### **CHAPTER III**

#### RESEARCH METHODOLOGY

# A. Research Design

Research design is all needed process in planning and conducting a research. The design of this study is conduct of experimental design. According to Ary (1985:26) "experimental research is a scientific investigation in which an investigator manipulates and controls one or more independent variables and observes the dependent variable or variables for variation concomitant to the manipulation of the independent variables". Experimental research can be done in the laboratory, in the class and in the field. In this study, the experimental research have done in the class with taking students as population.

This experimental used pre experimental with one group pre test post test design. Appliying in this design is the class which gets pre test first and than gets the treatments by applying guided writing technique and after gets treatment this class which gets post test.

The used pretest is aimed at proving whether the increase scores or achievement possibly got by the researcher. The test which is done before treatment is called pretest and after treatment is called posttest. Pre experimental research involve administaring pretest to the dependent variable, applying the experimental treatment X to the experimental class, and administaring post test.

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

**Table 3.1 One group Pretest-Posttest Design** 

Pre-test	Treatment	Post-test
Y1	X	Y2

Note:  $Y_1$  : Pretest

X : Treatment

Y<sub>2</sub> : Posttest

As the illustration above, the researcher gave a pretest (Y1) to the students. The function of pretest (Y1) was to find out the students' basic understanding on construct recount text writing. After that, the researcher gave a treatment (X) to the students in where the researcher gave Guided writing as guide to write recount text. Then, the researcher gave a posttest (Y2) to find out the result of the treatment.

# B. Population and sample

# A. Population

Population is all research subject that have particular charateristics. Gay (1987:102) states that the population is the group of interest to the researcher. McMillan (1996: 85) also claims that a "population is a group of elements or cases, whether individuals, objects or events, that conform to specific criteria and to which we intend to generalize the results of the research". The population of this research was the eighth grade of SMP BP

Haruniyah Potianak Timur that consist Which were consists of VIII A, VIII B, and VIII C.

# B. Sample

A sample is a subgroup of the target population that the researcher plans to study for generalizing about the target population (Creswell, 2008: 152). In this research, the researcher selected one class as the sample of this research. Concerning this, researcher used cluster random sampling technique. The researcher took the sample by using cluster random sampling technique because the researcher used single class as the sample. Before the researcher choose the sample, the researcher asked the teacher in the school that the students were homogeneous and based on the teacher information the students were homogeneous, it means that the students here ability. These were some procedural that the researcher made to take the sample. First the researcher named each class in piece of paper, the class were VIII A, VIII B and VIII C. Then the researcher put them grouping all of the piece together the researcher choose one class as the sample, then the class VIIIB chosen as the sample.

# C. Technique and Tools of Data Collection

# 1. Technique of Data Collection

In this research, the researcher used a measurement technique to obtain the data. It was administered twice. First, pre-test to collect the data before the treatment was given. The aim was to know the students' pre

condition before the experiment. Second, post-test to collect the data after the experimental treatment was given.

#### 2. Tool of Data Collection

The tool for collecting data in this research is writing test (recount text). This test is to measure and know the student raising in writing recount text. The writing consist of 60 words length, but before giving the test to the sample of this research, the researcher did a readability test to measure the students' ability in reading the instruction of writing test. The readability test could be defined that the instructions of the test can be understood by the students or they know what they should be during the test. Then, the researcher use scoring guide (see in APPENDIX IV). The scoring guide aims to score students' writing ability. Based on the component in scoring guide are content, organization, vocabulary, grammar, and mechanic with maximum score is 80-100 with classification (excellent).

# D. Technique of Data Analysis

The method data analysis is a technique to analyze and identify the data used to know the result. Then, the writer used a test to collect the data.

After administering the test, they were processed with the following steps:

# 1. Scoring

In this step, the writer give score to the student's writing by using scoring guide of writing. Can see in APPENDIX IV. To make easier to

interpret the score of the students, the researcher considers the interval or rating scale of student's writing:

Table 3.2 Scoring Guide criteria of writing

NO	Indicator	Assesment	Score
1.	Content	<ul> <li>Knowledgeable,</li> <li>Some knowledge of subject, adequate range, mostly relevant topic, but lack</li> </ul>	16-20 11-15
	AUA	detail.  Limited knowledge of subject, little substance, inadequate development of topic.	6-10
//	SUR	<ul> <li>Does not show knowledge of subject, non-substantive, not pertinent, or not enough to evaluate.</li> </ul>	1-5
2.		<ul> <li>Fluent expression, ideas clearly stated/supported, succinct, well-organized, logical sequencing, cohesive.</li> <li>Somewhat choppy, loosely organized but</li> </ul>	16-20 11-15
TITE	Organizatio n	main ideas stand out, limited support, logical but incomplete sequencing.  Non-fluent, ideas confused or disconnected, lack logical sequencing and development.	6-10
( )	1	Does not communicate, no organization, or not enough to evaluate.	1-5
3.	8	Sophisticated range, effective word/idiom choice and usage, word form mastery, appropriate register.	16-20
	0	Adequate range, occasional errors of word/idiom form, choice, usage but meaning not obscured.	11-15
	Vocabulary	Limited range, frequent errors of word/idiom form, choice, usage and meaning confused or obsured.	6-10
		<ul> <li>Essentially translation, little knowledge of English vocabulary, idioms, word form, or not enough to evaluate.</li> </ul>	1-5
4.		Effective compelex constuctions, few errors of greement, tense, number, word order/function, article, pronouns, prepositions.	16-20
		◆ Effective but simple constructions, minor	11-15

