

CHAPTER III

RESEARCH METHODOLOGY

This chapter presents the research method. It focuses the method used in conducting this study which covers (a) research design, (b) variable of research, (c) participants of research, (d) research instrument, (e) validity and reliability testing, (f) normality and homogeneity, (g) data collecting method, and (h) data analysis

A. Research Design

Research is careful, systematic, patient study and investigation in some field of knowledge, undertaken to discover or establish facts and principles (Fraenkel and Wallen, 1932: 7). Research design is all needed process in planning and conducting a research. There are many kinds of types of research, such as: experimental research, correlational research, casual-comparative research, survey research, etc.

In this research, the researcher used experimental design by using pre-test and post-test. The researcher chose this design because the researcher wanted to know the effectiveness of using diary practice in students' writing achievement. Quantitative approach has established widely agreed on general formulations of steps that guide researchers in their work.

According to Fraenkel and Wallen, (1932:7) Experimental design is the most conclusive of scientific method. The researcher establishes different treatment with the teacher uses in the class and then studies the effect and

result. The researcher can establish cause-and-effect relationships among variables. Experimental design is the most powerful research methodologies that researcher can use. Based on Gay, (1992:299) the steps in an experimental study is basically the same as for other types of research. An experiment typically involves two groups, an experimental group and a control group.

The process of experimental design is the students do the pre-test then treatment after that post-test, for experimental group. After students done in pre-test the students do the post-test (same time with experimental group) without treatment, for control group (Fraenkel and Wallen, 1932: 273).

The design of this research can be seen at the table below:

Table 3.1 Two Sample Pre-test-Post-test Design

Class	Pre-test	Treatment	Post-test
<i>Experimental</i>	Y_1	X	Y_2
<i>Control</i>	Y_1	–	Y_2

Y_1 : Pre-test

Y_2 : Post-test

X : Treatment

– : There is no treatment

B. Variable of Research

Fraenkel and Wallen (1932:40), states variable is the focus of a research. There are seven variable, but in this research, there are two variables. They are independent variable and dependent variable.

- a. Independent Variable is the one affecting another variable. The independent variable of this research is the use of diary writing to teach recount writing.
- b. Dependent Variable is the one affected by another variable. The dependent variable of this research is the student's achievement in writing recount text.

C. Participants of the Research

The research is population research. It means the researcher taken all of the students as the subject of the research. Gay (1992:102) states that the population is the group of interest to the researcher. The population was the first grade students of MA Terpadu Al-Anwar in academic year 2015/2016. The total population is 78 students.

According to Arikunto (2006:130), states that When the number of subjects is less than one hundred, they all should be taken as the subject of research. Based on the statement, the researcher took all of the students as the subject of research. They were divided into two classes, that was 39 students as the experimental group that were taught by using recount text and given

treatment using diary practice as their homework and 39 students as the control group that no treatment.

D. Research Instruments

In this research, the researcher used an instrument to collect the data. The researcher used test as her research instrument. The test has given to students by written text. According to Richards and Schmidt (2002:546), test is any procedure for measuring ability, knowledge, or performance. Testing provides a form of feedback, both learners and teachers.

The researcher made the test based on the School-based Curriculum of senior high school. The test was consist of theme, tense, time allotment, and some instructions. The researcher chose them because they will help students easy in writing Recount text.

The theme was different but in the same level for pre-test and post-test, because the time between pre-test and post-test only two weeks. If the theme was same, it will make students write same text. Because of students was difficult to determent the tense, the researcher gave what tense should they use on test. The researcher gave time allotment, to make students discipline and make them finished the test in the same time. To help students in writing Recount text, the researcher gave them some instructions.

The instructions consist of six instructions that were related and organized well each other. The first instruction was students should write down

student's name on the right top of the paper of answer. The second instruction was students should write Recount text paragraph based on theme. For making students did not confusing with the theme, the researcher determine same theme in each test. Next instruction was the paragraph must consist of 50-70 words. To help students in total word, the researcher determine to write the paragraph consist of 50-70 words. The consideration was in one paragraph they should have 20-25 word.

The next instruction was the paragraph is written in the past tense. Although the tense has done above, the researcher gave it again in instructions for remaining them what tense should they use. For the next instruction and the last instruction were students may open their dictionary but they should work it individually.

Before the researcher distributed the test to students, the researcher asked to a lecturer and English teacher to validation the test. After the test was valid, the researcher conducted try-out the test to second grade of MA Terpadu AL-ANWAR. After that, the researcher was counted their score with SPSS 16.0 to know the reliability of the test. After the test was valid and reliable, the researcher conducted the test as pre-test and post-test for first grade of MA Terpadu AL-ANWAR.

E. Validity And Reliability Testing

1. Validity

Heaton (1975: 159) defines the validity of a test as the extent to which it measures what it is supposed to measure and nothing else. To measure whether the test has a good validity or not, the researcher analyzed the test from content validity and face validity. These are two ways for testing the validity of test:

- a. Content validity: A test is said have content validity if its content constitutes a representative sample of language skills, structure, etc. being tasted. The test will have content validity if it includes a proper sample of the structure or content which is relevant with the purpose of test.

Table 3.2 Content Validity Checking

Basic competence	Mengungkapkan makan dan langkah-langkah retorika secara akurat, lancar dan berterima menggunakan ragam bahasa tulis dalam teks berbentuk <i>recount</i>
Indicators	Siswa dapat menyusun teks Recount Siswa dapat menulis teks berbentuk Recount teks
Material	Recount text
Question	Essay
Example	On Friday we went to the Blue Mountains. We stayed at David and Della's house. It has a big garden with lots of colorful flowers and a tennis court. On Saturday we saw the Three Sisters and went on the scenic railway. It was scary. Then, Mummy and I went shopping with Della. We went to some antique shops and I tried on some old hats. On Sunday we went on the Scenic Skyway and it rocked. We saw cockatoos having a shower. In the afternoon we went home.

