

CHAPTER III

RESEARCH METHOD

In this part, the study described about research methodology that used in conducting the research. Its purpose is to answer the problem of the study. This chapter consists of: Research design, population and sample, setting of the study, research instrument, time and place, data collecting procedures, and data analysis procedures.

A. Research Design

The study used Pre-Experimental design. The design of this study was experimental design because the researcher wants to measure the effect of teacher feedback technique in the teaching writing recount text.

This study used a quantitative approach. A quantitative approach is one in which the investigator primarily uses postpositive claims for developing knowledge (i.e., cause and effect thinking, reduction to specific variables and hypotheses and question, use of measurement and observation, and the test of theories) employs strategies of inquiry such as experiment and survey and collect data on predetermined instruments that yield statistics data.¹¹

According to Ary, "quantitative research is inquiry employing operational definitions to generate numeric data to answer predetermined hypotheses or

¹¹ Donald Ary, et al., *Introduction to Research in Education Third Edition*, New York : 1985, p.260

¹¹ John W. Creswell, *Research Design Qualitative, Quantitative, and Mixed Second Edition*, p.21

questions".¹² It was used quantitative approach because quantitative is the data that of all number using statistic data.

The study was the one-group pretest-posttest design usually involves three steps : (1) administering a pretest measuring the dependent variable; (2) applying the experimental treatment X to the subjects; (3) administering a posttest, again measuring the dependent variable. Differences attributed to application of the experimental treatment are then evaluated by comparing the pretest and posttest score.¹³

Table 3.1

Design of Pre-test and Post-test

Pre-test	Treatment	Post-test
Y I	X	Y 2

here :

X : Treatment

Y1 : Pre – test

Y2 : Post - test

B. Population and Sample

1. Population

A population was all the organisms that both belong to the same group or species and live in the same geographical area. In ecology the population

¹² Donald Ary, *Introduction to Research in Education Eight*, United State : Wadsworth (Engange Learning, 2010) p.648.

¹³*Ibid*, p. 303

of a certain species in a certain area was estimated used the Lincoln Index. The area that is used to define a sexual population is such that inter-breeding was possible between any pair within the area and more probable than cross-breeding with individuals from other areas. Normally breeding was substantially more common within the area than across the border.

According to Arikunto, population was the whole of research subject, if someone wants to research all of the elements in research area her study was called population research on census study.¹⁴

In this research, population was tenth-year students of SMAN 1 Katingan Tengah. The Population of the study was tenth grade students in the academic years 2016/2017 of SMAN 1 Katingan Tengah which consisted of 34 students. Since there was only one group of class of tenth grade, so obviously it was taken as the population research.

2. Sample

Sample was a part of population. According to Ary, “ Sample was a group selected from population for observation in a study.”¹⁵ For the sample, the researcher takes a class to be the sample. This study use purposive sampling for it. In this study, become sample are all the Students of tenth grade.

¹⁴ Suharsimi Arikunto, *procedure penelitian: suatu pendekatan praktek*. Jakarta: PT.Rineka Cipta, 2000, P. 108

¹⁵ Donald Ary, et al, *introduction to research in education eight*, united state : Wadsworth (engage Learning, 2010) p.649.

The study chooses this class as the object of his research because the duration of English Learning in this class is longer than others class. The study hope this research is going to be finished earlier.

C. Setting of The Study

This study was be taken from the tenth grade of the students at SMA-N 1 Katingan Tengah which is located on A.Yani street.

The study choosed this school as the object of his study for some reasons. First, this school has become a favorite school of other senior high schools in Kasongan regency. The favorite school means that the school becomes an example to be followed by other Senior High Schools at the same level in the aspects of teaching and learning process, teachers' profile, teaching facilities, school's achievements and school management and administration as well as its quality. Second, this school was located near the highway so it easy to reach. Third, considering that the English teacher of this school had implemented the group work before. So, it makes the study easy to conduct his classroom observation. Fourth, this school has many good students.

