

## **CHAPTER IV**

### **RESEARCH FINDINGS AND DISCUSSION**

This chapter presents the result of the research findings and discussion that includes the description of data, hypothesis testing, and discussion.

#### **A. The Description of Data**

In this study, the research objective is to know the effectiveness of using Flipped Classroom on students' reading recount text achievement of the eighth grade at MTsN 4 Tulungagung. The effectiveness can be seen from the significant difference mean score of the experimental group taught by using Flipped Classroom and the control group taught without using Flipped Classroom (a conventional strategy). In order to achieve the objectives of the research, the researcher did some steps to collect the data.

The first step was administered a pre-test to control group (VIII-D) and experimental group (VIII-E) to know the students' achievement in reading recount text before being given a treatment. The data collected from this step were scores of pre-test from control group and pre-test from experimental group. The second step was given the treatment. The treatment was given by the researcher for three times in each group by using different topic of reading in each meeting. The treatment in control group was using a conventional strategy and the treatment in experimental group was using Flipped Classroom in teaching reading recount text. The next step of data collection was administered a post-test to both groups. It was intended to measure students' reading recount text achievement after the treatment of

both in experimental group and control group. The collected data from post-test of control group and experimental group were statistically to know whether or not there was any significant difference mean score of reading recount text achievement of the both groups.

To describe the data, the researcher makes score criteria from the test (see Table 4.1). The function of these criteria was to know the students' reading achievement in recount text. The researcher classifies total of the scores into five categories. The table can be seen as follows:

**Table 4.1 Score's Criteria**

<b>No.</b>	<b>Interval Class</b>	<b>Criteria</b>
1.	88 – 100	Excellent
2.	76 – 87	Good
3.	63 – 75	Average
4.	50 – 62	Poor
5.	0 – 49	Very Poor

### **1. Data Presentation in Control Group**

The data were taken from the result of students' pre-test score before being given the treatment and post-test score after being given the treatment by using a conventional strategy in control group. In pre-test and post-test, the number of questions given consisted of 25 questions in the form of multiple choice. Table 4.2 showed the data of students' pre-test and post-test score in control group of VIII-D class consisted of 34 students. The data of students' score can be seen as follows:

**Table 4.2**  
**The Students' Score of Control Group**

<b>No.</b>	<b>Name</b>	<b>Pre-test</b>	<b>Post-test</b>
1.	AN	52	64
2.	APS	60	68
3.	AKN	60	76
4.	AMR	68	72
5.	BTN	64	76
6.	EFRA	56	60
7.	EIN	84	84
8.	ENP	68	76
9.	EAN	60	72
10.	FA	68	72
11.	FF	84	92
12.	FWM	52	68
13.	GNS	80	80
14.	GN	80	84
15.	HA	76	76
16.	IMA	68	72
17.	ISH	72	72
18.	IH	68	80
19.	MLRS	80	84
20.	MAM	80	92
21.	MW	60	64
22.	MAZ	52	68
23.	MAQ	60	60
24.	MFI	68	72
25.	MSPF	56	64
26.	NSPC	68	76
27.	NHA	80	84
28.	POP	52	68
29.	PCAS	60	68
30.	RAK	32	60
31.	RAK	32	52
32.	SOF	68	72
33.	WNR	76	80
34.	YNA	72	76
Sum		2216	2484

After knowing the results of pre-test and post-test score in control group, then the researcher was described by using descriptive statistic.

Descriptive statistic is used to describe of the data in a study with the simple and measures. To describe the data of research, the researcher using SPSS program 16.0 for windows.

**a. Pre-test of Control Group**

**Table 4.3 Descriptive Statistic of Control Group in Pre-test**

Pre-test Score in Control Group

N	Valid	34
	Missing	0
Mean		65.18
Median		68.00
Mode		68
Minimum		32
Maximum		84
Sum		2216

As the result of the Table 4.3 above showed that there were 34 students as subjects or participants. The mean of students' score in the pre-test was 65.18. The median was 68.00, and the middle score of pre-test was 68.00. The mode of pre-test score was 68, it means that the most frequently appeared scores was 68. The minimum score of the pre-test was 32, the maximum score of the pre-test was 84, and the sum was 2216.

