

## **CHAPTER IV**

### **RESEARCH FINDINGS AND DISCUSSION**

In this chapter the researcher presents research finding, hypothesis testing and discussion. The research finding discuss about the result of data analysis. The discussion section consists of discussion about the research finding.

#### **A. Research Findings**

The present research designed to test whether Flipped Classroom is effective to writing ability of the eighth grade at SMPN 2 Sumbergempol in academic year 2019/2020 by using flipped classroom in descriptive writing text.

The sample of the research consist of two classes. The data were described into two tables. The Table 4.1 showed students' score and achievement in experimental class and the Table 4.8 showed the students' score and achievement in control class. The data of this research were the pretest scores and posttest scores of experimental and control groups. The scores are presented as follows :

### 1. Data of Experimental Class

Experimental class was a class which taught descriptive writing skill by using Flipped Classroom Strategy. The subject experimental class group consisted of 31 students. Students' score of pre – test and post – test can be seen on the table below :

**Table 4.1 The Students' Score of Experimental Class (Pretest and Posttest)**

No	Students	Pretest	Posttest
1	S1	65	70
2	S2	50	65
3	S3	75	80
4	S4	50	60
5	S5	45	60
6	S6	70	80
7	S7	50	65
8	S8	45	60
9	S9	65	75
10	S10	50	70
11	S11	60	75
12	S12	65	70

13	S13	60	65
14	S14	45	50
15	S15	70	70
16	S16	50	65
17	S17	45	60
18	S18	40	55
19	S19	55	60
20	S20	50	65
21	S21	60	65
22	S22	80	85
23	S23	50	70
24	S24	55	60
25	S25	75	85
26	S26	50	60
27	S27	70	75
28	S28	60	65
29	S29	45	50
30	S30	45	65
31	S31	85	95
		1.780	2.095

Based on the Table 4.1 above, it showed that the lowest score in pre - test was 45 and the highest score was 85 Beside that, the highest score of post - test was 95 , the lowest score was 50

**a. Pretest of Experimental Class**

**Table 4.2 Descriptive Statistic of Pretest**

**Statistics**

**Statistics**

Pretest\_experimental

N	Valid	26
	Missing	0
Mean		57,50
Median		55,00
Mode		50
Std. Deviation		12,021
Sum		1495

Based on the Table 4.2 above, showed that the mean of students score in pretest was 57.50; the median was 55,00; and the mode was 50. The standard deviation was 12.021 and the sum was 1495.

After getting the statistical data, the researcher constructs a group frequency distribution with the helped of SPSS program 16.0 version. The frequency distribution of experimental class students' score in pretest can be seen in the Table 4.3 as below :

**Pretest\_experimental**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 40	1	3,8	3,8	3,8
45	5	19,2	19,2	23,1
50	6	23,1	23,1	46,2
55	2	7,7	7,7	53,8
60	4	15,4	15,4	69,2
65	2	7,7	7,7	76,9
70	3	11,5	11,5	88,5
75	1	3,8	3,8	92,3
80	1	3,8	3,8	96,2

85	1	3,8	3,8	100,0
Total	26	100,0	100,0	

Based on the data of Table 4.3, it showed that 1 student got score 40, 5 student got score 45, 6 student got score 50, 2 student got score 55, 4 student got score 60, 2 student got score 65, 3 student got score 70, 1 students got score 75, 1 students got score 80, 1 student got score 85.

Based on the experimental class students' score in pretest, the researcher qualified their ability into 4 categories; excellent, good, , fair and poor. The categorization can be seen in Table 4.4 as below:

**Table 4.4 The Experimental Group Students' Qualification in Pretest**

No.	Grade	Level	Range of Score	Frequency
1.	A	Excellent	81-100	1
2.	B	Good	61-80	7
3.	C	Fair	41-60	17
4.	D	Poor	0-40	1

- a. There is 1 student got score 40, it means that the students' writing ability was poor and the students still needed much improvement.
- b. There are 17 students got score 41-60, it means that the students' writing ability was still fair, it also needed the improvement.
- c. There are 7 students got score 61-80, it means the students' writing ability was good.
- d. There is 1 student got score 81- 100, it means the student' writing ability was Excellent.

**b. Posttest of Experimental Class**

**Statistics**

Posttest\_experimental

N	Valid	31
	Missing	0
Mean		67,58
Median		65,00
Mode		65
Std. Deviation		10,155
Sum		2095

Based on the Table 4.5 above, showed that the mean of students score in posttest was 67,58; the median was 65,00; and the mode was 65. The standard deviation was 10.155 and the sum was 2095.

