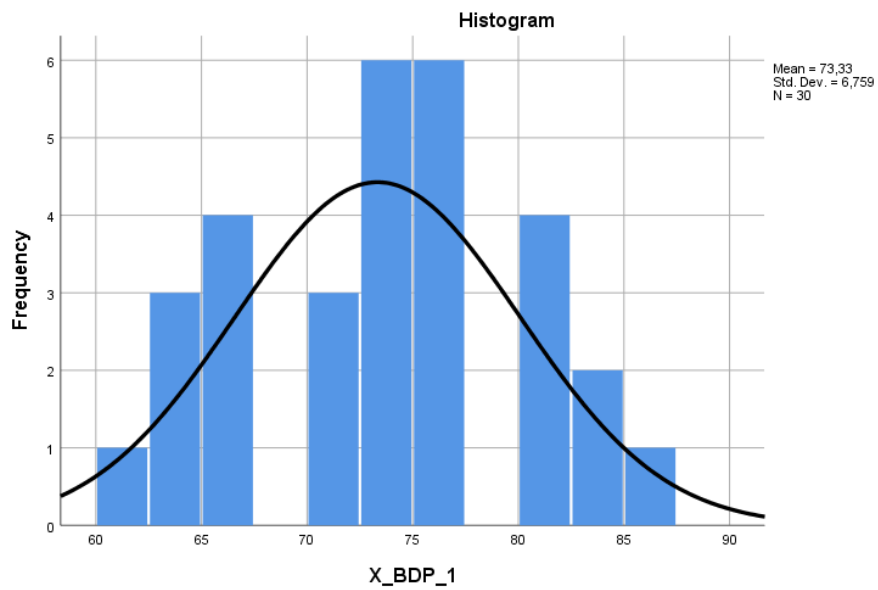
4.10 Frequency Distribution of Score Pre-Test

X_BDP_1					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	60	1	3,3	3,3	3,3
	63	3	10,0	10,0	13,3
	67	4	13,3	13,3	26,7
	70	3	10,0	10,0	36,7
	73	6	20,0	20,0	56,7
	77	6	20,0	20,0	76,7
	80	4	13,3	13,3	90,0
	83	2	6,7	6,7	96,7
	87	1	3,3	3,3	100,0
	Total	30	100,0	100,0	

The frequency shown that the distribution of score was the median was 73, where 11 students get a score lower than 73 and 19 students get a higher score than 73. By scoring rubric qualification, the median result can be concluded as follows:

- There is 1 students get a lower score than 73 (60-70) it means that the students needed enhancement.
- There is 18 students get a higher score than 73 (73-83) it means that reading comprehension was good enough, but needed the enhancement.
- There is 1 students get a higher score than 73 (87) it means that the students achievement was excellent.

4.1 Histogram Descriptive Statistic of Pre-Test



The histogram showed that the Mean was 73.33, the Standard Deviation was 6.759 and the total students were 30 students.

b. Post-test of Control Class

The researcher gave post-test for the control class to determine the students' reading comprehension, especially on narrative text. The post-test was followed by X-BDP-1, 30 students. Time for doing the test was 60 minutes. The post-test was given in the form of multiple choices. The reason of the pre-test was to decide the students' reading comprehension after learning process using Lecture teaching method. The post-test held on Thursday, 24th of February 2022. The result of the data was:

Table 4.11 Descriptive Statistic of Post-Test

Statistics		
X_BDP_1		
N	Valid	30
	Missing	0
Mean		80,63
Std. Error of Mean		1,193
Median		80,00
Mode		83
Std. Deviation		6,536
Variance		42,723
Range		23
Minimum		70
Maximum		93
Sum		2419
Percentiles	25	76,00
	50	80,00
	75	87,00