- b. Face validity: In this test, there were some aspects that are considered from this test to make a good test based on the face validity. They are: The instruction must be clear for the students, so the students are able to understand what they should do in that test. Then, the students of first grade were instructed to write a recount text. Thus, the theme which gave by the writer must be suitable with their level. Last, the consideration of time allocation must be suitable so that the students are able to supposed, when they finished their task before the time was up.

Table 3.3 Face Validity Checking

Theme	: My Holiday
Tense	: Simple Past Tense
Time allotment	: 90 minutes
INSTRUCTIONS	
1. Write your name and class on the right top of the paper!	
2. Make a recount paragraph based on the theme above!	
3. The paragraph must consist of 50-70 words.	
4. The paragraph is written in the past tense.	
5. You may open your dictionary.	
6. Work individually.	
My Holiday	

2. Reliability

According to Heaton, (1989: 162) reliability is a necessary characteristic of any good test: for it to be valid at all, a test must first be reliable as a measuring instrument.

The researcher used Cronbach's Alpha to check the reliability of test. The result of reliability checking is:

Table 3.4 Reliability Checking

Case Processing Summary

	N	%
CASES Valid	10	100.0
Excluded ^a	0	.0
Total	10	100.0

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.730	.731	5

Item Statistics

	Mean	Std. Deviation	N
VAR00001	3.4000	.51640	10
VAR00002	3.4000	.51640	10
VAR00003	2.7000	.48305	10
VAR00004	2.4000	.51640	10
VAR00005	2.4000	.51640	10

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
14.3000	3.122	1.76698	5

According to Raharjo (2014) the test was reliable if:

- a. The alpha > 0.90, the reliability was perfect
- b. The alpha > 0.70 – 0.90, the reliability was high
- c. The alpha > 0.50- 0.70, the reliability was moderate
- d. The alpha > 0.50, the reliability was low.

The result of reliability test above is 0.730. So the test was reliability because the alpha >0.50. It means the test was reliable.

F. Normality and Homogeneity testing

1. Normality

The normality result of pre-test and post-test of Experimental group

One-Sample Kolmogorov-Smirnov Test

		VAR00001	VAR00002
N		39	39
Normal Parameters ^a	Mean	65.7692	73.9744
	Std. Deviation	10.29425	9.74541
Most Extreme Differences	Absolute	.174	.155
	Positive	.174	.155
	Negative	-.172	-.132
Kolmogorov-Smirnov Z		1.086	.967
Asymp. Sig. (2-tailed)		.189	.308

Test distribution is Normal.

The normality result of pre-test and post-test of Control group

One-Sample Kolmogorov-Smirnov Test

		VAR00001	VAR00002
N		39	39
Normal Parameters ^a	Mean	63.4615	61.7949
	Std. Deviation	9.11576	8.84718
Most Extreme Differences	Absolute	.174	.138
	Positive	.135	.138
	Negative	-.174	-.131
Kolmogorov-Smirnov Z		1.084	.860
Asymp. Sig. (2-tailed)		.190	.450

Test distribution is Normal.

2. Homogeneity

The result of homogeneity of pre-test and post-test of Experimental

Group was.

Test of Homogeneity of Variances

VAR00001

Levene Statistic	df1	df2	Sig.
.519	1	76	.474

ANOVA

VAR00001

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1312.821	1	1312.821	13.066	.001
Within Groups	7635.897	76	100.472		
Total	8948.718	77			

When the Levene Statistic >0.05 , the test was homogeneity. The

Levene Statistic of this test was 0.519, it means the test was homogeneity.

The result of homogeneity of pre-test and post-test of Control Group was.

Test of Homogeneity of Variances

VAR00001

Levene Statistic	df1	df2	Sig.
.181	1	76	.672

ANOVA

VAR00001

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	54.167	1	54.167	.671	.415
Within Groups	6132.051	76	80.685		
Total	6186.218	77			

When the Levene Statistic >0.05 , the test was homogeneous. The Levene Statistic of this test was 0.181, it means the test was homogeneous.

G. Data Collecting Method

In this study, the method of collecting data is administering test. The researcher will use this method is to know the score of students' writing in recount text. The researcher administers the test twice (pre-test –post-test).

1. Pre-test

Before the researcher taught recount text used new method by using diary, the researcher asked students to make a recount text with the theme My Birthday. Pre-test was given to the experimental and control classes in same way. Pre-test was conducted on Tuesday, 31th May 2016.

2. Post-test

Post-test was given to the experiment class and control class. It was given in order to know students' achievement after they were taught by using diary (experimental class) and without diary (control class). In this case, students were asked to make recount text with theme My Holiday based on the correct order of generic structure. Post-test was conducted on Tuesday, 14th June 2016.

H. Data Analysis

After all the data needed in this research have been collected in writing recount text form. The researcher analyzed whether there is a significant difference between the ability in writing recount text of first grade at MA Terpadu AL-ANWAR of those who are taught by using and without diary practice. In conducting the test, the writer gave score to the writing ability of the students. To describe the students' ability in writing recount text, the writer used calculation; they are mean and standard deviation.

After that, the researcher calculated the result of mean of both groups to know the significance different score by using Z- test, because the participants of research are all of students of first grade of MA Terpadu AL-ANWAR. It was more than 30 students (in journal of Weaver : 2011).