CHAPTER IV

FINDING AND DISCUSSION

This chapter the researcher will present the research finding and discussion. It consists of the description of the data, data analysis, hypothesis testing and discussion.

A. The Description of Data

In this section, the researcher presents the students' writing ability, the researcher give pre-test and post-test in order to know whether or not there is different score of the students before and after being taught by using basic questioning technique. The researcher used three steps: pre-test, treatment by using basic questioning technique and post-test.

Pre-test was given to the students. They had to write descriptive text. The test in the form of writing test. There were 31 students as respondents or subject of the research. The test was conducted by the researcher before being taught by using basic questioning technique in writing descriptive text. This test to know the students' ability in writing descriptive text before students got the tearment.

After the researcher got the scores from pre-test, the researcher was given treatment to the students by using basic questioning as a technique. The researcher explain how to use basic questioning in writing descriptive text. After giving the treatment, the researcher asked the students to write descriptive text.

When treatment had finished, the researcher was conducted the post-test to know the students' ability in writing descritive text after being taught by using basic questioning technique. The students' ability in writing descriptive text was scored using analytical scoring rubric. The researcher used the analytic scoring rubric from the product of O'Malley. There are four domain score in this rubric and there are five components will be scored. The component are composing, style, sentence formation, usage and mechanics. And for the domain score are: 4 = Consistent control, 3 = Reasonable control, 2 = Inconsistent control, and 1 = Little or no control.

The presentation of the data as follows:

1. Students' ability in writing descriptive text before being taught by using basic questioning technique

Table 4.1 The students' pre-test score

No	Pre-test (X)	X^2
1.	55	3025
2.	35	1225
3.	55	3025
4.	50	2500
5.	55	3025
6.	55	3025
7.	50	2500
8.	50	2500
9.	75	5625
10.	35	1225
11.	55	3025
12.	55	3025
13.	55	3025
14.	50	2500
15.	50	2500
16.	40	1600
17.	50	2500
18.	40	1600
19.	50	2500
20.	35	1225
21.	55	3025
22.	45	2025
23.	55	3025
24.	55	3025
25.	45	2025
26.	55	3025
27.	50	2500
28.	45	2025
29.	50	2500
30.	40	1600
31.	40	1600
	$\sum X$ 1530	$\sum X^2$ 77550

The pre-test was followed by 31 students of the experimental group. The researcher allocated 80 minutes for conducting pre-test. The pre-test was in the form of writing instruction that the students should write descriptive text, the topic

was about “My Favorite Teacher”. It was done before treatment process using basic questioning technique. The pre-test was administered on March 30th , 2016.

Table 4.2 Descriptive Statistic of Pre-test

Statistics

VAR00001

N	Valid	31
	Missing	0
Mean		49.3548
Median		50.0000
Mode		55.00
Std. Deviation		8.24034
Minimum		35.00
Maximum		75.00
Sum		1530.00

Based on the calculation, the result are as follow:

a. Mean = $\bar{X} = \frac{\sum X}{N}$

Where $\bar{X}$ = mean

$\sum X$ = total score of pre-test

N = number of students

$$\bar{X} = \frac{\sum X}{N} = \frac{1530}{31} = 49{,}3548$$

b. Median

$$= \frac{50+50}{2} = \frac{100}{2} = 50$$

c. Mode is the most existing score that is 55.

d. Standard Deviation

$$S = \sqrt{\frac{\sum X^2 - \frac{\sum(x)^2}{N}}{N-1}}$$

S : standard deviation

$\sum X^2$: sum of pre-test quadrate score

$\sum x$: sum of pre-test score

N : number of students

$$S = \sqrt{\frac{\sum X^2 - \frac{\sum(x)^2}{N}}{N-1}}$$

$$S = \frac{\sqrt{77550 - (1530)^2}}{\frac{31}{31-1}}$$

$$S = \frac{\sqrt{77550 - 75512{,}90}}{30} = \sqrt{67.90333} = 8{,}24034$$

Based on the table 4.2 and the calculation, we can know that the students consist of 31 students. It shown that mean score is 49,354. The median score is 50 and the mode is 55. The mode is simply that value which has the highest frequency. Then the standard deviation is 8,24034.

