CHAPTER IV

RESEARCH FINDING AND DISCUSSION

In this chapter, the researcher presents the finding and discussion that included of the description of data, data analysis, the result of normality and homogeneity testing, hypothesis testing, and discussion.

A. The Description of Data

In this study, the researcher want to know the effectiveness of using Flipped Classroom in reading Comprehension of the Eighth Grade (Full-day class) Student Junior High School MTs Al-Huda Bandung. The effectiveness can be seen from the significant different score of the students reading comprehension before and after being taught using Flipped Classroom. Before giving the treatment, the researcher did pre-test to know student's achievement in reading comprehension, it was conducted on 30nd July 2018. The research was conducted on two meeting in A class. The first meeting was be held on 1th August 2018 and then on 2th August 2018. For two days, the researcher did not only give the treatment, but also hold evaluation test to measure the ability of student's achievement in reading comprehension. After giving treatment, researcher conducted post-test to know student's achievement in reading comprehension after being taught Flipped Classroom and it was conducted on 3th August 2018. Below is the result of research :

The presentation of the data follow:

Table 4.1 The students' score in pretest and post-test can be seen in table.

No.	Subject	Pre-test	Post-test	Gained score
1.	ARF	55	70	15
2.	AN	75	80	5
3.	FDA	60	75	15
4.	LF	75	80	5
5.	LAB	65	65	0
6.	MDN	40	80	40
7.	MSD	65	70	5
8.	MA	45	80	35
9.	MDB	45	60	15
10.	MHF	75	75	0
11.	NNM	40	70	30
12.	NAF	60	80	20
13.	RNI	60	65	5
14.	RAA	65	75	10
15.	WB	60	75	15
16.	YZ	70	80	10
17.	YA	45	55	10
18.	ZA	70	75	5

There were 18 students' as subjects or respondents of the research. Based on the table, it can be seen the highest and the lowest score of the students'. The highest score of pre-test was 70 and the lowest score of pre-test was 40. While, the highest score of post-test was 80 and the lowest score of post-test was 55.

After obtaining the pre-test and post-test scores, the writers used IBM SPSS 16.0 to organize the descriptive statistics data and frequency of score.

1. Computation Result of The Students' Score Before Being Taught by Using Flipped Classroom (Pre-Test)

The pre-test was given by to answer the question about recount text. The number of question was given consist of 20 questions in the form of multiple choice. There were 18 students' as the sample of research. This test is to know the students' reading achievement before students got the treatment.

The statistic data of pre-test score (Table 4.2) and frequency distribution of pre-test (table 4.3) can be seen below:

Table 4.2 Descriptive Statistic of Pre-test

Statistics

Pretest

N	Valid	18
	Missing	0
Mean		59.44
Median		60.00
Mode		60
Sum		1070

Based on table 4.2 above, we can see there were 18 students following the pre-test. The mean score of students in pre-test was 59.44. the median score was 60.00, it means that the middle score of pre-test was 60.00 in 18 students. The

mode of pre-test score was 60, it means that the most frequently appeared scores was 60. The total all scores of pre-test was 1070. From the result, students still fair in reading comprehension before being taught by using flipped classroom.

The frequency of the students' score was presented in the following table below:

Table 4.3 Frequency of Score in Pre-test

Pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	40	2	11.1	11.1	11.1
	45	3	16.7	16.7	27.8
	55	1	5.6	5.6	33.3
	60	4	22.2	22.2	55.6
	65	3	16.7	16.7	72.2
	70	2	11.1	11.1	83.3
	75	3	16.7	16.7	100.0
	Total	18	100.0	100.0	

The table 4.3 showed the frequency distribution of pre-test by considering on qualification of criteria students' scores:

a. There are 5 students got score 40-45, it means that the students' reading comprehension achievement was poor and the students still needed much improvement.

b. There are 8 students got score 55-65, it means that the students' reading comprehension achievement was still fair, it also needed the improvement.

c. There are 5 students got score 70-75, it means that the students' reading comprehension achievement was good.

It can be concluded that the students' need a technique to improve their ability on reading comprehension skill especially recount text.

2. The result of the students' score after being taught by using flipped classroom.

Table 4.4 Descriptive Statistic of Post-test

Statistics

posttest

N	Valid	18
	Missing	0
Mean		72.78
Median		75.00
Mode		80
Sum		1310

Based on table 4.4 above, we can see there were 18 students following the post-test. The mean score of students in post-test was 72.78. The median score was 75.00, it means that the middle score of post-test was 75.00 in 18 students. The mode of post-test score was 80. The total all score of post-test was 1310. From the result, students was excellent in reading recount text after being taught by using flipped classroom.