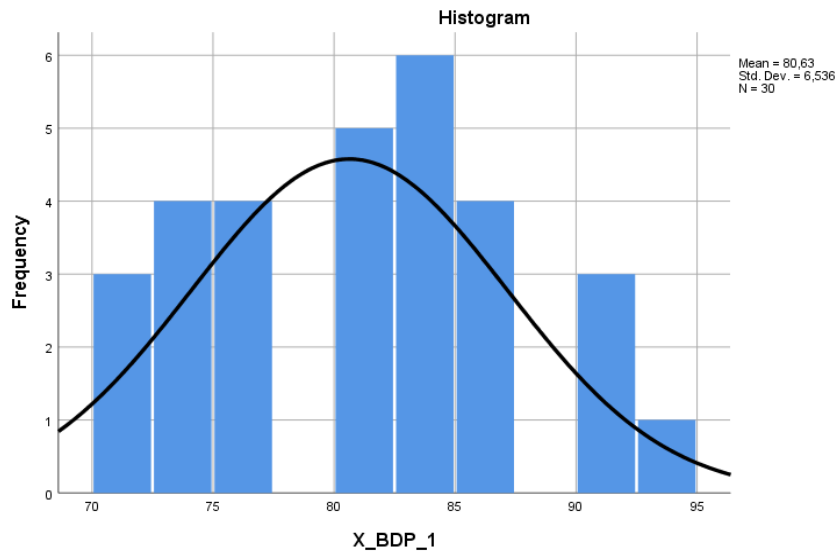
The descriptive statistic table above shown that the mean score shown the score was 80.63. That means the average of 30 students was 80 with the lowest score of 70 and the highest score of 93. This concluded that the score increased significantly but only 73 to 80.

4.12 Frequency Distribution of Score Post-Test

X_BDP_1					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	70	3	10,0	10,0	10,0
	73	4	13,3	13,3	23,3
	77	4	13,3	13,3	36,7
	80	5	16,7	16,7	53,3
	83	6	20,0	20,0	73,3
	87	4	13,3	13,3	86,7
	90	3	10,0	10,0	96,7
	93	1	3,3	3,3	100,0
	Total	30	100,0	100,0	

The result shown that the score addition to an increase the mean score, there is also an increase in the meadian score. The median score on the pre-test was 73 while the median in the post-test was 80.63 with 11 students getting a lowest score than 80 and 19 students get a higher score than 80.63.

4.2 Histogram Descriptive Statistic of Post-Test



Based on the histogram on the table 4.2, the Mean was 80.63, the Standard Deviation was 6.536 and the total students were 30 students.

2. The Students' Scores of Experimental Class

a. Pre-test of Experimental Class

The researcher utilized flipped classroom technique for the treatment in the experimental class. Before administered the treatment, the researcher administered a pre-test to experimental class. The pre-test was followed by X-TKJ-1, consist of 30 students. Time for doing the test was 60 minutes. The pre-test was given in the form of multiple choices. The reason of the pre-test was to decide the students' reading comprehension before learning process using flipped classroom technique. The pre-test held on Monday, 31th of January 2022. The result of the data was:

Table 4.14 Descriptive Statistic of Pre-Test

Statistics		
X_TKJ_1		
N	Valid	30
	Missing	0
Mean		73,73
Std. Error of Mean		1,073
Median		73,00
Mode		73
Std. Deviation		5,878
Variance		34,547
Range		23
Minimum		60
Maximum		83
Sum		2212
Percentiles	25	70,00
	50	73,00
	75	77,75

The descriptive statistic table above shown that the mean score shown the score was 73.73. That means the average of 30 students was 80 with the lowest score of 60 and the highest score of 83. This concluded that the students reading comprehension on narrative text need enhancement.

