

CHAPTER III

RESEARCH METHOD

A. Research Design

This research consisted of two variables; they were independent variable (X) that referred to the using descriptive words strategy, and (Y) referred to the writing ability on descriptive paragraph as dependent variable. Creswell states that “In experiment, we test an idea (or practice or procedure) to determine whether it influences an outcome or dependent variable”.¹ The experimental research is identified by giving treatment to the sample as the independent variable. Dealing with this statement, Ferguson states that “an independent variable used in experiment may be either a treatment variable or a classification variable. In conducting this research, the writer used two classes. The first class was as experimental class taught by using descriptive words strategy. In this research, the writer used control – group design. This kind of this research design is popular as quasi experiment. This quasi experimental design is focused on Nonequivalent Control Group Design.

The experiment and control class were given pretest and posttest, and only the experiment class was treated by using descriptive words strategy. In this research, the writer used quasi experiment and focused on Nonequivalent Control Group.

¹John W, Creswell, 2008, *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*, New Jersey: Pearson Education International, p. 299

The model of the research design is illustrated as follows:²

Table III.1
The Research Design

Select experimental group	Pretest	Experimental treatment	Posttest
Select Control group	Pretest	No treatment	Posttest

B. Time and Location of Research

This research was conducted at SMP Negeri 2 Bangkinang, located on Jl. Letnan Boyak No. 11 Bangkinang. Maximally, this research was conducted from August, 20th to September, 14th 2013.

C. Subject and Object of the Research

The subject of this research was the first semester of the second grade students at SMP Negeri 2 Bangkinang. In academic year 2013/2014. The object of this research was the effect of using descriptive words strategy toward writing ability on descriptive paragraph.

D. Population and Sample of the Research

The location of this study was at SMP Negeri 2 Bangkinang. Population for this data was the second grade students of SMP Negeri 2 Bangkinang. It had 9 classes, consisted of VIII 1 until VIII 9.

²Ibid, p. 314

The total number of the second grade students at SMP Negeri 2 Bangkinang was 240 students. It seemed that the population above was quite large to be taken as sample in the research. The number of sample was 50 students from two classes. The writer took the sample by doing cluster random sampling. Based on the data above, the writer concluded that the experimental class was VIII. 4, and the control class was VIII. 3 because they were homogeneous and had the same characteristics both of them.

E. The Research Procedure

1. Experimental Class

There were three procedures in collecting the data in experimental class as bellow:

a. Pre-test

The pre-test was given after teaching in writing descriptive paragraph without using descriptive words. It was used to measure the students' ability in writing descriptive paragraph before they were taught by using descriptive words strategy.

b. Treatment

The treatment was conducted for experimental group taught by using descriptive words strategy. The teacher gave explanation to the students what descriptive paragraph was and taught them how to write descriptive paragraph by using descriptive words strategy. For applying descriptive words strategy,

teacher asked to write descriptive paragraph by using descriptive words strategy.

c. Post test

Posttest was given to the students after applying descriptive words strategy. The result of posttest was compared with the pretest to get the effect of this strategy and to know students' ability in writing descriptive paragraph after taught by using descriptive words strategy.

2. Control Class

There were three procedures in collecting the data in control class as bellows:

a. Pre-test

The control group was given pre-test to know students' writing descriptive paragraph. The test was the same as for experimental group.

b. Teaching by using Conventional strategy

The students were given the explanation about descriptive paragraph by the teacher and asked them to write descriptive paragraph.

c. Post-test

Posttest was given to the students after taught by using conventional strategy. It was used to know whether the students were able to write descriptive paragraph or not.

Finally, the result of the test in experimental class and control class was compared. From the result, the writer knew whether deescriptive words strategy could affect writing descriptive paragraph or not.

F. The Technique of Collecting Data

The instrument was used to acquire in this research, the writer used test. There were two tests, pretest and posttest for experimental class and control class. Pretest was done before treatment and posttest was done after treatment. The tests were given to both experimental class and control class.

