CHAPTER III
METHODOLOGY OF THE RESEARCH

A. Research Design

in this research the writer will use is a Quasi Experiment. Ruseffendi say that Quasi-Experimentation is research which the subject of research studies are not grouped randomly but researchers receive state subject to a potluck.[1] this research is conducted to determine the student's ability to write text procedure through image sequence method at the eight grade students of SMPN 21 Kota Serang.

The study design will be used is a non-equivalent control group design. In the design of this study, the research subjects or not the study participants were randomly selected to participate. researchers used two classes in this study, where one class for class control and the other class for the experimental class. This research scheme will be described as follows:

O_1 X O_2 (Experiment)

……..

O_1 O_2 (Control)

(Ruseffendi, 2010:53)

[1] E.T.Ruseffendi. Dasar-Dasar Penelitian Pendidikan & Bidang Non-Eksakta Lainnya. (Bandung: Tarsito. 2010),p.52.

Information:

O_1 : pre-test

O_1 : post-test

X : Class that get treatment method a sequence pictures

…… : Subject is not grouped randomly

B. Subject Of The Research

1. Population

Population is a generalization region consisting of the object or subject and has certain qualities and characteristics defined by the researchers to learn and then drawn conclusions.[2] The population in this research is students of class VIII at SMPN 21 Kota Serang in the academic year 2016/2017.

2. Sample

The sample is part of the total and characteristics possessed by the population.[3] The sample in this research are taken with cluster random sampling of some of the existing classes taken at random two classes. The first class is experimental class and the second class is the control class. Experimental class is a class that is get treatment with the method of sequence pictures, while the control class is class that uses the expository.

[2] Sugiyono, Statistika untuk Penelitian, (Alfabeta: Bandung, 2014), p.61.
[3] Sugiyono, Statistika untuk Penelitian, (Alfabeta: Bandung, 2014), p.62.

C. Technique of Data Collection

In this research, the writer analyze the students ability in writing procedure text using sequence pictures. The researcher must use instrument in order to get the better data. The instrument of the research is a tool or facility that is used by researcher for collecting the data in order to get better result, it can be occurred complete and systematic. To make this research successful, the researcher used some instruments to collect the data, they are as follows:

1. Observation

   The first way technique of data collection is observation. Observation is very effective way of finding out what people do in particular contents, the routines and interactional patterns of their everyday lives.

2. Documentation

   Document is a piece of written or printed material that provides a record of evidence or event an agreement, ownership, identification etc.[4] It refers to the archival data that help the researcher to collect the needed data. The researcher function the document related to the object research such as students name list and the English subject schedule. In this case, the data was gained by the help of the English teacher.

[4] Eastwood, John, Concise Oxford Dictionary, 8th Ed. (London: Oxford University Press, 2004), p. 256

3. Test

Indrakusumah stated that test is a tool or a systematic and objective procedures for obtain data or information about a person in a way that may be said to accurately and quickly.[5] Brown states that a test is a method of measuring a person's ability, knowledge, or performance in a given domain.[6] Test is used to collect initial data and the final data about the student's writing ability in procedure text. Here the researcher gave written text for control and experimental classes. In this research, the researcher used pre-test and post-test.

a) Pre-test

Before the teacher taught new material by using sequence pictures, the teacher give the test to the students. Pre-test is given to the experimental and control class in the same way. The test was given in both of classes was written test.

b) Post-test

Post-test is given to the experimental class and control class. It is given in order to know the score of students' achievement after they are taught using sequence pictures (experimental class) and without using sequence pictures (control

[5] Erman Suherman & Yaya Sukjaya, Petunjuk Praktis Untuk Melaksanakan Evaluasi Pendidikan Matematika, (Wijayakusumah: Bandung, 1990), p.80.

[6] H.Douglas Brown,Language assessment Principles and Classroom Practices, (San Francisco: Longman, 2004), p.3.

class). The test was given in both of classes was written test.

D. Technique Of Data Analyzing

After all of data collected, the writer got got two data. The first is the result of pre-test and the second is the result of post-test. The writer analyzes it by using statistic calculation of t-test formula with the degree of significant 5%, the writer used step as follows:

1. Determine mean of variable X_1 :

$$M_1 = \frac{\sum X_1}{N_1}$$

2. Determine mean of variable X_2 :

$$M_2 = \frac{\sum X_2}{N_2}$$

3. Determine standard deviation variable X_1:

$$SD_1 = \sqrt{\frac{\sum {X_1}^2}{N_1}}$$

4. Determine standard deviation variable X_2:

$$SD_2 = \sqrt{\frac{\sum {X_2}^2}{N_1}}$$

5. Determine t-test:

$$t_0 = \frac{M_1 - M_2}{\sqrt{\frac{(\sum {x_1}^2 + \sum {x_2}^2)(N_1 + N_2)}{(N_1 + N_2 - 2)(N_1 \times N_2)}}}$$

6. Determine table with significant 5% :

$$df = N_1 + N_2 - 2$$

M_1 = The average score of Experimental class

M_2 = The average score of Control class

$\sum {X_1}^2$ = Sum of square deviation of Experimental class

$\sum {X_2}^2$ = Sum of square deviation of Control class

N_1 = Number of Students of Experimental class

N_2 = Number of Students of Control class

2 = constant number

df = degree of freedom

df = $N_1 + N_2 - 2$

E. Hypothesis

Hypothesis is a tentative explanation or answer to (temporarily) on behavior, phenomena (symptoms) or events that will happen.[7] The hypothesis formulated in this study are: Based on the statement of the problem above, the hypothesis of the study is Sequenced Pictures has significant degree of effectiveness to teach writing procedure text at the eight grade of SMPN 21 Kota Serang in the academic year of 2016/2017.

[7] E.T. Ruseffendi, Dasar-Dasar Penelitian Pendidikan dan Bidang Non-Eksakta Lainnya, (Bandung: Tarsito, 2010), p.23.