The frequency of the students' score was presented in the following table below:

Table 4.5 Frequency of Score in Post-test

Posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	55	1	5.6	5.6	5.6
	60	1	5.6	5.6	11.1
	65	2	11.1	11.1	22.2
	70	3	16.7	16.7	38.9
	75	5	27.8	27.8	66.7
	80	6	33.3	33.3	100.0
	Total	18	100.0	100.0	

The table 4.5 showed the frequency distribution of post-test by considering on qualification of criteria students' score:

a. There are 4 students got score 55-65, it means that the students' reading comprehension achievement in recount text was fair. There is no students got poor score.

b. There are 8 students got score 70-75, it means that the students' reading comprehension achievement was good.

c. There are 6 students got score 80, it means that the students' reading comprehension achievement was excellent.

It means that the ability of students' reading comprehension exceeds the standard. It can be concluded that flipped classroom can be used for teaching reading and can improve the students' ability in reading comprehension a recount text.

3. Computation the Descriptive Statistics of Pre-test and Post-test

The writer organized the range, minimum, maximum, mean, standard deviation, and variances of pretest and posttest scores of the sample which calculated respectively by using IBM SPSS Statistics 16.0. Table 4.6 represents the result:

Table 4.6 Descriptive Statistic for Pre-test and Post-test

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
pre_test	18	35	40	75	59.44	11.991	143.791
post_test	18	25	55	80	72.78	7.519	56.536
Valid N (listwise)	18						

Table 4.6 showed that the minimum score in pre-test was 40 and in post-test was 55. Then, the maximum score in pre-test was 75 and in post-test was 80. The range of pre-test was 35 and post-test was 25. The range of data was the distance between the highest score and the lowest score. The standard deviation of pre-test was 11.991 and post-test was 7.519. The standard deviation is to measure how much the variance of the sample. If the standard deviation is higher than the mean, it means the mean is not homogeny. While, if the standard deviation is

smaller than the mean, it means that the mean was homogeny. The standard deviation of pre-test was 11.991< 59.44 and post-test was 7.519<72.78. So, the sample of this research almost homogeny or has the same mean.

Based on the result of pre-test and post-test, it has different students' score before and after taught by using project based learning. The mean of post-test was (72.78) higher than the mean of pre-test (59.44). It means, the used flipped classroom has caused to the improvement of students' scores.It can be concluded that the score increased after being treatment using flipped classroom in reading recount text.

B. Normality and Homogeneity

1. The result of normality testing

A normality test is a statistical process used to determine if a sample or any group of data fits a standard normal distribution. Normality is conducted to determine whether the gotten data is normal distribution or not. The researcher used SPSS IBM 16 *One Sample Kolmogrov-Smirnov test* by value significance (α) =0.05. The result can be seen in the table below:

Table 4.7 Normality testing

One-Sample Kolmogorov-Smirnov Test

		Pretest	Posttest
N		18	18
Normal Parameters[a]	Mean	59.44	72.78
	Std. Deviation	11.991	7.519
Most Extreme Differences	Absolute	.185	.227
	Positive	.164	.168
	Negative	-.185	-.227
Kolmogorov-Smirnov Z		.785	.964
Asymp. Sig. (2-tailed)		.568	.310

a. Test distribution is Normal.

Based on the table above, it was known that the significant value from pre-test is 0.785 and from post-test is 0.964. And value from Asymp. Sign (2-tailed) of pre-test is 0.568 and it is higher than 0.05 (0.568>0.05). Then for post-test score is 0.310 and it is higher than 0.05 (0.310>0.05). It can be interpreted that both of data (pre-test and post-test) are normal distribution.

2. The result of Homogeneity testing

A homogeneity testing is a test that assesses whether there are differences in variance between the two group or more. Homogeneity testing is conducted to know whether the gotten data has a homogeneous variance or not. The researcher used Test of Homogeneity of variance or not. The researcher used Test of

Homogeneity of variances with SPSS by value of significance (α) = 0.05. And the result can be seen below:

Table 4.8 Homogeneity Testing

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
2.356	5	11	.110

Based on the table above, the significant value is 0.110. It means that significant value is higher than 0.05 (0.110>0.05).It can be said that the data has same variance or homogen.

