

CHAPTER IV

RESEARCH FINDINGS AND DISCUSSION

In this chapter, the researcher presents the findings which have been collected during research, and discussion about the data of the research.

A. The Findings

In this research, the researcher wants to know the effectiveness of using inquiry learning method in teaching writing descriptive text toward students' writing achievement. The effectiveness can be seen from the significant difference scores of the student's writing achievement before and after being taught by using inquiry learning method. The presentation of data is also to answer the research problems presented in chapter I.

To investigate students' writing skill in descriptive text before and after using inquiry learning method, the researcher conducted pretest and posttest. As previously mentioned, the researcher used writing test as the instrument in collecting the data, the researcher conducted pretest and posttest in a group of sample consisted of 32 students in seventh grade.

The form of writing test in pretest and posttest was a kind of descriptive text which the tests was same, that was descriptive someone. In pretest, the topic was favorite someone/ the idol, while in post-test, the topic was same. In pretest, the students started making the first draft in the classroom, and could revise and edit their works in the classroom without read and search

from books or other source. Meanwhile, in posttest, the students were allowed to make the first draft, revise and edit completely in the classroom after read and search from books or other source. The final result of students' writing after doing all of the steps in process writing in pretest and posttest then were analyzed by using writing scoring rubric.

After getting the data, the researcher analyzed the data by using *paired sample t-test* though SPSS 20 to find out the significant difference scores of students' writing achievement before and after being taught by using inquiry learning method. Mentioned below is the presentation of data in this research.

Table 4.1 The result of students' achievement in writing descriptive text before being taught by using Inquiry Learning Method

No	Student	Pretest
1	AND	60
2	ANG	60
3	DRN	68
4	DNS	72
5	DRWR	48
6	DO	56
7	DK	76
8	DAF	80
9	EM	76
10	FPS	56
11	FF	60
12	FS	48
13	HAD	64
14	KN	68
15	MAT	68
16	MAZ	52
17	MADP	60
18	MTSH	68
19	MIM	44
20	PH	76
21	PNZ	72

Continuing

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No	Students	Pretest
1	RA	72
2	RM	48
3	RC	60
4	RIN	68
5	RDK	64
6	SNA	52
7	TFR	64
8	TWD	76
9	VYYP	72
10	WSW	48
11	YAP	68

Statistics

VAR00001

N	Valid	32
	Missing	0

Table 4.1 shows the students' scores resulted from the pretest. The students' names were identified based on the initial name of student. The student's score have variation, the low score is 44 and the high score is 80. The pretest was followed by 32 students of the seventh grade that was taken sample. The researcher allocated 80 minutes for doing the writing test. It was administered on Monday, April 18th 2016.

Table 4.2 The result of students' achievement in writing descriptive text after being taught by using Inquiry Learning Method

No	Student	Posttest
1	AND	76
2	ANG	76
3	DRN	80
4	DNS	76
5	DRWR	84
6	DO	76

Continuing

Continued

No	Student	Posttest
1	DK	76
2	DAF	76
3	EM	84
4	FPS	80
5	FF	80
6	FS	84
7	HAD	72
8	KN	76
9	MAT	84
10	MAZ	72
11	MADP	72
12	MTSH	76
13	MIM	68
14	PH	84
15	PNZ	80
16	RA	72
17	RM	72
18	RC	76
19	RIN	80
20	RDK	80
21	SNA	72
22	TFR	72
23	TWD	80
24	VYYP	60
25	WSW	76
26	YAP	64

Statistics

VAR00002

N	Valid	32
	Missing	0

Table 4.2 shows the students' scores resulted from the posttest. The researcher allocated 80 minutes for doing the writing test. It was administered on Thursday, May 5th 2016. The Post-test score better than pretest score.

To make the data meaningful, the researcher organized the frequency and the percentage of score in pre-test by using SPSS 20 IBM. Table 4.3 represent the statistical result :

Table 4.3 Frequency of score in Pretest

Pretest				
	Frequency	Percent	Valid Percent	Cumulative Percent
44.00	1	3.1	3.1	3.1
48.00	4	12.5	12.5	15.6
52.00	2	6.3	6.3	21.9
56.00	2	6.3	6.3	28.1
60.00	5	15.6	15.6	43.8
Valid 64.00	3	9.4	9.4	53.1
68.00	6	18.8	18.8	71.9
72.00	4	12.5	12.5	84.4
76.00	4	12.5	12.5	96.9
80.00	1	3.1	3.1	100.0
Total	32	100.0	100.0	

As can be seen from the Table 4.3 , 1 student (3.1%) got 44, 4 students (12.5%) got 48, 2 students (6.3%) got 52, 2 students (6.3%) got 56, 5 students (15.6%) got 60, 3 students (9.4%) got 64, 6 students (18.8%) got 68, 4 students (12.5%) got 72, 4 students (12.5%) got 76, and 1 student (3.1%) got 80.