The writer gave the test to the students by writing descriptive paragraph. The data of this research were the score of the students' writing ability in writing descriptive paragraph that could be measured by using writing assessment used by the English teacher of SMP Negeri 2 Bangkinang.

G. The Reliability and the Validity of the Test.

For testing the students' writing ability, the writer used test to know reliability and validity. To know the validity of the test, the writer used content validity. Content validity used by the writer in the test, which students asked to write about the topics related to the materials. Gay says that reliability is the degree which a test consistently measures whatever it is measuring.³ It is

³L.R. Gay and Peter Airasian, 2000, *Educational Research Competencies For Analysis And Application Sixth Edition*, New Jersey: Pearson Education, p. 169

supported by brown that reliability has to do with accuracy of measurement.⁴ In obtaining the reliability of test, the writer used inters rater reliability.

In this research, the writer used two raters to score the students' writing ability on descriptive paragraph. Browns says that inter rater reliability occurs when two or more scores yield inconsistent scores of the same test, possibly for lack of attention to score criteria, inexperience, inattention or even preconceived biases.⁵ Thus, reliability is expressed numerically, usually as a reliability coefficient obtained by using correlation.

Table III. 2
The Rater 1 and Rater 2 Scores of Students' Writing Ability on Descriptive Paragraph

Students	Rater 1	Rater 2
1	52	54
2	58	55
3	53	50
4	54	64
5	55	66
6	52	49
7	56	53
8	57	58
9	56	50
10	59	60
11	52	53
12	53	55
13	52	51
14	53	59

⁴H. Douglas Brown, 2003, *Language Assessment: Principles And Classroom Practices*, New York: Pearson Education Inc, p. 19-27

⁵*Ibid*, p. 21

15	54	51
16	52	48
17	58	62
18	52	50
19	56	50
20	48	48
21	54	54
22	53	52
23	47	48
24	59	55
25	53	55

The score of rater 1 can be correlated to rater 2. To know the reliability of the test, the writer used product moment formula through SPSS 16.0 Version.

Table III. 3
Correlation of Score of Rater 1 and Rater 2
Correlations

		rater1	rater2
rater1	Pearson Correlation	1	.527**
	Sig. (2-tailed)		.007
	N	25	25
rater2	Pearson Correlation	.527**	1
	Sig. (2-tailed)	.007	
	N	25	25

** . Correlation is significant at the 0.01 level (2-tailed).

From the table above, it can be seen that r calculation was 0.527, to correlate to r table. Firstly obtained the degree of freedom (df). The df was 48, because $df = 48$ was not found, so the writer took $df = 50$ to be correlated either at level 5% and 1%. At the level 5% r table 0.273 and at the level 1% r table 0.354.

r calculation (r_0)	r table (r_t)
0.527	0.273 (5%) 0.354 (1%)

From the table above, the writer concluded that (r_0) was higher than (r_t) either at 5% and 1%. Thus, there was a significant correlation between score of rater 1 and rater 2. In other words, the writing test was reliable because the reliability of writing test was moderate relationship.

H. The Technique of Analyzing Data

In analyzing the data of this research, the writer used T-test formula. Gay says that T-test is used to determine whether two means are significantly different at a select probability level.⁶ The data was analyzed by using SPSS 16.0 version.

The t-table was employed to see whether there was a significant difference between the mean score of both experiment and control group. The t-obtained value was consulted with the value of t-table at the degree of freedom ($df = (N_1 + N_2) - 2$) statistically hypothesis:

Ha : $t_0 > t\text{-table}$

Ho : $t_0 < t\text{-table}$

⁶L. R. Gay and Petter Airasian, *Loc. Cit*

H_a is accepted if $t_o > t\text{-table}$ or there is significant difference of using descriptive words strategy toward writing ability on descriptive paragraph of the second grade students at SMP Negeri 2 Bangkinang.

H_o is accepted if $t_o < t\text{-table}$ or there is no significant difference of using descriptive words strategy toward writing ability on descriptive paragraph of the second grade students at SMP Negeri 2 Bangkinang.