

CHAPTER III

RESEARCH METHODOLOGY

A. Research Design

The research design of this study is quasi experimental, because the sample is taken based on some considerations of the English teacher and the researcher whether in side conditions, ability, the scores and etc. According to Sugiyono (2013:79), the quasi experimental is the sample (the classes) whether the experiment class or control class is not chosen by using random sampling like another experiment research in generally. It can be said that the sample is chosen by using purposive sampling. Sugiyono states (2013:85), purposive sampling is a sampling technique that is used with some considerations and both of the classes has the same ability. The research about the use of freewriting technique in improving students' writing ability of Class XI at MAN 4 Banjar. An experimental study includes two classes (experimental class and control class) of the eleventh grade students' those are XI Bahasa and XI IPS 2 of MAN 4 Banjar.

The researcher applied experimental research design. The writer gave pre-test and post-test to both classes, but treatment was applied only to the experimental class. Then control class was taught by using guided material.

B. Research Setting

The data in this study was gathered from eleventh grade students of MAN 4 Banjar on street Pendidikan no 31, Banjar Regency, Martapura, South Kalimantan, Indonesia which consist of 231 students. It can be seen on the table below:

Table 3.1. Data of Students of XI Graders

Classes	Male	Female	Total
BAHASA	8	10	18
IPA 1	12	20	32
IPA 2	11	23	34
IPA 3	14	18	32
IPS 1	18	11	29
IPS 2	15	14	29
IPS 3	19	13	32
MAPK	12	13	25
Total	110	122	231

This setting and the students in Class of Bahasa were chosen because the researcher has done an observation in this school that most of the writing problems occur in Class of Bahasa. The students of Class of Bahasa still have low ability in writing. This factor facilitated the writer to get close to the students.

The research study was done for about two months, exactly in 35 days, it started on July 17th 2017 until August 21st 2017, including the observation, pre-test, treatment and post-test.

C. Subject of the Research

The subject of this research were 47 students' of eleventh graders of XI Bahasa they consist of 18 students and XI IPS 2 they consist of 29 students at MAN 4 Banjar in the academic year of 2017/2018. The reasons why both of the classes being experimental and control class because some considerations like both of classes have the same teacher, the same mean scores in writing in their earlier semester (see appendix). They consist of different department as seen in the following table:

Table 3.2. Data of Students of XI BAHASA and XI IPS 2

Classes	Male	Female	Total
BAHASA	8	10	18
IPS 2	15	14	29
Total	23	24	47

D. Object of the Research

The subject of this research is freewriting technique to improve the students writing. In this technique, an experimental class where the control class is taught by guided writing technique.

E. Research Instrument

1. Observation

The first instrument for taking the data was observation sheet which has done on July 17th 2017. This observation was used just to decide the classes that being

experiment class and control class and also to know their problems in writing. The researcher got an permission from the teacher to come to his class and the researcher observed the process of teaching English writing. For the form of the observation sheet, it can be seen on the table below:

Table 3.3. Lists of Observation Sheet

NO	Observation Item	Yes	No	Comment
A.	Pre-teaching			
	1. The teacher greets and asks the students' condition.			
	2. The students respond to the teacher's greeting and tell about their condition.			
	3. The teacher leads a prayer.			
	4. The teacher reviews the previous materials.			
	5. The teacher introduces the new topic to the students.			
	6. The teacher tells the objective of the teaching and learning process.			
B.	Whistlist-teaching			
	1. The students are ready to learn the materials.			
	2. The teacher builds the students' beckground knowledge by the question related to the topic			
	3. The teacher checks the students' understanding.			
	4. The teaching gives some examples that relate with their environment.			
	5. The teacher gives some reinforcement			
	6. The teacher gives chances to the students to ask questions.			
	7. The students deliver the questions to the teacher.			
	8. The teacher asks the students to make a sentence based on their drawing			
C.	Post Teaching			
	1. The teacher summarizes and reflects the lesson.			
	2. The teacher closes the lesson			
	3. The teacher lead the prayer			

2. Test

The second instrument was a test, it included (pre-test and post-test). It started on August 1st 2017 for the pre-test and it has done on August 21st 2017, for the

form of the test, the student just wrote about recount text and there was no limitation about how many words that they had to write.

