

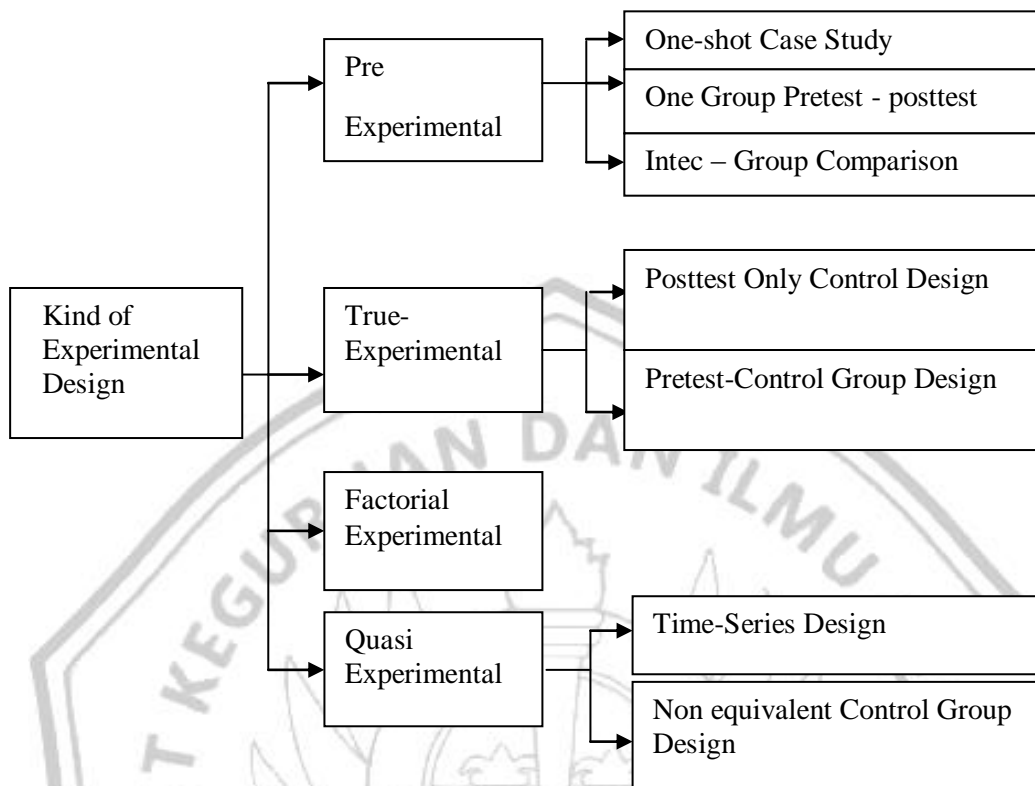
## **CHAPTER III**

### **RESEARCH METHODOLOGY**

#### **A. Form of The Research**

This study can be categorized as an experimental research. According to Cohen, Manion and Morrison ( 2007 : 211 ), “Experimental research is that investigators deliberately control and manipulate the conditions which determine the events in which they are interested. At its simplest, an experiment involves making a change in the value of one variable called the independent variable and observing the effect of that change on another variable called the dependent variable.”

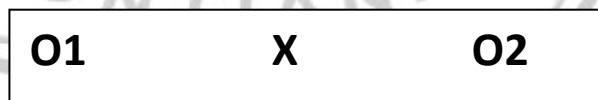
The research design used in this research is pre experimental, the research is intended to know whether effective or not the use of Running Dictation in teaching descriptive text writing to the seventh grade students of SMPN 16 Pontianak. This research is a research that has no control group. There are some kinds of experimental designs, Sugiyono ( 2011: 73 ) states “Experimental design consist of Pre-Experimental Design, True Experimental Design, Factorial Design, and Quasi Experimental.” In this research the researcher will use pre-experimental research. As Tuckman (1978: 128) states “Pre experimental design is the component pieces or element of experimental design.” Kinds of Experimental study is clearly described below:



Sugiyono ( 2011: 73 )

In this research, the researcher used one group pre-test post-test design. Pre-test would be given before the treatments which aimed to know the pre-condition of the students on writing skill, and post-test would be given after the treatments to know the result.

**Sequence of One group pre-test and post-test design:**



Where:

O1 = Pre-test

O2 = Post-test

X = Treatment

(Cohen et al, 2000: 217)

## B. Population and Sample of Research

### 1. Population

Population is the elements, individuals, or units that meet the selection criteria for a group to be studied, and from which a representative sample is taken. According to Yount (2006 : 1) “a population consists of all the subjects you want to study.” The population of this research is seventh grade students of SMPN 16 Pontianak. There are eight classes of the seventh grade students.

TABLE 1.1

The Distribution of Research Population

Class	Number of Students
VII A	35
VII B	34
VII C	33
VII D	30
VII E	32
VII F	32
VII G	30
VII H	35

(Source: school office of SMP Negeri 16 Pontianak)

## 2. Sample

Sample is small proportion of a population of a selected for analysis. According Yount (2006 : 1), sample is “the representative portion of a population.” The researcher decided to select one class randomly as the sample of this study. The sample of this research is class VIIC. There are 33 students in that class.