The data pre-test and post test can be arranged in the form of frequency and percentage through scoring criteria. There are three scoring criteria to classification the score. According O'Malley & Pierce (1996: 49), the scoring criteria are: exceeds the standard, meets the standard, and approaches the standard. The researcher used the scoring criteria from the product of O'Malley.

Table 4.3 Scoring Criteria

Range Score	Criteria
75-100	Exceeds the standard
70-60	Meets the standard
55-25	Approaches the standard

The formula to find out the precentage score as follow:

$$P = \frac{F}{N} \times 100\ \%$$

Where P = Symbol of precentage

F = Frequency

N = Subject on the sample

Table 4.4 The precentage of students' pre-test

Range Score	**Criteria**	Frequency	Percent (%)
75-100	Exceeds the standard	1	4 %
70-60	Meets the standard	-	-
55-25	Approaches the standard	30	96 %
		N= 31	P= 100%

The frequency and precentage of pre-test by using SPSS 16.0.

Table 4.5 Frequency of Pre-Test

VAR00001

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	35	3	9.7	9.7	9.7
	40	4	12.9	12.9	22.6
	45	3	9.7	9.7	32.3
	50	9	29.0	29.0	61.3
	55	11	35.5	35.5	96.8
	75	1	3.2	3.2	100.0
	Total	31	100.0	100.0	

Based on the table 4.4, it concluded that the students' ability before being taught by using basic questioning technique,there are thirty students got range of score between 55-25, it means that the ability of students' writing skill of SMP Negeri 2 Sumbergempol approaches the standard. And there are one students got range of score 75-100, it means that the ability of student' writing skill exceeds the standard. So, it concluded that the students' need a technique to improve their ability on writing skill especially descriptive text.

2. Students' ability in writing descriptive text after being taught by using basic questioning technique

Table 4.6 The students' post-test score

No	Post-test (Y)	Y^2
1.	75	5625
2.	55	3025
3.	70	4900
4.	65	4225
5.	70	4900
6.	80	6400
7.	65	4225
8.	65	4225
9.	90	8100
10.	60	3600
11.	75	5625
12.	75	5625
13.	65	4225
14.	60	3600
15.	60	3600
16.	55	3025
17.	60	3600
18.	75	5625
19.	55	3025
20.	50	2500
21.	65	4225
22.	55	3025
23.	70	4900
24.	70	4900
25.	60	3600
26.	65	4225
27.	70	4900
28.	70	4900
29.	75	5625
30.	60	3600
31.	60	3600
	$\sum Y$ 2045	$\sum Y^2$ 137175

The post-test was followed by 31 students of the experimental group. The researcher allocated 60 minute for conducting post-test, because before conducted the post-test the researcher reviewed students activities in conducting the treatment. The post-test was in the form of writing instruction that the students should write descriptive text, the topic was about "My Family". It was done after treatment process using basic questioning technique. The post-test was administered on April 27th , 2016.

Table 4.7 Descriptive Statistic of Post-test

Statistics

VAR00002

N	Valid	31
	Missing	0
Mean		65.9677
Median		65.0000
Mode		60.00
Std. Deviation		8.70051
Minimum		50.00
Maximum		90.00
Sum		2045.00

Based on the calculation, the result are as follow:

a. Mean = $\overline{X} = \frac{\sum Y}{N}$

Where $\bar{X}$ = mean

$\sum Y$ = total of score post-test

N = number of students

$$\bar{X} = \frac{\sum Y}{N} = \frac{2045}{31} = 65{,}9677$$

b. Median

$$= \frac{65+65}{2} = \frac{130}{2} = 65$$

c. Mode is the most existing score that is 60.

d. Standard Deviation

$$S = \sqrt{\frac{\sum y^2 - \frac{\sum (y)^2}{N}}{N-1}}$$

S : standard deviation

$\sum Y^2$: sum of post-test quadrate score

$\sum y$: sum of post-test score

N : number of students

$$S = \sqrt{\frac{\sum y^2 - \frac{\sum (y)^2}{N}}{N-1}}$$

$$S = \sqrt{\frac{137175 - \frac{(2045)^2}{31}}{31-1}}$$

$$S = \sqrt{\frac{137175 - 134904{,}03}{30}} = \sqrt{75{,}699} = 8{,}70051$$

Based on the table 4.7 and the calculation, the students consist of 31 students. It shown that mean score is 65,9677. The median score is 65 and the mode is 60. The mode is simply that value which has the highest frequency. Then the standard deviation is 8,70051.