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

**Table 4.4 Frequency of Pre-test in Control Group**  
**Pre-test Score in Control Group**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 32	2	5.9	5.9	5.9
52	4	11.8	11.8	17.6
56	2	5.9	5.9	23.5
60	6	17.6	17.6	41.2
64	1	2.9	2.9	44.1
68	8	23.5	23.5	67.6
72	2	5.9	5.9	73.5
76	2	5.9	5.9	79.4
80	5	14.7	14.7	94.1
84	2	5.9	5.9	100.0
Total	34	100.0	100.0	

Based on the data of Table 4.4 above, it showed that 2 students got score 32, 4 students got score 52, 2 students got score 56, 6 students got score 60, 1 student got score 64, 8 students got score 68, 2 students got score 72, 2 students got score 76, 5 students got score 80, and 2 students got score 84.

The result showed that the students' reading recount text achievement in control group taught by using a conventional strategy had average ability. It can be seen from the mode (68) in Table 4.3. The mode represented the categorization of students before being taught by using a conventional strategy. It means that the students' reading recount text achievement in control group have to improve their ability in reading.

### b. Post-test of Control Group

**Table 4.5 Descriptive Statistic of  
Control Group in Post-test**

Post-test Score in Control Group

N	Valid	34
	Missing	0
Mean		73.06
Median		72.00
Mode		72
Minimum		52
Maximum		92
Sum		2484

As shown in Table 4.5 above showed that there were 34 students as subjects or participants. The mean of students' score in the pre-test was 73.06. The median was 72.00, it means that the middle score of pre-test was 72.00 in 34 students. The mode of pre-test score was 72, it means that the most frequently appeared scores was 72. The minimum score of the pre-test was 52, the maximum score of the pre-test was 92, and the sum was 2484.

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

**Table 4.6 Frequency of Post-test in Control Group  
Post-test Score in Control Group**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 52	1	2.9	2.9	2.9
60	3	8.8	8.8	11.8

64	3	8.8	8.8	20.6
68	5	14.7	14.8	35.3
72	7	20.6	20.6	55.9
76	6	17.6	17.6	73.5
80	3	8.8	8.8	82.4
84	4	11.8	11.8	94.1
92	2	5.9	5.9	100.0
Total	34	100.0	100.0	

Based on the data of Table 4.6 above, it showed that 1 student got score 52, 3 students got score 60, 3 students got score 64, 5 students got score 68, 7 students got score 72, 6 students got score 76, 3 students got score 80, 4 students got score 84, and 2 students got score 92.

The result showed that the students' reading recount text achievement in control group taught by using a conventional strategy had average ability, and only 2 students were in excellent ability. It can be seen from the mode (72) in Table 4.5. The mode represented the categorization of students after being taught by using a conventional strategy.

## 2. Data Presentation in Experimental Group

The data were taken from the result of students' pre-test score before treatment and post-test score after being given treatment by using Flipped Classroom in experimental group. In pre-test and post-test, the number of questions given consisted of 25 questions in the form of multiple choice. Table 4.7 showed the data of students' pre-test and post-

test score in experimental group of VIII-E class consisted of 35 students.

The data of students' score can be seen as follows:

**Table 4.7**

**The Students' Score of Experimental Group**

<b>No.</b>	<b>Name</b>	<b>Pre-test</b>	<b>Post-test</b>
1.	ANR	68	80
2.	AFES	76	92
3.	AFR	68	68
4.	AMS	60	84
5.	CAA	56	72
6.	DAW	80	80
7.	DZM	76	80
8.	DEF	80	92
9.	DAN	76	84
10.	ENW	64	68
11.	FZS	56	76
12.	FA	80	92
13.	HDS	60	68
14.	HN	72	80
15.	IRS	56	72
16.	IALR	60	76
17.	KKT	76	80
18.	LDVI	72	88
19.	LSA	84	92
20.	LIH	68	88
21.	MZA	64	76
22.	MAH	72	80
23.	MLA	60	84
24.	MRM	52	80
25.	NIHS	76	92
26.	NRF	60	84
27.	RAR	72	72
28.	SSAA	80	88
29.	SCZ	68	80
30.	SDW	68	76
31.	SDO	60	80
32.	SA	80	96
33.	YOFCN	88	92
34.	ZAL	84	96
35.	ZKJ	40	68