This is not surprising finding considering that students only using their knowledge in composing a descriptive text. The students seemed a bit difficult to develop their ideas into a good text. Then, after accepting the treatment (using Inquiry Learning Method), the students showed good improvement.

Table 4.4 Frequency of score in Posttest

Posttest				
	Frequency	Percent	Valid Percent	Cumulative Percent
60.00	1	3.1	3.1	3.1
64.00	1	3.1	3.1	6.3
68.00	1	3.1	3.1	9.4
72.00	7	21.9	21.9	31.3
76.00	10	31.3	31.3	62.5
80.00	7	21.9	21.9	84.4
84.00	5	15.6	15.6	100.0
Total	32	100.0	100.0	

As can be seen from the Table 4.4, 1 student (3.1%) got 60, 1 student (3.1%) got 64, 1 student (3.1%) got 68, 7 students (21.9%) got 72, 10 students (31.3%) got 76, 7 students (21.9%) got 80, 5 students (15.6%) got 84.

This finding shows that after accepting the treatment, students' score significantly increased. Comparing to the result of pre-test, the result of post-test shows a significant progress. In pre-test, there was no student who got more than 80 (0%), while in post-test, the percentage of sample who got more than 80 increased by 15.6% (0% - 15.6%). Moreover, the lowest score in post-test (60) is larger than pre-test (44), and the highest score in post-test (84) is also larger than pre-test (80) and also the students that got the high score so much more than low score. This finding indicates that after using Inquiry Learning Method, the students' achievement in writing significantly increased proven by the progress of score from pre-test to post-test.

After organizing the frequency and the percentage of score from pre-test and pos-test, the means, the medians, the standard deviations, the variances, the minimum and the maximum of the writing pre-test and post-test scores of the sample were calculated respectively by using IBM SPSS Statistics 20. Table 4.5 represents the results.

Table 4.5 Descriptive Statistics for Pre-test and Post-test

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Pre-test	32	44.00	80.00	63.2500	9.97739
Post-test	32	60.00	84.00	76.1250	5.70088
Valid N (listwise)	32				

As the table 4.5 shows, the mean of post-test scores (76.3) is larger than the mean of pre-test scores (63.3). It indicates that on average, the use of Inquiry Learning Method has caused the improvement of students' scores, but it is important to know that such a conclusion is only a descriptive conclusion. It should be tasted about being meaningful this progress.

Therefore, to know whether Inquiry Learning Method is effective to increase students' writing achievement in descriptive text, the researcher tested the result of pre-test and pos-test by using Paired Sample Test in IBM SPSS Statistics 20. As what previously mentioned that there are two hypotheses in this study : (1) Null hypothesis stating that there is no any significant different of students' achievement in writing descriptive text before being taught by using Inquiry learning method and after being taught

by using Inquiry Learning Method, and (2) Alternative hypothesis stating that there is a significant different of students' achievement in writing descriptive text before being taught by using Inquiry learning method and after being taught by using Inquiry Learning Method. The testing was done to know whether the null hypothesis could be rejected or not. Table 4.6 shows the result of the test.

Table 4.6 Paired Sample Test

	Paired Differences					T	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pretest – Posttest	-12.87500	11.02417	1.94882	-16.84964	-8.90036	-6.607	31	.000

Referring to Table 4.6, we can see that the t_{obtained} is -8.90036. The way to test whether null hypothesis could be rejected was by comparing the result of t_{obtained} and t_{table} . If the result of t_{obtained} is larger than t_{table} at the level of significance 0.05, the null hypothesis can be rejected. On the contrary, if the result of t_{obtained} is smaller than t_{table} , the null hypothesis cannot be rejected. In consulting to t_{table} , the researcher needed to find out the degree of freedom. As can be seen in Table 4.5 that Df (Degree of Freedom) is 31, the researcher consulted to the t_{table} , and at the level of significance 0.05, the value of t_{table} is ± 2.021 . Comparing to the value of t_{table} , the value of t_{obtained}

is larger ($-2.021 < -8.900$). From the presentation of data in table 4.5, the result of t -count is 6.60 with degree freedom (df) = 31 and significance value (Sig. 2-tailed) 0.000. Based on the statistical analysis using t -test, it shows that t -table = 2.021 and t -count is 6.60, it means that t -count higher than t -table (t -count $>$ t -table)

B. Hypothesis testing

The hypothesis testing of this research are stated as follows:

1. If the score of t -count is higher than t -table (t -count $>$ t -table) in df = 31 with significance level 0.05 and significance value lower than 0.05 (significance value $<$ 0.05). The null hypothesis (H_0) is rejected. It means that there is a significant different of students' achievement in writing descriptive text before being taught by using Inquiry learning method and after being taught by using Inquiry Learning Method.
2. If the value of t -count is lower than t -table (t -count $<$ t -table) in df = 31 with significance level 0.05 and significance value higher than 0.05 (significance value $>$ 0.05). The null hypothesis (H_0) is accepted. It means that there is no any significant different of students' achievement in writing descriptive text before being taught by using Inquiry learning method and after being taught by using Inquiry Learning Method.