## 3. Sampling

In this research, the researcher decided to select one class randomly to fulfill the sample of this study. The technique of sampling that used by researcher was Cluster Random Sampling. Cluster random sampling is a process in which random samples of successive clusters of subjects until small groups are chosen as units. According to Ary *et al.* (2000:154), Cluster random sampling is a way of choosing sample randomly as a group of individual not as an individual in order to be convenient to study.

These were some procedural that researcher made to take the sample. First, the researcher named each class in a piece of paper. The classes were VIIA, VIIB, VIIC, VIID, VIIE, VIIF, VIIG, VIIH. Then, the researcher put them grouping all of the pieces together. The researcher chooses one class as the samples. Then, the class VIIC chosen as experimental group.

## **C. Technique and Tool of Data Collecting**

### **1. Technique of Data Collecting**

In order to conduct this research, the researcher would be using measurement technique to measure the student's knowledge after and before treatment. Ross ( 2005 : 33 ), Measurement is a process that assigns a numerical description to some attribute of an object, person, or event". The measurement would be applied two times. Pre-test would be given before the treatment and post-test would be given after the treatment.

### **2. Tool of Data Collecting**

The tool uses for collecting data in this research was writing test. Writing test is achievement test design to measure students' writing proficiency. The samples of this research are asked to write a descriptive text in essay. The test would be used to measure the students' writing skill. The procedure to make test are :

#### **a. Validity**

Validity is the most important idea to consider when preparing of selecting an instrument for use. Validity information indicated the degree to which the test was capable of achieving certain aims, stated by Cohen ( 2000: 105 ) "validity is an important key to effective research. If a piece research is invalid then it is worthless." And also Kothari ( 2004: 73 ) stated that, "validity is the extent to which

differences found with a measuring instrument reflect true differences among those being used”. The aim of validity in this research was measure the knowledge and ability. Validity that used in this research was content validity.

Fraenkel & Wallen (2009: 150) assumed “Most instruments (and especially achievement tests) provide only a sample of the kinds of problems that might be solved or questions that might be asked. Content validation, therefore, is partly a matter of determining if the content that the instrument contains is an adequate sample of the domain of content it is supposed to represent.” To ensure the relevant content of the items by researcher, it is suggested to use experts judgment in order to valuate the contents of the test items that will be used by researcher to measure students’ ability. In this context, the researcher will discuss the problem with the expert that master in teaching english and then the researcher distributes the test to the expert. And then, the expert will tell the appropriate test that will be purposed of the study.

The consideration for the validity of items can be a suggestion, evaluation, and also modification to re-make the instrument. The researcher asked for a lecture to be expert to check the instrument (writing test with scoring rubric). The

main expert for check the validity of the instrument, there was Yulia Ramadhiyanti, M.Pd.

b. Inter Rater Technique

Brown ( 2003 :240 ) stated that “each essay is scored by two trained readers working independently. The final score assigned is the mean of the two independent ratings.” The result score is called inter-rater technique. This technique will be used because for human error and subjectivity.

And also, inter-rater is useful because human observers will not necessarily interpret answers the same way; raters may disagree as to how well certain responses or material demonstrate knowledge of the construct or skill being assessed.

**D. Data Analysis**

1. Writing Test

The researcher analyzed the students’ writing in descriptive text by using the result of pre test in writing test. The data of students descriptive text writing was analyze from the result of the students’ score in the text had been given as follows:

a. Individual Score of Pre Test

The researcher made the measurement based on the scoring rubric of writing in appendix 7.

## b. Mean Score of The Students

The mean score is the sum of the individual score divided by total number of individual. The mean score also called by the average score that could be formulated as follows:

$$\bar{X} = \frac{\sum X}{n}$$

Taken from Fraenkel & Wallen (2009: 192)

Where :

$\bar{X}$  = The mean score

$\sum X$  = The sum individual scores

$n$  = The total number of individual

## 2. Normality Distribution Test

Normality test can be use to measure the data is normal distributed or not. Normality data distributed was one of criteria for using parametric test. The normality of data use to make the consideration wheather the researcher may carry out t-test or use another test for next step for analyze the data. Fraenkel & Wallen (2009: 192) have claimed “many distributions of data tend to follow a certain specific shape of distribution curve called a normal distribution”. The statistical calculation of normality test was used Shapiro-Wilk. If the data was non-normal distibution, the



researcher would be using Wilcoxon signed-rank test for the next step. In the other hand, if the data was normal, the researcher would be using T Paired Sample Test.

The researcher determined to operate SPSS 20. The researcher opened the *Variable View*. There is the box of *Name*. Write Pre Test in number 1 and Post Test in number 2. Then, back to *Data View* and input the total data of Pre Test and Post Test in each table. Then the researcher clicked on *Analyze* on the menu bar, and then selected *Descriptive statistics*. When the pull-down, menu appears, researcher selected *Explore*. Choose *Both* and through actived *Normality plots with test* (Appendix 11). The output criteria of the test of normality as follows:

- a. The distribution is not normal if Sig. value or Significance or probability score  $< 0,05$ .
- b. The distribution is normal if Sig. value or Significance or probability score  $> 0,05$ .

### 3. T-test Paired Sample

T-test Paired Sample would be used to figure out the significant difference students' mean score of pre-test and post-test. To measure T-test paired sample, the researcher would be using SPSS20.