1. Refeective Teaching

The researcher used the reflective teaching for observing, evaluating, and collecting information the process of giving treatment for experiment class and guided writing for control class. Also took some bote about the process teaching and learning writing.

F. Data Collection Techniques

The researcher did an observation to collect first data about teaching and learning English writing and also to know the students' problems in learning English writing.

The researcher also used a test to collect the data. The data will be collected from the pre-test and post-test (written test). The pre-test is administered before the treatments and post-test is administered after treatments.

After the written test had been conducted, the compositions were rated. According to Brown (2007:244). There are lists of criteria of writing, he list for scoring criteria, as follows:

Table 3.4. Scoring Rubric of Writing

No	Aspect of Scoring	Scoring			
		Very Poor (<6)	Poor (7-11)	Average (12-16)	Very Good (17-20)
1	Content (30)				
2	Grammar (25)				
3	Vocabulary (20)				
4	Organization (20)				
5	Mechanics (spelling and punctuation)(5)				
	Total				

G. Data Analysis Techniques

In analyzing the data, the writer used *Bivariate Compartmental Analysis Technique*. The technique was used to test the hypothesis whether there is a significant difference of scores between two variables (classes) which are tested. Before the researcher analyzed the data, it is necessary to calculate the data into the statistic calculation. In calculating data, the researcher used T_{test} independent sample test by using SPSS to find whether the freewriting is effective or not and used T_{test} in manual to find whether there is a significant difference between the score of the students' achievement in learning writing by using freewriting. But, before the researcher decides or calculates the T_{test} , the researcher calculated a normality test and homogeneity test by using SPSS application. The experiment class is X variable and the control class is Y variable.

According to Budi (2012:31), before getting into the T_{test} calculation, the researcher had to decide the frequency of distribution with some formula, as follows:

a. $I = \frac{R}{K}$

- b. $R = X_{\max} - X_{\min}$
- c. $K = 1 + 3.322 (\log n)$

The formula of T_{test} is expressed as follows:

$$t_o = \frac{-Mx - My}{SE_{Mx - My}}$$

Notes:

M_x = Mean of Variable X

M_y = Mean of Variable Y

SE = Standar Error

Prior the calculation of t_{test} , there are several procedures to be taken. They are as follows:

- a. Determining Mean of Variable X, with formula:

$$M_x = \frac{\sum x}{N_1}$$

- b. Determining Mean of Variable Y, with formula:

$$M_y = \frac{\sum y}{N_2}$$

- c. Determining Standard of Deviation Score of Variable X, with formula:

$$SD_x = \sqrt{\frac{\sum x^2}{N_1}}$$

- d. Determining Standard of Deviation Score of Variable Y, with formula:

$$SDy = \sqrt{\frac{\sum y^2}{N2}}$$

- e. Determining Standard error of Mean of Variable X, with formula:

$$SE_{Mx} = \frac{SDx}{\sqrt{N1-1}}$$

- f. Determining Standard error of Mean of Variable Y, with formula:

$$SE_{My} = \frac{SDy}{\sqrt{N2-1}}$$

- g. Determining Standard Error of Difference of Mean of Variable X and Variable Y, with formula:

$$SE_{Mx-My} = \sqrt{SE_{Mx}^2 + SE_{My}^2}$$

- h. Determining t_0 with formula:

$$t_0 = \frac{Mx - My}{SEMx - My}$$

- i. The Testing of Hypothesis:

H_a : There is a significant difference Mean between Variable X and Variable Y.

H_o : There is no a significant difference Mean between Variable X and Variable Y.

- j. Determining t_{table} in significant level 5% with degree of freedom(df)

$$df = (N_1 + N_2) - 2$$

H. Procedures of the Research

a. The researcher observes the location and subject in two classes (experiment class and control class). Before treating the students using freewriting in experiment class, the researcher administers the pre-test to the students in both classes with the same instruments to know their scores.

b. The treatment is only applied to the experiment class (XI Bahasa) but not in control class (XI IPS 2).

c. Post-test is administered after finishing the treatment. The researcher used the same format of test for both of classes. Even though the instrument test is the same, students do not realize that would be examined again later. Finally, the researcher made a calculation of the result from both of the test to know the significant difference of scores and then made conclusion.