Sum	2412	2856
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After knowing the results of pre-test and post-test score in experimental group, then the researcher was described by using descriptive statistic. Descriptive statistic is used to describe of the data in a study with the simple and measures. To describe the data of research, the researcher using SPSS program 16.0 for windows.

**a. Pre-test of Experimental Group**

**Table 4.8 Descriptive Statistic of Experimental Group in Pre-test**

Pre-test Score in Experimental Group

N	Valid	35
	Missing	0
Mean		68.91
Median		68.00
Mode		60
Minimum		40
Maximum		88
Sum		2412

As the result of the Table 4.8 above showed that there were 35 students as subjects or participants. The mean of students' score in the pre-test was 69.37. The median was 72.00, and the middle score of pre-test was 72.00. The mode of pre-test score was 60, it means that the most frequently appeared scores was 60. The minimum score of the pre-test was 40, the maximum score of the pre-test was 88, and the sum was 2428.

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

**Table 4.9 Frequency of Pre-test in Experimental Group**  
**Pre-test Score in Experimental Group**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 40	1	2.9	2.9	2.9
52	1	2.9	2.9	5.7
56	3	8.6	8.6	14.3
60	6	17.1	17.1	31.4
64	2	5.7	5.7	37.1
68	5	14.3	14.3	51.4
72	4	11.4	11.4	62.9
76	5	14.3	14.3	77.1
80	5	14.3	14.3	91.4
84	2	5.7	5.7	97.1
88	1	2.9	2.9	100.0
Total	35	100.0	100.0	

Based on the data of Table 4.9 above, it showed that 1 student got score 40, 1 student got score 52, 3 students got score 56, 6 students got score 60, 2 student got score 64, 5 students got score 68, 4 students got score 72, 5 students got score 76, 5 students got score 80, 2 students got score 84, and 1 student got score 88.

The result showed that the students' reading recount text achievement in experimental group taught by using Flipped Classroom had poor ability. It can be seen from the mode (60) in Table 4.8. The mode represented the categorization of students

before being taught by using Flipped Classroom. It means that the students' reading recount text achievement in experimental group have to improve their ability in reading.

**b. Post-test of Experimental Group**

**Table 4.10 Descriptive Statistic of  
Experimental Group in Post-test**  
Post-test Score in Experimental Group

N	Valid	35
	Missing	0
Mean		81.60
Median		80.00
Mode		80
Minimum		68
Maximum		96
Sum		2856

As shown in Table 4.10 above showed that there were 35 students as subjects or participants. The mean of students' score in the pre-test was 81.60. The median was 80.00, it means that the middle score of pre-test was 80.00 in 35 students. The mode of pre-test score was 80, it means that the most frequently appeared scores was 80. The minimum score of the pre-test was 68, the maximum score of the pre-test was 96, and the sum was 2856.

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

**Table 4.11 Frequency of Post-test in Experimental Group**  
**Post-test Score in Experimental Group**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	68	4	11.4	11.4	11.4
	72	3	8.6	8.6	20.0
	76	4	11.4	11.4	31.4
	80	9	25.7	25.7	57.1
	84	4	11.4	11.4	68.6
	88	3	8.6	8.6	77.1
	92	6	17.1	17.1	94.3
	96	2	5.7	5.7	100.0
	Total	35	100.0	100.0	

Based on the data of Table 4.11 above, it showed that 4 students got score 68, 3 students got score 72, 4 students got score 76, 9 students got score 80, 4 students got score 84, 3 students got score 88, 6 students got score 92, and 2 students got score 96.