Table 4.15 Frequency Distribution of Score in Pre-Test

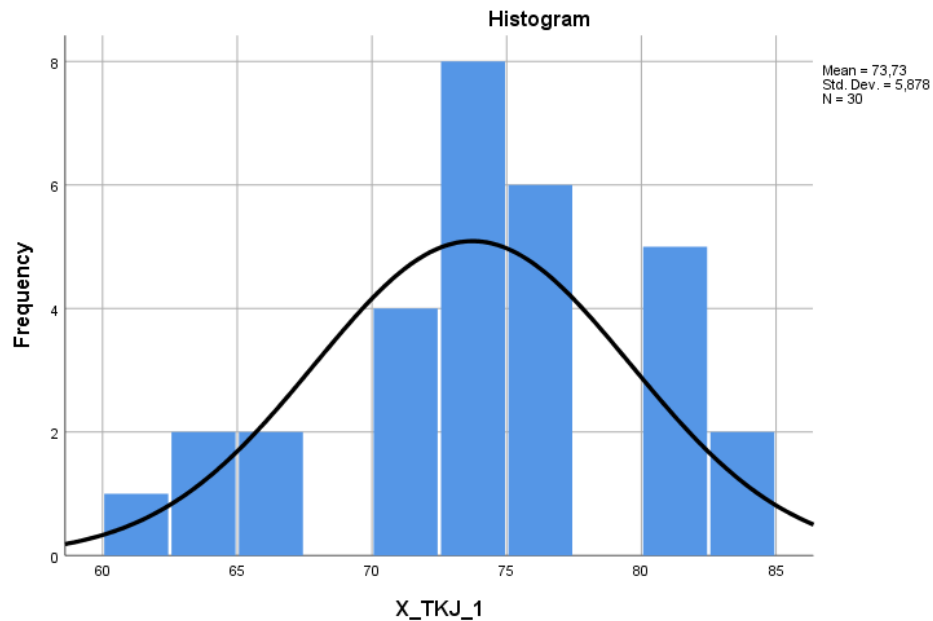
X_TKJ_1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	60	1	3,3	3,3	3,3
	63	2	6,7	6,7	10,0
	67	2	6,7	6,7	16,7
	70	4	13,3	13,3	30,0
	73	8	26,7	26,7	56,7
	77	6	20,0	20,0	76,7
	80	5	16,7	16,7	93,3
	83	2	6,7	6,7	100,0
	Total	30	100,0	100,0	

The frequency shown that the distribution of score was the median was 73, where 9 students get a score lower than 73 and 21 students get a higher score than 73. By scoring rubric qualification, the median result can be concluded as follows:

- There is 9 students get a lower score than 73 (60-70) it means that the students needed enhancement.
- There is 20 students get a higher score than 73 (73-80) it means that reading comprehension was good enough, but needed the enhancement.
- There is 1 students get a higher score than 73 (83) it means that the students achievement was excellent.

4.3 Histogram Descriptive Statistic of Pre-Test



The result showed that the Mean was 73.73, the Standard Deviation was 5.876 and the total students were 30.

b. Post-test of Experimental Class

The researcher gave post-test for the experimental class to determine the students' reading comprehension, especially on narrative text. The post-test was followed by X-TKJ-1, which consist of 30 students. Time for doing the test was 60 minutes. The post-test was given in the form of multiple choices. The reason of the pre-test was to decide the students' reading comprehension after learning process using flipped classroom technique. The post-test did on Monday, 21st of February 2022. The result of the data was:

Table 4.17 Descriptive Statistic of Post-Test

Statistics		
X_TKJ_1		
N	Valid	30
	Missing	0
Mean		86,00
Std. Error of Mean		1,461
Median		87,00
Mode		87
Std. Deviation		8,004
Variance		64,069
Range		27
Minimum		73
Maximum		100
Sum		2580
Percentiles	25	80,00
	50	87,00
	75	93,00

The descriptive statistic table above shown that the mean score shown the score was 86.00. That means the average of 30 students was 86 with the lowest score of 73 and the highest score of 100. This concluded that there ia an increase in students' reading comprehension after getting treatment using flipped classroom strategy.