The data post test can be arranged in the form of frequency and percentage through scoring criteria.

The formula to find out the precentage score as follow:

$$P = \frac{F}{N} \times 100\ \%$$

Where P = Symbol of precentage

F = Frequency

N = Subject on the sample

Table 4.8 The precentage of students' post-test

Range Score	**Criteria**	Frequency	Percent (%)
75-100	Exceeds the standard	7	22 %
70-60	Meets the standard	19	61 %
55-25	Approaches the standard	5	17 %
		N= 31	P= 100%

The frequency and precentage of post-test by using SPSS 16.0.

Table 4.9 Frequency of Post-Test

VAR00002

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	50	1	3.2	3.2	3.2
	55	4	12.9	12.9	16.1
	60	7	22.6	22.6	38.7
	65	6	19.4	19.4	58.1
	70	6	19.4	19.4	77.4
	75	5	16.1	16.1	93.5
	80	1	3.2	3.2	96.8
	90	1	3.2	3.2	100.0
	Total	31	100.0	100.0	

Based on the table 4.8, it concluded that the students' ability after being taught by using basic questioning technique,there are five students got range of score between 55-25, it means that the ability of students' writing skill of SMP

Negeri 2 Sumbergempol approaches the standard. Then, there are nineteen students got range of score 70-60, it means that the ability of students' writing meets the standard. And there are seven students got range of score 75-100, it means that the ability of students' writing exceeds the standard So, it concluded that basic questioning technique can used for teching writing and can improve the students' ability in writing descriptive text.

B. Data Analysis

Data analysis was done to know the different score of the students' achievement in writing descriptive text before and after being taught by using basic questioning technique. Referring to the data in the form of students' score gained from pre-test and post-test as stated above, the next step was analyzing those data by computing it using Paired Sample T-test and formula of t-test.

Table 4.10 Paired Sample Statistic

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	VAR00001	49.3548	31	8.24034	1.48001
	VAR00002	65.9677	31	8.70051	1.56266

Based on the table 4.10, the data presented are the performances scores of the members of one group which the students who were being taught before and after by using basic questioning technique in writing ability. Output paired sample statistics show that there are mean scores differences between pre-test and post-test. The mean score of pre-test is 49,35 and the mean score of post-test is 65,96. So, the mean score of post-test is higher than the mean score of pre-test. The number of pre-test and post-test given by the researcher are one item in the form of essay or writing test. The pre-test was done before the treatment. The post-test was done after the treatment process. The number of subjects or respondents of each sample (N) is 31 students.

Meanwhile, standard deviation of pre-test is 8.24 and the standard deviation of post-test it 8.70. Mean standard of error for pre test is 1.48, while mean standard eror for post-test is 1.56. So, it concluded that the value increases after being taught by using basic questioning technique in writing ability.

Table 4.11 Paired Samples Correlation

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	VAR00001 & VAR00002	31	.730	.000

Based on table 4.11, output paired sample correlation shows that correlation between both sample is 0.730 and numeral significance is 0.00. For the interpretation of decision based on the result of probability achievement that is:

a. If the probability > 0.05, so the null hypothesis (Ha) is accepted.
b. If the probability < 0.05, so the null hypothesis (Ho) is rejected.

The numeral significant is 0.00 smaller than 0.05 (0.00 < 0.05), it means that the null hypothesis (Ho) is rejected. So, there is significant different of students' achivement in writing ability before and after being taught by using basic questioning technique at the seventh grade of SMP Negeri 2 Sumbergempol.

After that, the reseacher find out the t_{count} to compare two kinds of data sample.

