

CHAPTER III

RESEARCH METHOD

In this chapter, the researcher discusses and reviews research methodology that is used in this research. They include research design, subject of study, procedure of study, data and source of data, data collection technique, and data analysis technique.

A. Research Design

The method in this study use a quantitative method. According to Cresswell, quantitave method is defined as a method that focuses on investigating the use of positive statement to develop knowledge, use enquiry strategies such as experiment, survey, collect and get statiscal data on predetermined instrument.

The design of this study is Quasi-experimental design. There are two classes for this study, VIII E class as experimental group and VIII C class as an control group. In the control class will be not teach by using clustering technique, meanwhile in the experimental class will be teach by clustering technique as the treatment.

Table 3.1 : Pretest Posttest Design

Group	Class	Subject	pretest	treatment	Post test
E	Eight	32	Y ¹	X	Y ²
c	Eight	34	Y ¹	-	Y ²

Note :

E : The experimental group that is taught with clustering technique.

C : The control group that is taught without clustering technique

Y1 : The pretest before the experimental treatment

Y2 : The post test after the experimental treatment

X : Independent Variable or The treatment

The following treatments are :

1. The teacher asks students to analyse the important of idea or information from the recount text.
2. The teacher writes generic structure of recount text on the whiteboard and list the role, audience, format, and topic for their writing
3. The teacher asks students to determine the audience for this writing and to decide the format writing
4. The teacher asks students to make clustering chart.
5. The teacher asks students to make recount text based on the clustering chart that are made by self experience students
6. The teacher asks students to submit their work to the teacher

B. Subject of Study

The Subject of the study in this research are the students of VIII C and VIII E grade of MTsN 2 Blitar. The number of the student that involved in this research are 66 students.

C. Research Instrument

There are two instruments for this study, they are pre-test and post test.

1. Pre-test

In simple term, the test is number measuring a persons' ability, knowledge, or performance in a given domain Brown (2004:3). The pretest is given to the students before the teacher using her technique in teaching learning process. In the pretest of this study, the researcher asks the students to write a personal recount text about their experience in the past (without clustering technique/ treatment).

2. Post-test

Post-test is given to the students after the technique will be implement. The purpose of the post-test is to know the improvement of writing skill in the personal recount text after they got a treatment. In the post test , the researcher asks the students to write a personal recount about their experience in the past (using treatment).

D. Validity and Reability Testing

Clustering technique is used to improve students skill in recount text should have criteria of validity. The result of the validity determines the judgement whether or not the ability can indeed be measured. Validity refers to appropriateness, meaningfulness, correctness , and usefulness of the inferences that a researcher made.

The validity employed in using this technique is content validity. Content validity is determined systematically by conducting a set of operations such as defining in a precise term the specific content universe to be sampled, specifying objectives, and describing how the content universe is

sampled to develop the product, in order to judge whether or not the use of clustering technique has content validity specifications of the skill or structures that it means to cover is needed.

In order to fulfill the content validity the researcher involving a teaching expert to give judgment about the use of clustering technique. It intends to measure whether or not the use of clustering technique contain aspects needed to improving students's performance in writing of clustering technique which is considered inappropriate or ineffective.

In relation to reability, the researcher apply *Anatest* to calculate the reability of the test.

Below are the criteria of reliability test :

0.800 - 1000 = Very high

0.600 - 0.800 = High

0.400 - 0.600 = Medium

0.200 – 0.400 = Low

0.00 – 0.200 = Very low.

E. Normality and Homogenity Testing

The researcher will be use normality test to know whether the data have a normal distribution or not. When the data will be apply,the normality test is apply. In this research , the researcher use statiscal computation by using *Statistical Package for Social Science (SPSS)* for normality test.

The hypotheses for normality test are formulated below:

H_0 : the data are normally distributed

H_a : the data are not normally distributed

While the criteria acceptance or rejection of normality test are :

H_o is accepted if Sig (P value) = 0.05

H_a is accepted if Sig (P value) < 0.05

After normality testing, the researcher determined the homogeneity of the test. This test is intended to test whether the data obtained from the sample homogeneous or not. In this research, the researcher use statistical computation by using Statistical Package for Social Science (SPSS) for homogeneity of the test.