After getting the statistical data, the researcher constructs a group frequency distribution with the helped of SPSS program 16.0 version. The frequency distribution of experimental class students' score in posttest can be seen in the Table 4.6 as below:

**Table 4.6 Frequency of Posttest**

**Posttest\_experimental**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 50	2	6,5	6,5	6,5
55	1	3,2	3,2	9,7
60	7	22,6	22,6	32,3
65	8	25,8	25,8	58,1
70	5	16,1	16,1	74,2
75	3	9,7	9,7	83,9
80	2	6,5	6,5	90,3
85	2	6,5	6,5	96,8

95	1	3,2	3,2	100,0
Total	31	100,0	100,0	

Based on the data of Table 4.6, it showed that 2 student got score 50, 1 student got score 55, 7 student got score 60, 8 student got score 65, 5 student got score 70, 3 student got score 75, 2 student got score 80, 2 student got score 85, 1 student got score 95.

Based on the experimental class students' score in posttest, the researcher qualified their ability into 4 categories; excellent, good, , fair and poor. The categorization can be seen in Table 4.7 as below :

**Table 4.7 The Experimental Group Students' Qualification in Posttest**

No.	Grade	Level	Range of Score	Frequency
1.	A	Excellent	81-100	3
2.	B	Good	61-80	18
3.	C	Fair	41-60	10
4.	D	Poor	0-40	0

- a. There is 0 student got score 40, it means that the students' writing ability was poor and the students still needed much improvement.

- b. There are 10 students got score 41-60, it means that the students' writing ability was still fair, it also needed the improvement.
- c. There are 18 students got score 61-80, it means the students' writing ability was good.
- d. There are 3 students got score 81- 100, it means the student' writing ability was Excellent.

## 2. Data of Control Class

Control class was a class which taught narrative speaking skill by using Conventional Method. The subject control group consisted of 32 students. Students' score of pre – test and post – test can be seen on the table below:

**Table 4.8 The Students' Scores of Control Class (Pretest and Posttest)**

No	Students	Pretest	Posttest
1	S1	45	50
2	S2	50	50
3	S3	55	60
4	S4	60	60
5	S5	25	50
6	S6	80	90
7	S7	55	55
8	S8	60	60
9	S9	65	70
10	S10	65	70

11	S11	55	60
12	S12	55	55
13	S13	40	45
14	S14	50	55
15	S15	55	60
16	S16	60	65
17	S17	75	75
18	S18	70	70
19	S19	65	65
20	S20	55	60
21	S21	60	65
22	S22	65	70
23	S23	55	55
24	S24	50	50
25	S25	60	65
26	S26	45	50
27	S27	40	55
28	S28	55	65
29	S29	55	60
30	S30	60	75
31	S31	65	70
32	S32	60	60
32	S32	= 1765	=1965

Based on the Table 4.8 above, it showed that the lowest score in pre - test was 25 and the highest score was 80. Beside that, the highest score of post - test was 90 , the lowest score was 45

**a. Pretest of Control Class**

**Table 4.9 Descriptive Statistic of Pretest**

<b>Statistics</b>		
Pretest_control		
N	Valid	31
	Missing	0
Mean		56,94
Median		55,00
Mode		55
Std. Deviation		10,542
Sum		1765

Based on the Table 4.9 above, showed that the mean of students score in pretest was 56,94; the mode was 55; and the median was 55,00. The standard deviation was 10,542 and the sum was 1765.

After getting the statistical data, the researcher constructs a group frequency distribution with the helped of SPSS program 16.0 version. The frequency distribution of control class students' score in pretest can be seen in the Table 4.10 as below:

**Pretest\_control**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 25	1	3,2	3,2	3,2
40	2	6,5	6,5	9,7
45	1	3,2	3,2	12,9
50	3	9,7	9,7	22,6
55	9	29,0	29,0	51,6
60	7	22,6	22,6	74,2
65	5	16,1	16,1	90,3
70	1	3,2	3,2	93,5
75	1	3,2	3,2	96,8
80	1	3,2	3,2	100,0
Total	31	100,0	100,0	

Based on the data of Table 4.10, it showed that 1 student got score 25, 2 student got score 40, 1 student got score 45, 3 student got score 50, 9 students got score 55, 7 student got score 60, 5 student got score 65, 1 student got score 70, 1 student got score 75, 1 student got score 80.