Table 4.12 The result of pre-test and post-test students' writing ability before and after being taught by using basic questioning technique

No	Pre-test (X)	Post-test (Y)	D (Y-X)	D^2
1.	55	75	20	400
2.	35	55	20	400
3.	55	70	15	225
4.	50	65	15	225
5.	55	70	15	225
6.	55	80	25	625
7.	50	65	15	225
8.	50	65	15	225
9.	75	90	15	225
10.	35	60	25	625
11.	55	75	20	400
12.	55	75	20	400
13.	55	65	10	100
14.	50	60	10	100
15.	50	60	10	100
16.	40	55	15	225
17.	50	60	10	100
18.	40	75	35	1225
19.	50	55	5	25
20.	35	50	15	225
21.	55	65	10	100
22.	45	55	10	100
23.	55	70	15	225
24.	55	70	15	225
25.	45	60	15	225
26.	55	65	10	100
27.	50	70	20	400
28.	45	70	25	625
29.	50	75	25	625
30.	40	60	20	400
31.	40	60	20	400
	$\sum$X 1530	$\sum$Y 2045	$\sum$D 515	$\sum D^2$ 9725

The steps of t_{count} as follows:

Before find out t_{count} , the researcher finds out the total number of quadrate deviation ($\sum X^2 d$),

$$\sum X^2 d = \sum d^2 - \frac{(\sum d)^2}{N}$$

$$= 9725 - \frac{(515)^2}{31}$$

$$= 9725 - \frac{265225}{31}$$

$$= 9725 - 8555{,}64$$

$$= 1169{,}36$$

Where:

$\sum X^2 d$ = total number of quadrate deviation

$\sum d$ = sum of different between post-test and pre-test

N = number of students

Then, the researcher also finds out the Mean of differentiate pre-test and post-test, the formula used is follow:

$$Md = \frac{\sum d}{N}$$

$$Md = \frac{515}{31}$$

$$Md = 16{,}6129$$

Where:

Md : the mean of differential pre-test and post test

$\sum d$: sum of different between post-test and pre-test

N : total number of students

After the researcher got the result of total number of quadrate deviation, the researcher can start to find the value of t_{count}.

$$t_{count} = \frac{Md}{\sqrt{\frac{\sum x^2 d}{N\,(N-1)}}}$$

$$= \frac{16{,}6129}{\sqrt{\frac{1169{,}36}{31\,(31-1)}}}$$

$$= \frac{16{,}6129}{\sqrt{1{,}2573}}$$

$$= \frac{16{,}6129}{1{,}1213}$$

$$= 14.8157$$

df = N-1

= 31-1

= 30

After got the manual results, the researcher used SPSS 16.0 to prove the manual statistic.

Table 4.13 Paired Samples 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 VAR00001 - VAR00002	-1.66129E1	6.24328	1.12133	-18.90296	-14.32285	-14.815	30	.000

Based on the result in SPSS 16.0, the output paired samples test in table 4.13, showed that the mean of pre-test and post test was -1.66129, standard deviation was 6.24328, standard error mean was 1.12133. Then, the lower difference was -18.90296, while the upper difference was -14.32285. The t_{count} was -14.815 (symbol minus ignored), df was 30, and the last is significance (2-tailed) was 0.00.

From the table, df was 30 and t_{count} was 14.815 and to know whether it is significant or not, the researcher used t_{table} to know the significant. The result of t_{table} with significant level 5 % (0.05) and df=30 was 2.042. So, it can be concluded that t_{count} is bigger than t_{table} ($t_{count} > t_{table}$) (14.815>2.042). If t_{count} is

bigger than t_{table} , it means that H_o is rejected and H_a is accepted. In contrary, if t_{count} is smaller that t_{table} means that H_o is accepted and H_a is rejected.

From the result above, t_{count} is bigger than t_{table}. So, the Null Hypothesis (Ho) is rejected and the Alternative Hypothesis (H_a) is accepted. It means that there is significant difference between the students' ability in writing descriptive text before and after being taught using basic questioning technique.

C. Hypothesis Testing

From the analysis data above, the hypothesis of the research which used in SPSS 16.0 are:

1. If t_{count} is bigger than t_{table}, the null hypothesis (H_0) is rejected and alternative hypothesis (H_a) is accepted.

   Alternative hypothesis (H_a) is accepted, means that there is significant difference between the students' ability in writing descriptive text before and after being taught by using basic questioning technique.