Based on the output of *paired sample t-test* on table 4.5, the significance value was 0.000, the value of t -count was 6.60, and the value of

t-table in $df = 31$ was 2.021. As stated earlier, if *t-count* is higher than *t-table* ($t\text{-count} > t\text{-table}$) and the significance value is lower than significance level ($0.000 < 0.05$), the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted.

Because of the data in table 4.5, the researcher concluded that the *t-count* is higher than *t-table* ($6.60 > 2.021$) and the significance value is lower than significance level ($0.000 < 0.05$). It could be concluded that H_0 was rejected and the alternative hypothesis (H_a) was accepted. It means that there is a significant difference of students' achievement in writing descriptive text before being taught by using Inquiry learning method and after being taught by using Inquiry Learning Method. Therefore, Inquiry Learning Method was effective and it was suggested to be used to teach writing descriptive text, especially in the seventh grade of SMPN 01 Ngantru.

C. Discussion

From the data analysis, the objective of this research is to know if there is an effect applying Inquiry Learning Method in teaching writing descriptive text to the seventh grade of SMPN 01 Ngantru in academic year 2015/2016. In order to gain the research problems were stated in Chapter I, the researcher conducted an experiment in pretest and posttest design. The procedures done during teaching and learning process were divided into three steps. The first step was administering a pretest. It was conducted to know the students' basic competence and earlier knowledge before got the treatment. The next step

was applying the treatment that was using inquiry learning method in teaching writing descriptive text. The treatment was done in four meetings. The last step was giving posttest. In the posttest, the students were given a test to know their writing scores after they were treated by using inquiry learning method.

The results of the study indicated that the result of post-test seemed to be better than the pre-test ones. That is, the scores of post-test were significantly better than the scores of pretest at the end of the study. Although the result of their posttest were not perfect, it seemed better than the result of pretest. Unlike the result of pretest, the result of posttest shows that students seemed more interested to share their ideas. They used variety of vocabularies, and the content was more interesting.

After the steps were conducted, the researcher got data in pretest and posttest scores. Next, the researcher analyzed them by using *paired sample t-test* through SPSS 20. The researcher analyzed the descriptive statistics of both pretest and posttest score.

Because *t-count* was higher than *t-table*, so the alternative hypothesis was accepted and the null hypothesis was rejected. It means that there was differences writing score between before and after being taught by using Inquiry Learning Method in the seventh grade of SMPN 1 Ngantru. Based on explanation above, there was a significant effect of using Inquiry Learning Method towards students' achievement in writing descriptive text.

Regarding the result of data analysis above, it is strongly related to some advantages served by Inquiry Learning Method. Inquiry as a form of self directed learning in which students take more responsibility for determining what they need to learn, identifying resources and how best to learn from them, using resources and reporting their learning, assessing their progress in learning (McMaster University, 2007) cited by Rachel Spronken-Smith.

Inquiry basically is the complex idea that means many things to many people in many contexts. Inquiry is a good asking. The questions have to be answered, tried, observed meaningful. The knowledge and the ability gotten by students expected is not remembering result but the result of their discover. Inquiry can be applied toward all of the course (Nurhadi, 2004;43) During the research using Inquiry Learning Method in teaching writing descriptive text, the researcher found that the students were interested to share their ideas and creative in writing class and their score become well. It showed that using Inquiry Learning Method increased students' achievement to study English especially in writing.

Spronken-Smith et al. (2008) provide a review of the potential benefits for teaching staff who use an IBL approach. They cite a strengthening of teaching-research links, the rewarding aspect of seeing students being so engaged and gaining improved understanding and skills. Another benefit for teachers is the increased interaction with students and the induction into a wider community or practice of IBL practitioners (Slatta, 2004). Like

students, teachers can have difficulties adjusting to the approach and IBL can be challenging and involve emotional turmoil (Spronken-Smith et al., 2008) Teachers, too, can reap benefits from using IBL through the integration of teaching and research, increased enjoyment and interaction with students, their induction into a wider community of practice of innovative teachers and the rewards gained from improved student engagement and academic achievement (Spronken-Smith et al., 2008 : 13).

The advantages above implied that using Inquiry Learning Method gave positive effects towards students' writing achievement. It had been proven by the result of data analysis that showed there was significant difference on the students' writing achievement in descriptive text before and after being taught by using Inquiry Learning Method.

The result of this research also proved that Inquiry Learning Method was effective to increase students' achievement in descriptive text. The effect of Inquiry Learning Method was also could be seen from the quantity of the words which significantly increased in post-test. Thus, it concluded that using Inquiry Learning Method was effective towards students' writing achievement and it suggested to be used in teaching writing descriptive text, especially in the first grade of SMPN 01 Ngantru.