

CHAPTER III

RESEARCH METHODOLOGY

This chapter the writer presents the method of the study. The research methods includes the research design, hypothesis, research variables, population and sample, research instruments, research procedure, data collection technique, and data analysis technique.

A. Research Design

Research is an activity to obtain the truth of scientific knowledge through predetermined procedures, to reach the truth. According to Mardalis method is the technical way that done in the research process, while the study was interpreted as an effort in the field of science that is run to obtain the fact and principles consciously and systematically to bring of truth.³⁵ Therefore method is a technical way or done in the research process. Systematically, using the scientific method required a design or plan of study. To be able say systematically, it is necessary in ways that can be justified scientifically.

This method used quasi experimental research. Experimental research is the way to find a causal relationship (relationship clause) between the two factors that are deliberately caused by the researcher with reduce or set aside other factors that interfere. Experiments are always done with the intent to see a treatment.³⁶ In

³⁵Mardalis, *Metode Penelitian Suatu Pendekatan Proposal*, (Jakarta: Bumi Aksara, 1995), p. 24

³⁶Suharsimi Arikunto, *Prosedur Penelitian Suatu Pendekatan Praktek*, (Jakarta: Bina Aksara, 1987), p.3

quasi experimental research the subject can't be randomly assigned to either the experimental or the control group.³⁷

The researcher took two classes, the control group and the experimental group. The control group was taught by traditional technique while experimental was taught by short note technique. The research design of pretest and posttest control and experimental group can be illustrated as follows:

Table 3.1

The research design

Group	Pretest	Treatment	Posttest
A	O ₁	X	P ₁
B	O ₂	-	P ₂

Explanation:

A and B : A is experimental group

B is control group

O₁ and O₂ : O₁ is the pretest given treatment in experimental group

O₂ is the pretest given treatment in control group

X : the treatment where the technique is implemented in experimental group.

P₁ and P₂ : P₁ is the post test given treatments in experimental group

³⁷ (<http://eprints.umm.ac.id/1921/>) Access in Wednesday 13 July 2011.

Ha accepted if $t\text{-value} > t\text{-table}$

C. Research Variable

Variable is an object of study that becomes important points in research.

These researches there are 2 variables:

1. Independent Variables

Independent variable is the single variable that is not influenced by other variables.³⁸ In this study the independent variable is Technical Short Note.

2. Dependent Variables

Dependent Variables are a kind of variable that is affected by other variables.³⁹ In this study the dependent variable is the student writing skill at VIII grade SMP Negeri 1 Bangsal Mojokerto.

D. Population and Sample

1. Population

According to Arikunto population is the whole subject of the research.⁴⁰

So in this study the population were 8th grade students of SMP Negeri 1 Bangsal.

In this study there were six classes from VIII A to VIII F with 209 students as the total number of student.

³⁸ Cholid Narbuko & Abu Ahmad, *Metodologi Penelitian*, (Jakarta: Bumi Aksara 1997), p. 119

³⁹ *Ibid*, p. 119

⁴⁰ Suharsimi Arikunto, *prosedur penelitian*, p 130

2. Sample

Sample is the process of selecting a number of individuals (objects of research) for a study such the individual (the object of study) is representative of a larger group on the selected object.⁴¹

In this study the sample are VIII A and VIII F. VIII A was chosen as the experimental class and VIII F as the control class. Each class had 34 students. Both were chosen based on the teacher's recommendation. The total number of the sample was 68 students.

E. Research Instruments

Since the study was quasi experimental, pretest and post test would use as instruments to collect data. The collect data were the scores obtained from pre and posttest that were given to both control and experimental group. The score from the pre test were used to see that the initial ability of both groups was similar before conducting the treatment. On the other hand, the scores from posttest were used to measure whether the implemented method influence the experimental group or not.

⁴¹ Sumanto, *Metodologi Penelitian Sosial & Pendidikan*, (Yogyakarta: Andi Offset, 1995),p. 39

1. Validity

This study used content validity to construct the test. Content validity demands that the test should be constructed as to contain a representative of the course, the relationship between the test items and the course of objective always being apparent⁴². To fulfill the content validity, the content of the test was matched with the curriculum provided i.e. text books material that was used this school and based on the teacher. In this case, the instrument was validated by the teacher.

2. Test

Test is a method of measuring person ability, knowledge or a performance in a given domain⁴³. The test was used to determine the result of student learning in writing through Short Note technique and Traditional technique. Furthermore, the composition was analyzed in this test are content, vocabulary and grammar.

a) Pretest

In this case the researcher used two classes they were VIII-A as experimental group, VIII- F as control group and both of them would be given a pre test. The purpose of pre test was to know the students' writing ability. Then, the experimental group would be

⁴² William, *"The Research Methods Knowledge Base, 2nd Edition* (Ithaca, N.Y. : Cornell Custom Publishing, 1999),p. 67

⁴³ Louis Cohen, *" Research Method in Education"* (London and New York: Routledge, 2007),p. 414

Table 3.2

The Teaching Procedure

No	Experimental Group		Control Group	
	Date	Theme/ Material	Date	Theme/ Material
1.	7 th May 2011	Pretest	7 th May 2011	Pretest
2.	11 th May 2011	Treatment 1: Taught using Short Note technique with the theme tourism place.		Treatment 1: Taught using Traditional technique with the theme tourism place.
3.	14 th May 2011	Treatment 2: Taught using Short Note with the theme pet		Treatment 2: taught using Traditional technique with the theme pet
4.	18 th May 2011	Posttest	18 th May	Posttest

the students' writing ability before the treatment. The pretest conducted on 7th of May 2011. (Appendix)

b) Posttest

After the researcher observed the implementation of this technique than the posttest was given. Then, the result of the test was scored and calculated. It was conducted on 18th of May 2011 in both classes. (Appendix)

H. Data Analysis Technique

After collecting the data of pretest and post test from the experimental group and control group, then the researcher measured the score differences from pretest and post test of experimental group and control group by the statistical calculation. In this study, the researcher used t – test formula to find out whether the mean differenced between them were significant or not. T- Test used to measure and compared the differenced of means score between experimental group and control group.⁴⁶ The students' scores were analyzed statistically by using a procedure of t – test, with the steps below:

First, the researcher put the scores of the pre test and post test of experimental and control groups.

Second, the researcher calculated the mean from overall scores of pre test and post test of both groups. The calculation of the mean used the following formula:

⁴⁶A.E.Bartz, *Basic Statistical Concepts in Education and the Behavior Sciences* (Minneapolis: Burgess Pub.Co,1976). p.293

Where :

X = deviation of posttest and pretest score of each subject in experimental group

Y = deviation of posttest and pretest score of each subject in experimental group

After calculating all of the scores, the writer calculated the number of degree of freedom by adding the individual of each group, then subtract of two.

The formula as follows:

$$df = N1+N2-2$$

Where :

df =degree of freedom

N1 = number of subject in experimental class

N2 = number of subject in control class

Standard of significance⁴⁷ = 0,025

After doing those steps, the researchers concluded the result of the research by test the hypothesis.

⁴⁷ Op.cit, prosedur penelitian, p. 310