Based on the control class students' score in pretest, the researcher qualified their ability into 4 categories; excellent, good, , fair and poor. The categorization can be seen in Table 4.11 as below:

**Table 4.11 The Control Group Students' Qualification in Pretest**

No.	Grade	Level	Range of Score	Frequency
1.	A	Excellent	81-100	0
2.	B	Good	61-80	7
3.	C	Fair	41-60	22
4.	D	Poor	0-40	3

Based on the Table 4.11 above, the result of categorization shows that 3 students in poor ability, 22 students in fair ability 7 students in good ability. The result above shows that many students had fair ability in descriptive writing. It can be concluded that the students' descriptive writing skill from both experimental and control class were almost same in pretest and the students have to improve their ability in descriptive writing skill.

**b. Posttest of Control Class**

**Table 4.12 Descriptive Statistic of Posttest**

Statistics		
Posttest_control		
N	Valid	32
	Missing	0
Mean		61,41
Median		60,00
Mode		60
Std. Deviation		9,439
Sum		1965

Based on the Table 4.12 above, showed that the mean of students score in posttest was 61,41 ; the mode was 60; and the median was 60,00. The standard deviation was 9,439 and the sum was 1965.

After getting the statistical data, the researcher constructs a group frequency distribution with the helped of SPSS program 16.0 version. The frequency distribution of control class students' score in posttest can be seen in the table 4.13 as below:

**Posttest\_control**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 45	1	3,1	3,1	3,1
50	5	15,6	15,6	18,8
55	5	15,6	15,6	34,4
60	8	25,0	25,0	59,4
65	5	15,6	15,6	75,0
70	5	15,6	15,6	90,6
75	2	6,3	6,3	96,9
90	1	3,1	3,1	100,0
Total	32	100,0	100,0	

Based on the data of Table 4.13, it showed that 1 student got score 45, 5 students got score 50, 5 student got score 55, 8 student got score 60, 5 students got score 65, 5 students got score 70, 2 student got score 75, 1 student got score 90.

Based on the control class students' score in posttest, the researcher qualified their ability into 4 categories; excellent, good, , fair and poor. The categorization can be seen in Table 4.14 as below :

**Table 4.14 The Control Group Students' Qualification in Posttest**

No.	Grade	Level	Range of Score	Frequency
1.	A	Excellent	81-100	1
2.	B	Good	61-80	13
3.	C	Fair	41-60	19
4.	D	Poor	0-40	0

Based on the Table 4.14 above, the result of categorization shows that 1 student in excellent ability, 13 students in good ability, 19 students in fair ability, The result above shows that many students had fair ability in descriptive skill. Only one student had excellent. It can be concluded that flipped classroom.

## **B. Hypothesis Testing**

The hypothesis testing of this study as follows :

### **1. Null Hypothesis ( Ho )**

“There is no a significant difference score on descriptive writing skill between students taught by using flipped Classroom Method and those taught by using Conventional Strategy”.

## 2. Alternative Hypothesis (Ha)

“There is a significant difference score on descriptive writing skill between students taught by using Flipped Classroom Method and those taught by using Conventional Strategy”.

To know whether there was any significant different score of the students' descriptive writing skill between students taught by using Flipped Classroom Method and those taught by using Conventional Method, the researcher analyzed the data by using Independent Sample T - test in SPSS statistics 16.0 version. The result can be seen on table as below :

**Table 4.15 Group Statistic**

**Group Statistics**

Kelas		N	Mean	Std. Deviation	Std. Error Mean
posttest_ekxperimen	Experimental	31	67.58	10.155	1.824
ntalandcontrol	Control	32	61.41	9.439	1.669

Based on Table 4.15, it shows there were two classes, it was experimental class and control class. First experimental class, shows N cell there were 31, Mean of score experimental class (67.58), Standard Deviation



posttest_ek	Equal			2.5	61	.015	6.174	2.469	1.237	11.111
xperiment	variances	.125	.725	01						
alandcontr	assumed									
ol	Equal									
	variances			2.4	60.	.015	6.174	2.472	1.230	11.118
	not			98	333					
	assumed									

Based on Table 4.16, that significant level (sig) is 0.015, and it is lower than 0.05 ( $0.02 < 0.05$ ). Therefore, the null hypothesis saying that there was no a significant difference score of the students' descriptive writing skill between students' taught by using Flipped Classroom Strategy and those taught by using Conventional Method was rejected and alternative hypothesis saying that there was a significant difference score of the students' descriptive writing skill between students' taught by using Flipped Classroom Strategy and those taught by using Conventional Method was accepted. It was found that there was a significant difference score of the students' descriptive writing skill between students' taught by using Flipped Classroom and those taught by using Conventional Method. Thus, Flipped Classroom was effective toward students' descriptive writing skill.