The result showed that the students' reading recount text achievement in experimental group taught by using Flipped Classroom had good ability, and there were 11 students in excellent ability. It can be seen from the mode (80) in Table 4.10. The mode represented the categorization of students after being taught by using Flipped Classroom. So, in the experimental group there were more numbers of students in excellent ability. Hence, the post-test score was higher than the post-test score of control group.

## B. Hypothesis Testing

The hypotheses testing of this study as follows:

1. If the significant level is bigger than significant value, the null hypothesis ( $H_0$ ) is rejected and the alternative hypothesis ( $H_a$ ) is accepted. It means that there is difference mean score of reading recount text achievement between the students taught by using Flipped Classroom and those taught by using a conventional strategy. The different is significant.
2. If the significant level is smaller than significant value, the null hypothesis ( $H_0$ ) is accepted and the alternative hypothesis ( $H_a$ ) is rejected. It means that there is no difference mean score of reading recount text achievement between the students taught by using Flipped Classroom and those taught by using a conventional strategy. The different is not significant.

To know whether there is any significant different mean score of reading recount text achievement between the students taught by using Flipped Classroom and those taught by using a conventional strategy, the statistical computation using Independent Sample T-test result must be shown whether  $H_0$  is rejected, meanwhile  $H_a$  is accepted. To analyze the data the researcher used statistical test using computation Independent Sample T-Test by SPSS 16.0. It is used to know the effectiveness of using Flipped Classroom in teaching reading recount text. The result can be seen on the table as follows:

**Table 4.12**  
**Group Statistics**

Class		N	Mean	Std. Deviation	Std. Error Mean
Score	Experimental Group	35	81.60	8.357	1.413
	Control Group	34	73.06	9.095	1.560

Based on Table 4.12 above, it showed that the mean score of post-test in experimental group was 81.60 and the mean score of post-test in control group was 73.06. Next, the both of sample sizes or N used for experimental group were 35 students, and for control group were 34 students. While, standard deviation post-test in experimental group was 8.357 and standard deviation post-test in control group was 9.095. Then, mean standard error post-test in experimental group was 1.413 and mean standard error post-test in control group was 1.560. It can be concluded that the use of Flipped Classroom has caused the increased mean score of students' achievement and improved was better than using a conventional strategy. For details of the result of Independent Sample T-test can be seen in Table 4.13 below:

**Table 4.13**  
**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	Equal variances assumed	.029	.866	4.064	67	.000	8.541	2.102	4.346	12.736
	Equal variances not assumed			4.059	66.144	.000	8.541	2.104	4.340	12.743

Based on the result of Independent Sample T-test in Table 4.13 above, showed that in Levene's Test for Equality of Variances, it seen that  $F = 0.29$  ( $p = 0.866$ ) because of  $p$  higher than 0.05, it indicated that there was no difference in variance data or in the other words data was equal/homogenous. If the data was homogeneous, see on the result of equal variances assumed. As can be seen in table above showed that  $Df$  (Degree of freedom) was 67. Therefore, the way to test whether the null hypothesis can be rejected was by comparing  $p$ -value with the standard level of significance (0.05). So, to reject the null hypothesis was when the  $p$ -value of the obtained statistics was less than 0.05.

Thus, the significant value ( $sig$ ) of this research was 0.000, and it was lower than 0.05 ( $0.000 < 0.05$ ). Therefore, the null hypothesis ( $H_0$ ) saying that there is no significant difference mean score of reading recount text achievement between the students taught by using Flipped Classroom and those taught by using a conventional strategy was rejected, and the alternative hypothesis ( $H_a$ ) saying that there is significant difference mean score of reading recount text achievement between the students taught by using Flipped Classroom and those taught by using a conventional strategy was

accepted. It can be concluded that using Flipped Classroom was effective on students' mean score in reading recount text achievement of the eighth grade students.

### **C. Discussion**

The objective of the study was to know the effectiveness of using Flipped Classroom on students' reading recount text achievement and to know the significant difference mean score of reading recount text achievement between the students' taught by using Flipped Classroom and those taught by using a conventional strategy of the eighth grade at MTsN 4 Tulungagung.