C. Data Analysis

To investigate whether flipped classroom is effective towards students' achievement in reading recount text, the researcher analysed the result of pre-test and post-test of the students by using Paired Sample Test in IBM SPSS 16.0. Table.11 showed the result of calculation Paired Sample Correlation as follow:

Table 4.9 Paired Sample Correlation

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pretest & Posttest	18	.744	.000

Based on the table above, showed that the correlations between two score of pre-test and post-test. The correlation score of pre-test and post-test is 0.744 and score of Sig. is 0.000. If the Sig.>0.05 means Ho is accepted. If Sig. < 0.05 means Ho is rejected. It shows that Sig.0.000 is lower than 0.05 means that Ho is rejected and Ha is accepted. So, it can conclude that there was significant different score between pre-test and post-test.

Table 4.10 Paired Sample T-test

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Pretest - Posttest	-37.222	7.712	1.818	-41.057	-33.387	-20.477	17	.000

Based on the table output paired sample T-test shows that the result of compare analysis with using T-test. In this table, the mean of pre-test and post-test is 37.222, standard deviation is 7.712, standard error is 1.818, the lower difference is 41.057, while upper difference is 33.387. the result of T test is 20.387 with df 17 and Sig.(2-tailed) is 0.000.

D. Hypothesis Testing

The last step in analysing the data was testing the hypothesis of research. From the analysis above, the criteria to test the hypothesis of this research which is use in SPPS 16.0 were:

1. When sig. value <0.05, the null hypothesis (Ho) is rejected, and the alternative hypothesis (Ha) is accepted.
2. When sig. value >0.05, the null hypothesis (Ho) is accepted, and the alternative hypothesis (Ha) is rejected.

Based on the Table above, the significance value of the research is 0.000 and significant level is 0.05. so, the significance value is smaller than significant level (0.000<0.05). it means that the alternative hypothesis (Ha) is accepted and the null hypothesis (Ho) is rejected. In other word, teaching reading comprehension recount text using flipped classroom is effective. It can answer the research problem that there is any significant difference on students' reading comprehension recount text achievement before and after being taught by using flipped classroom at the eighth grade (Full-day class) of MTs Al-Huda Bandung.

E. Discussion

From the explanation above, it can be seen from the score of the students after being taught by using flipped classroom reading is better and higher. It can be seen in the treatment process that the students more interested when the researcher applied this strategy in class. According to Bretzmann (Bretzmann, 2013: 10) the students has much time to understand the material and looking for another resources which is related to the topic at home. They can do it individually or with friends to share their idea and understanding about the topic in the video learning. Then, the class time is used to do the harder work of assimilating the knowledge through strategies such as discussion. It can be seen in

the third meeting that each group has different answer and idea from the discussion.

Regarding on the result of data analysis, it is also strongly support with previous study as an effective for students' reading comprehension achievement in reading text. The research was written by Asmara Miftakhol Jannah (2017), the researcher was conducted in quasi experimental research design. The result of the research above, that flipped classroom is effective to improve students' reading comprehension in narrative text at eight grade.

According to Brenda's statements that flipped classroom strategy increased the interaction between the teacher and the student and between the student and another student. Interactive learning strategies in the classroom have to be planned out and revised accordingly as the dynamics is different from class to class, so as to develop higher-order thinking skills and, ultimately, for students to become life-long learners. Dr. Ahmet (Ahmet, 2015: 16) also stated that the flipped classroom strategy promoted individualized-learning for students as some of the students used the opportunity to replay and pause the online lecture to absorb it better. Students could do this at their own paces. However, students will need to take the initiative and take responsibility for their own learning. By using flipped classroom strategy, students spend more class time to focus on higher thinking levels such as applying, analyzing and evaluating (learning objectives of Bloom's Taxonomy) what they have learned from the video that they have watched at home.

Based on the explanation above, the implication of this strategy can help students to be confident and can increased teacher and students' interaction. It confirmed the theory from (Danker, Brenda, 2015) that that flipped classroom strategy increased the interaction between the teacher and the student and between the student and another student. Interactive learning strategies in the classroom have to be planned out and revised accordingly as the dynamics is different from class to class, so as to develop higher-order thinking skills and, ultimately, for students to become life-long learners.

This strategy can be implemented in teaching learning process in order to support students more understand and easy in reading. In general, the implication of flipped classroom in teaching and learning process can support both teacher and students in many aspect. Beside this strategy make enjoyable in learning, it can make students more receptive and cooperative in the classroom.