The hypotheses for the homogeneity test are formulated as follows:

H_o : The variance of the data is homogenous

H_a : The variance of the data is not homogenous

While the criteria acceptance or rejection of homogeneity test are :

H_o : is accepted if Sig (p_{value}) = 0.05

H_a is accepted is Sig (p_{value}) = <0.05

F. Data Collection Method

The researcher use quasi experimental design which has aimed to prove that the use of clustering technique could improve the teaching writing of recount text. In this research, the researcher give the pre-test before the treatment and give post test after the treatment. Test is use to gather data in order to measure students achievements in writing recount text before and after treatment. The researcher use to kinds of tests to collect data relating the students' ability in writing skill. They are pretest and post test. The test that

will be give to the students is written test. In scoring each item of writing recount text, the researcher use the scoring procedures for writing assessment as Hyland (1996) asserts.

Table 3.2: The Analytical Score Rubric of Writing Recount

No	Criteria	Rating Score			
		4	3	2	1
1	Content	Their event are clearly started, personal comments on events and easy to understand.	Their event are clearly started, some personal comments include, and quite easy to understand.	Their event are sketchy inadequate personal comments and no events and quite easy to understand.	Not recognizable event and confused, no or weak personal comment.
2	Structure	a. All necessary background provided b. Account in chronological or other order. A. Reorientation "round off sequence"	a. Fairly well-developed orientation b. Most actors and events mentioned. c. Largely chronological and coherent d. Reorientation "round off sequence"	a. Orientation gives some information b. Some necessary background omitted c. Account partly coherent d. some attempt to provide information	a. Missing or weak orientation b. No background provided c. Disorganized and incoherent d. No orientation or includes new matter
3	Mechanic	A few errors of spelling, capitalization and punctuation	Occasional errors of spelling capitalization and	Frequent errors of spelling, capitalization and punctuation	Dominated by errors of spelling, capitalization and

			punctuation		punctuation
4	Grammar	There is almost no error in the use sentence	There are a few errors in the use of sentence	There are many errors in the use of sentence	Almost all sentences contain error
5	Vocabulary	Excellent choice of vocabulary of many vocabulary variations	Adequate vocabulary choice or few vocabulary variation	Lack variety in choice of vocabulary or almost no vocabulary variation	Poor of vocabulary and lack of vocabulary variety

G. Data Analysis

After the research collects all the data, the data can be analyzed by researcher.

1. For Pre-test and Post-test

This calculation is used to compare the mean score between the experiment and control group. The formula calculation is :

- For experiment class I that symbolized by X. And for control class are variable II that symbolized by Y.
- Determining the mean of variable X (Experimental class) with formula:

$$M_x = \frac{\sum X}{N}$$

- Determining the mean of variable Y (control class) with formula :

$$M_y = \frac{\sum Y}{N_y}$$

- Determining standard of deviation of variable X with formula:

$$SD_x = \sqrt{\frac{\sum Y^2}{N_y}}$$

- Determining standard of deviation of variable Y with formula:

$$SD_y = \sqrt{\frac{\sum Y^2}{N_y}}$$

- f. Determining standard error of mean variable X with formula :

$$SE_{MX} = \frac{SD_x}{\sqrt{N-1}}$$

- g. Determining standard error of mean variable Y with formula:

$$SE_{MY} = \frac{SD_y}{\sqrt{N-1}}$$

- h. Determining standard error of different mean of variable X and mean variable Y

$$SE_{mx-my} = \sqrt{SEM_x^2 - SEM_y^2}$$

- i. Determining t_o with formula =

$$t_o = \frac{M_x - M_y}{SE_{M_x - M_y}}$$

- j. Determining t-table in significant with fomula=

$$df = N_1 + N_2 - 2$$