## C. Normality and Homogeneity Testing

### 1. Normality Testing

Normality test intended to show that the sample data come from a normally distributed population. The normality testing in this research To know the normality, the researcher used statistic computation SPSS Statistics 16.0 One - Sample Kolmogorov - Smirnov test by the value of significance ( $\alpha$ ) = 0.05. The result of normality testing can be seen in the table below :

**Table 4.17 Normality Test of Experimental Class and Control Class**

#### One-Sample Kolmogorov-Smirnov Test

		pretest_ek		pretest_co	posttest_co
		s	posttest_eks	n	n
N		31	31	32	32
Normal Parameters <sup>a</sup>	Mean	57.42	67.58	56.56	61.41
	Std. Deviation	11.893	10.155	10.583	9.439
Most Extreme	Absolute	.217	.181	.191	.153
Differences	Positive	.217	.181	.123	.153
	Negative	-.116	-.131	-.191	-.097

Kolmogorov-Smirnov Z	1.211	1.007	1.082	.865
Asymp. Sig. (2-tailed)	.106	.262	.192	.442

a. Test distribution is Normal.

Based on the result of the test above, it can be seen that the significance value pretest of experimental group was 0.106, posttest of experimental group was 0.265, pretest of control group was 0.192, and posttest of control group was 0.442, so all of them were more than 0.05. It means that  $H_0$  was accepted and  $H_a$  was rejected. So, it can be interpreted that all of the data were normal distributed.

## 2. Homogeneity Testing

Homogeneity testing conducted to know whether the gotten data has a homogeneous variance or not. The homogeneity testing in this research using statistic computation SPSS Statistics 16.0 that is Levene Statistic test by the value of significance (  $\alpha$  ) = 0.05. The samples can be categorized as homogeneity if value of significance > 0.05, so it means that the data of sample had same variance. The result can be seen below:

**Table 4.18 Homogeneity of Test****Test of Homogeneity of Variances**

pretest\_eksperimental and control

Levene Statistic	df1	df2	Sig.
2.161	1	61	.147

From the result above, the test was homogeneity because significant was 0.147, it known that the significant was more than 0.05 ( $0.147 > 0.05$ ). it means that  $H_0$  was accepted and  $H_a$  was rejected. So, the homogeneity testing of variance in pretest of experimental and control groups for descriptive writing skill in this research showed that the data had homogeneous variance, so it was qualified to be analyzed.

#### **D. Discussion**

Based on the research finding, it showed that the mean scores between pretest and posttest of control group and experimental group was different. The objectives of the study was to know the effectiveness of using Flipped Classroom Strategy toward students' descriptive writing skill and to know the significance different score of the students' descriptive writing skill between students' taught by using Flipped Classroom Strategy and those taught by using Conventional Strategy of the eighth grade students at SMPN 2 Sumbergempol in academic year 2019/2020.

In this research, students who were taught by using Conventional Strategy did not reveal significant improvement. It can be seen from the mean score of pretest was 56.94 and the average score of posttest was 61.41. The gain of the mean score in control class between pretest and posttest was 4.47. Whereas in the pretest of experimental group, the average score was 57.50, and the average score in posttest was 67.58. The gain of the mean score in experimental class between pretest and posttest was 10.08. It looked that the gain of mean score in experimental class higher than the gain of mean score in control class. The mean score of both groups also look difference value, the result shows that the posttest of experimental group was better than posttest of control group. Then, based on the result of the statistical

computation, showed that the result of experimental group after taught by using Flipped Classroom Strategy, the significance value is 0.015 which was lower than the significance level 0.05 ( $0.02 < 0.05$ ). Therefore, the null hypothesis saying that there was no a significant difference score of the students' narrative speaking skill between students' taught by using Flipped Classroom Strategy and those taught by using Conventional Strategy was rejected and alternative hypothesis saying that there was a significant difference score of the students' narrative speaking skill between students' taught by using Flipped Classroom and those taught by using Conventional Strategy was accepted. It means there was a significance different score of the students' descriptive writing skill between students' taught by using Flipped Classroom Method and those taught by using Conventional Method. From the result above, the conclusion was the students get good achievement in descriptive writing skill after taught by using Flipped Classroom Method. So Flipped Classroom Method was effective toward students' descriptive writing skill.

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 Jannah (2017), the research 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 (2015) statements 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. 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 writing. 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.