In this research, the students who were taught by using a conventional strategy (control group) did not reveal significant improvement. It can be seen from the mean score of pre-test was 65.18 and the mean score of post-test was 73.06. The gained of the mean score in control group between pre-test and post-test was 7.88. Meanwhile, the students who were taught by using Flipped Classroom (experimental group) reveal significant improvement. It can be seen from the mean score of pre-test was 68.91 and the mean score of post-test was 81.60. The gained of the mean score in experimental group between pre-test and post-test was 12.69. It means that the gained of mean score in experimental group higher than the gained of mean score in control group.

Furthermore, the result of the statistical computation using Independent Sample T-test showed that the significance value was 0.000



which was lower than the significance level 0.05 ( $0.000 < 0.05$ ). Therefore, the null hypothesis ( $H_0$ ) saying that there is no significant difference mean score of reading recount text achievement between the students taught by using Flipped Classroom and those taught by using a conventional strategy was rejected and alternative hypothesis ( $H_a$ ) saying that there is significant difference mean score of reading recount text achievement between the students taught by using Flipped Classroom and those taught by using a conventional strategy was accepted. It means that there was significant difference mean score of reading recount text achievement between the students taught by using Flipped Classroom and those taught by using a conventional strategy. From the result above, it can be concluded that the students got a good achievement in reading recount text after being taught by using Flipped Classroom.

In addition, the score of students after being taught by using Flipped Classroom were better and higher. It can be seen in the treatment process in which the students participated actively and more interested when the researcher applied this strategy. According to Mull (2012) Flipped Classroom is as a model that provides the students to prepare themselves for the lesson by watching videos, listening products and reading articles. Therefore, the students have much time to understand the material and looking for other resources which is related to the topic at home (Bretzmann, 2013: 100). In other words, the students learn the material in their own comfort and they are able to watch the video instruction as many as they wanted to understand the

topic before coming to the class. They also can do it individually or with friends to share idea and understanding all the material or topic that explained in the video teaching and learning. Then, the class meeting can be used to discuss difficult or incomprehensible parts of material through strategy, such as discussion to complete the assignment in class where the teacher is available to assist with questions to check the student's comprehension.

Regarding to the result of research finding, it was also strongly supported by previous studies as Flipped Classroom was effective for students' reading comprehension. The first study was done by Dibiso, Hambali, and Erlina (2019) in quasi-experimental research design. The study was divided into two groups, the class XI-C as the experimental group and XI-E as the control group. The result of the study showed that Flipped Classroom can effectively be used to improve the students' reading comprehension achievement.

The second study was done by Danker (2015) which was conducted in action research approach. The result showed that Flipped Classroom strategy increased the interaction between the teacher and the students and between the student and another student, despite the large class size. Interactive learning strategies in the classroom have to be planned out and revised accordingly as the dynamics was different from class to class, so as to develop higher-order thinking skills.

The third study was done by Jannah (2017) the study was conducted in quasi-experimental research design. The study was divided into two

groups, the class IX-A as the experimental group and IX-B as the control group. The result showed that post-test score of experimental group was higher than control group. So, Flipped Classroom was effective to teach students' reading comprehension in narrative text at the eighth grade.

Based on the finding of this present research and previous studies, using Flipped Classroom had a positive effect on students' reading comprehension during the teaching and learning process. This strategy can be implemented in the teaching process in order to support students to easily understand the reading text. In general, the implication of Flipped Classroom in the teaching and learning process can support the teacher and students in many aspects. Beside this strategy make enjoyable in learning, it also can make students more receptive, cooperative, and active in the classroom. It has also been verified by the results of data analysis which stated that there was significant difference mean score of reading recount text achievement between the students taught by using Flipped Classroom and those taught by using a conventional strategy. Thus, it can be concluded that the use of Flipped Classroom was effective on students' mean score in reading recount text achievement of the eighth grade students at MTsN 4 Tulungagung.