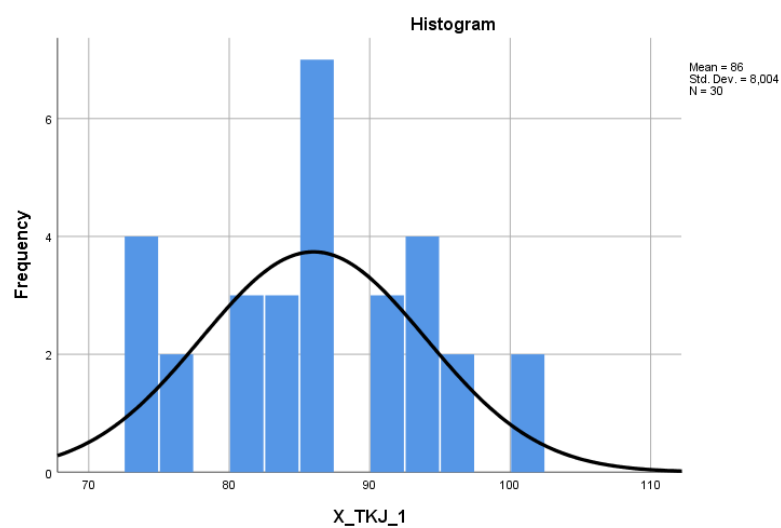
Table 4.18 Frequency Distribution of Score in Post-Test

X_TKJ_1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	73	4	13,3	13,3	13,3
	77	2	6,7	6,7	20,0
	80	3	10,0	10,0	30,0
	83	3	10,0	10,0	40,0
	87	7	23,3	23,3	63,3
	90	3	10,0	10,0	73,3
	93	4	13,3	13,3	86,7
	97	2	6,7	6,7	93,3
	100	2	6,7	6,7	100,0
	Total	30	100,0	100,0	

The result shown that the score addition to an increase the mean score, there is also an increase in the meadian score. The median score on the pre-test was 86 while the median in the post-test was 86 with 12 students getting a lowest score than 86 and 18 students get a higher score than 86.

4.4 Histogram Descriptive Statistic of Post-Test



Based on the histogram on table of 4.4, the Mean was 86, the Standard Deviation was 8.004 and the total students were 30 students.

E. Discussion

The learning process divided into pre-test, treatment and post-test. The researcher started a reading exam as a pre-test. Previously, the students' prior reading comprehension was known before getting treatment. The students were given the treatment twice. The flipped classroom method was utilized to teach reading in this study. The students became more engaged and enthusiastic about language learning after receiving therapy. A post-test was the final stage for students. According to the findings, the Independent Sample Test output data show a mean of the pre-test 73, 33 and a mean of the post-test 86, 00.

The students' reading score after using the Flipped Classroom method was greater than their reading ability prior to using Flipped Classroom method. Furthermore, the significance value of the Independent Sample Test was 0.006. The significance level was less than 0.05 ($0.006 < 0.05$), indicating that the alternative hypothesis (H_a) was accepted while the null hypothesis (H_0) was rejected. Thus, it could be said that the reading comprehension of tenth grade at SMK Maarif NU Jatirejo Mojokerto had significantly score before and after learning process using the Flipped Classroom .

Based on this research, it concluded that the Flipped Classroom method was helpful in improving students' reading comprehension at tenth grade of SMK Maarif NU Jatirejo Mojokerto. The previous research can supported the discoveries of going before investigates which has been finished by Shimamoto (2012), the result of the study is flipped classroom can possibly to cause a huge change in teaching learning. By of

technology, teacher can provide a solution to traditional teaching technique by executing joined learning techniques which blend the benefit of straight educating and dynamic learning to engage students in the learning. The second from Mok (2014), the result of the study is after implementing a flipped classroom; students were more included and urged to be more dependable and independent in learning. The third from Abdelrahman (2017), the result of this study is students' writing competence and satisfaction improved as a result of their association and complementary activities with the created book of passage composing.

The result of the data analysis revealed that using a Flipped Classroom can improve students more dynamic in educating and learning process in reading comprehension, especially on narrative text in the tenth grade of SMK Maarif NU Jatirejo Mojokerto. The students were used to lack vocabulary, however presently they can recall it better by speculating the meaning. The students were initially perplexed by the English text, however presently they can translate the text by themselves. The students' have difficulty comprehending, particularly a narrative text, however now they are becoming more sensitive to comprehend the narrative texts. Now the students can try a new experience on English learning.