	0	11 1 1 1	
	Grammar	problem in complex constructions,	
		several errors of greement, tense,	
		number,word order/function, articles,	
		pronouns, prepositions but meaning	
		seldom obscured.	
		<ul> <li>Major problems in simple/complex</li> </ul>	6-10
		constructions, frequent errors of	
		negations, agreement, tense number,	
		word order/function, article, pronouns	
		prepositions and or fragments, run-ons,	
		deletions, meaning confused or obscured.	
		<ul> <li>Virtually no mastery of sentence</li> </ul>	1-5
		constructions rules, dominated by errors,	
		does not communicate, or not enough to	
	VOL.	evaluate.	
5.	11/2	<ul> <li>Demonstrates mastery of conventions,</li> </ul>	16-20
	S	few errors of spelling, punctuation,	
	9 11	capitalization, paragraphing.	
.4	, \\\	• Occasional errors of spelling,	11-15
2		punctuation, capitalization, paragraphing	11 10
		but meaning not obscured.	
	Mechanics	Frequent errors of spelling, punctuation,	6-10
	Wicenames	poor handwriting, meaning confused or	0 10
	11 11 11	obscured.	
		<ul> <li>No mastery of conventions, dominated by</li> </ul>	1-5
Lorent		errors of spelling, punctuation,	
50	1	capitalization, paragraphing, handwriting	
0,		illegible, or not enough to evaluate.	
1 97		inegione, or not chough to evaluate.	

(modified from writing assessing by Alderson. J.C. & Bachman. L.F., 2002:116)

# 2. Analyzing

In the last step, the writer used t-test to ensure the effectiveness of guided writing in the form of chain writing story in writing recount text.

We can see the formula below:

a. The students' mean score of Pre-test and Post-test.

$$M_1 = \frac{\sum X_1}{N} \qquad M_2 = \frac{\sum X_2}{N}$$

(Johnson and Christensen 2000: 369)

**Note**:  $m_1$  = the students' mean score of pre test

 $m_2$  = the students' mean score of post test

 $\sum x1$  = the sum of individual score of pre test

 $\sum x^2$  = the sum of individual score of post test

n = the total number of students

b. The analysis on the students different score of pre test and post test.

$$MD = M_2 - M_1$$

**Note**: MD = The different students' mean score of pre test and post test

 $M_2$  = The students' mean score of post test

 $M_1$  = The students' mean score of pre test

c. The test significance of the students' score

$$t = \frac{MD}{\sqrt{\frac{\sum X^2 d}{N(N-1)}}}$$

$$\sum X^2 d = \sum d^2 - \frac{(\sum d)^2}{N}$$

**Note** : t =The obtained for correlated sample

MD = The mean of difference

 $\sum d^2$  = The total sum of the squared difference scores

 $\sum d$  = The total sum students' interval score of the pre test and post test

N =The number of students

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d. The effect size analysis. Effect size is a measure of the effectiveness of

the treatment

$$Es = \sqrt[t]{\frac{1}{N}}$$

Note: Es = Effect size

t =The result of the test

N = Number of the students

#### E. **Implementation of the Research**

The researcher will take five time meetings for this research:

#### 1. Pre-test

The first implementation of this research was the researcher gave pre-test to the sample. Pre-test was given before teaching through Guided writing was held. The purpose was to obtain the data and to know the students' pre condition before the treatment was given. The pre-test was given to the class VIII B students of SMP BP Haruniyah Pontianak as the sample. The pre-test was held on January 25, 2014. There were 37 students who joined the pre-test. In the pre-test, students were asked to write a recount text by the topic my holiday. The students were given 30 minutes to do the test and then the result of pre-test was analyzed.

### 2. Treatment

The second implementation of this research was the researcher gave treatments to the students. The treatments were held two times, those

are on January 26 and January 27 2016. The treatments were the teaching recount text writing through guide writing technique. The procedures of the teaching were as follow:

# a. The first meeting of the treatment (January 26, 2016)

- The researcher gave instruction to the students make a group into five or six group, that one group consist five or four students.
- 2) The researcher explained about recount text and about the technique that would be used. It was guided writing technique. The researcher gave the example of recount text.
- 3) The researcher explained to the students about the aspect of writing recount text, the content, organization, vocabulary grammar and mechanics.
- 4) From the example of recount text that was given, the researcher asked the students to devide the organizations of descriptive text, they were orientation, event and reorientation.
- 5) At last, the students made their recount text by group, It was to know the students' understanding about recount text.

# b. The second meeting of the treatment (January 27, 2016)

- The researcher gave instruction to the students make a group into five or six group, that one group consist five or four students.
- 2) The researcher told the students that they were going to write about narative text. The topic was about their experience.

- 3) The researcher gave instruction to make one student one sentence to make students easier in writing recount text.
- 4) The researcher did not forget to remind the students to pay attention to the aspect in writing recount text that is content, organization, vocabulary grammar and mechanics. The students had to make their own writing recount text in a good grammar.

### 3. Post-test

After teaching the students with the treatment, the researcher finally held post-test as the third implementation of this research. It was to obtain the data after the treatments were given. The post-test was held on January 28, 2016. Post-test was also joined by 37 students. Here, the students were asked a recount text by the topics *my sad experience*. The time provided for students to do this test was 30 minutes.