2. If t_{count} is smaller than t_{table} , the null hypothesis (H_0) is accepted and alternative hypothesis (H_a) is rejected.

   Null hypothesis (H_0) is accepted, means that there is no significant difference between the students' ability in writing descriptive text before and after being taught by using basic questioning technique.

In this research, t_{count} is bigger than t_{table}. So, the Null Hypothesis (H_0) is rejected and Alternative Hypothesis (H_a) is accepted. It means there is significant difference between the students' ability in writing descriptive text before and after being taught by using basic questioning technique. It can be concluded that basic questioning technique is effective to teach writing descriptive text in the seventh grade of SMP Negeri 2 Sumbergempol.

D. Discussion

Based on the data analysis, it shows that there is significant difference of students' ability in writing descriptive textbefore and after being taught by using basic questioning technique at seventh grade students of SMP Negeri 2 Sumbergempol.

The researcher administered the pre-test and post-test to get the score. The finding showed that the mean of pre-test score was 49,35 from 31 students. And the mean of post-test score was 65,96 and the mean of differentiate pre-test and post-test was 1.66129. Based on the mean of pre-test and post-test, the mean of post-test was higher than the mean of pre-test. It means that the students' writing ability after being taught by uisng basic questioning technique was improved.

The data was analyzed by using T-test and SPSS 16.0. The result of t_{count} was -14.815 (symbol minus ignored) and df was 30. Then, the researcher used t_{table} with significant level 5% (0.05) and df=30. The result of t_{table} was 2.042. So, t_{count} is bigger than t_{table} (14.815 > 2.042). T_{count} is bigger than t_{table} means that the Null Hypothesis (H_0) is rejected and Alternative Hypothesis (H_a) is accepted. It

concluded there is significant difference between the students' writing ability before and after being taught by using basic questioning technique, its strongly related to some advantages of basic questioning. According Burke (2010:3), questions likened a Swiss Army knife. It means that questions are an active, disciplined mind trying to understand texts or concepts and communicate that understanding to others. According Critellie and Tritapoe (2010: 2), questioning is an essential part of instruction it allows teachers to monitor student competence and understanding as well as increase thought-provoking discussion or the key to gaining more information.

The succesfull readers, writers, and thinkers have learned to ask certain questions than students that should guide with the instruction in formulating and using questions to generate, comprehend, analyze, and elaborate begins to demystify what those highly effective students do. This finding also was supported by theory provided by Poole (2003:9), questions are great conversation starters. Good questions invite people to open up about themselves and divulge their thoughts and feelings on a wide variety of topics. According Lewis (2), the aim of questioning are: to test a student's preparation (find out if students did their homework.), arouse interest (bring them into the lesson by motivating them.), to develop insights, to develop ideals, attitudes and appreciations (ask questions that cause students to get more than knowledge in the classroom.), to strengthen learning (review and summarize what is taught.), to stimulate critical thinking, and to test achievement of objectives. Questions can do more than measure what students know. Appropriately challenging, engaging, and effective questions

stimulate peer discussion and encourage students to explore and refine their understanding of key concepts. So, good and clearly questions is important to make our friend understand what we said and we will get good answer from what our friend said.

And the advantages of the questions are: questions can help diagnose student understanding of material, questions are a way of engaging with students to keep their attention and to reinforce their participation, questions are a way to review, restate, emphasize, and/or summarize what is important, questions can be used to stimulate discussion and creative and critical thinking, and to determine how students are thinking and questions can help students retain material by putting into words otherwise unarticulated thoughts.

> Tatum (2005) suggests in Burke (2010:20): "Questions, and the freedom to ask them, determines the extent to which the student feels included in the class and curriculum."

So, using questioning, the researcher can create students actively to ask, summarize, to generate, comprehend and elaborate the information of the text. The use of basic questioning in writing descriptive text is to give a stimulus to make the students get an idea and to know what they should describe with answering the questioning.

The explanation above imply that the use of basic questioning technique gives positive effect towards students' writing ability. It has been proved by the result of data analysis that there is significant difference between the students' writing ability before and after being taught by using basic questioning technique. It can be concluded that the use of basic questioning technique is effective toward

students' ability in writing descriptive text at the seventh grade students of SMP Negeri 2 Sumbergempol.