D. Research Instrument

The data needed for this study was be gathered by test

1. Test Type

Test was measurement tool that very important for education research.¹⁶ This study was used writing test about recount paragraph

¹⁶ Arief Furchan, *Pengantar Penelitian Dalam Pendidikan*, Yogyakarta: Pustaka Pelajar, 2004, p. 268.

writing with different topic. Like the table for pre-test, treatment, and post-test, they are:

Table 3.2
Table of Topics

Pre-Test	Treatment	Post-Test
Holiday	Using English Language in all English Subject	Personal Experience

The study was collected the data from pretest and posttest. From them was found the effect of the teacher feedback technique in recount text in writing. Pretest was be given in first before treatment. The last test was posttest. It aims to compare the pretest scores to the posttest scores. In the treatment the study was teach in recount paragraph with teacher feedback technique for found the effect to the student's score.

2. Documentation

Documentation was one way to support the data with directly from the place of research, activity, photos that the relevant research and data. The study in this research was collected some information data classes, the students' name list, syllabus, and score of students. All those data was collected from the documents that available at SMA-N 1 Katingan Tengah.

E. Instruments Validity

1. Content Validity

Content validity was a requirement of the test performance that being to measuring.¹⁷ The study was used recount paragraph test that was based on syllabi of the second semester. The test will be measured the students' writing ability.

Table 3.3

Significant of Content Validity

Competence Standard	Material	Type of Test	Kind of Question
The students create a recount paragraph in at least 100 words	Recount Paragraph	Performance Test	ParagraphTest

2. Face Validity

Face validity is a design to achieve the performance on the test.¹⁸ In this study, the test items would use English and suitable on the syllabus of English of the first semester at SMA-N 1 Katingan Tengah, with following:

- 1) Recount text test instruction on the test.
- 2) Scoring system for evaluation the paragraph.
- 3) Writing recount text for the kind of test.
- 4) The language of items was English.
- 5) The test was suitable on the syllabus.

¹⁷ H. Douglas Brown, *Teaching by Principles: An Interactive Approach to Language Pedagogy*, San Frasisco: Longman, 2000, p. 388.

¹⁸ *Ibid*, p. 388.

3. Construct Validity

Construct validity was the theoretical construct in the language learning and teaching which is operational the entity being received.¹⁹ In this study, the test item following the purpose of syllabus that aim at developing the students knowledge and skill in writing with various types of paragraph developments: recount text.

To measure the validity of the instrument, the study was used the formulating of product moment by Pearson as follows:²⁰

$$r_{xy} = \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{\{N\sum X^2 - (\sum X)^2\}\{N\sum Y^2 - (\sum Y)^2\}}}$$

Where:

r_{xy} : Total coefficient of correlation

$\sum X$: Total value of score X

$\sum Y$: Total value of score Y

$N\sum Y$: Multiplication result between score X and Y

N : Number of Students

To know the level of validity of instrument, the value was interpreted based on the quality of validity as follows:

t-test > t-table= Valid

t-test < t-table= Not Valid

¹⁹ *Ibid*, p. 389.

²⁰ Ridwan, *Metode dan Teknik Menyusun Thesis*, Bandung: Alfabeta, 2007, p. 110.

Table 3.4
Criteria of Validity

Validity	Interpretation
0.800-1.000	Very High Validity
0.600-0.799	High Validity
0.400-0.599	Fair Validity
0.200-0.399	Poor Validity
0.000-0.199	Very Poor Validity

F. Instruments Reliability

Reliability refers to the consistence of score.²¹ In this study, the study was employ on two raters. They are the study self and teacher of writing class.

The coefficient and interpretation of inter rater reliability according to Djiwandono as show in table 3.5:²²

Table 3.5

Inter-rater coefficients Correlation Interpretation

Correlation Coefficient	Interpretation
0.90 to 1.00 or -0.90 to -1.00	Very High or Negative Correlation
0.70 to 0.89 or -0.70 to -0.89	High Positive or Negative Correlation
0.50 to 0.69 or -0.50 to -0.69	Moderate Positive or Negative Correlation
0.30 to 0.49 or -0.30 to -0.49	Low Positive or negative correlation
0.00 to 0.29 or -0.00 to -0.29	Little if any Correlation

²¹ *Ibid*, p. 386.

²² *Ibid*, p.

G. Time and Place of The Study

The study was conducted in two months. The experiment was done to the sample in four times of meeting, first meetings for the pre-test, two meetings for the treatment and last meeting for post-test. There are four meetings for the treatment. The study taken four meetings in order to take the data briefly. In addition, the school has their own system in learning as implemented in curriculum or syllabus. The study avoids the miscommunication between researcher and school. Next, many experts recommend for treatment in experimental research at least done on four meetings.

H. Data Collection Procedures

To get the data that was needed in the study, there are few ways to do it, they are :

1. Preparation

- a) The study chooses the place of the study.
- b) The study gives information for the instance that related to show this study.
- c) The study was given the pre-test to the students.

2. Implementation

The study given the treatment by used teacher feedback strategy in teaching recount text

3. Conclusion

- a) The study given the test to the students.
- b) The study calculates the result of test.

c) The study puts the data to the table had been prepare.

I. Data Analysis Procedure

In order to analyze the data, the study was does some way procedures:

1. Collecting the score of the student work sheet result. With the table:

Code of Students	Experimental Class	
	Y	X
SUM (Σ)		

Where:

Y : Pretest

X : Posttest

2. Tabulating the data into the distribution of frequency of the score table, then found out the mean of students' score, standard deviation, and standard error of variable by used the formulas bellow:

- a. Mean

$$M = \frac{\Sigma FX}{N}$$

Where:

M = Mean

F = Frequency

Σ = The sum of

X= The scores

- b. Measuring the sum of standard deviation.

$$SD = i \sqrt{\frac{\Sigma D^2}{N} - \frac{(\Sigma D)^2}{(N)}}$$

Where:

SD = Standard deviation

$\sum D$ = The square deviation sum of experimental group

N = The total number of respondents

- c. Measuring the standard error.²³

$$SEM = \frac{SD}{\sqrt{N-1}}$$

Where:

SEM = Standard error of the mean

SD = Standard deviation

N = Number of case

1 = Bilangan konstan

3. The study used normality test. It used normality of the data found the normal distribution or not.
4. The study used homogeneity test. It used relatively to found the same variant or not.
5. Then the study applied all of them into t-test formula. That purpose to was there is effect or teacher feedback in writing or not. The formula was:²⁴
6. The last, the study was calculate degree of freedom (d.f) by used formula:

$$t_o = \frac{MD}{SE MD}$$

Where:

MD = Mean of Different

SEMD = Standard error of the mean

²³ Anas Sudijono, *Pengantar Statistik Pendidikan*, Jakarta: Rjawali Press, 2012, p.282.

²⁴ Riduawan, *Metode dan Teknik Menyusun Thesis*, Bandung: Alfabeta, 2010, p. 157.

$t_0 = T$ Test

By the criteria:

If $t_{\text{test}} \geq t_{\text{table}}$, H_a is accepted and H_0 is rejected

If $t_{\text{test}} \leq t_{\text{table}}$, H_a is rejected and H_0 is accepted

7. The last, the study calculate degree of freedom (d.f) by using formula:

$$df = N-1$$

After getting t-count, then the study compared with it to t-table of certain significant level. If the t-count is higher than t-table, it means that there is positive effect of Teacher Feedback in teaching writing. The point was writer hypothesis is accepted. In contrary, the t-count is lower than t-table, the writer is not accepted.

8. In addition, the writer used SPSS 18 program to compare the data.