CHAPTER III

METHODOLOGY OF THE RESEARCH

A. The Method of Study

In this study the authors use experimental research approach, to obtain data from respondents. According to Brown, experimental research should exhibit several key characteristics. It should be systematic, logical, tangik, replicable, and reductive, and one should be cautious of any study not exhibiting these characteristic [1].

The main experimental methods are as follows: Initially we collected associations from a large number of normal people, with the intention, first, of examining the reactions to see whether they are at all subject to any law; and, next, of discovering whether individual patterns occur, i.e., whether any definite reaction-types are to be found. We combined with this a second experiment of a general psychological nature.[2]

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[1]David nunan, *Research Methods in Language Learning* (New York: Cambridge University press, 1992), p. 9

[2]C.G. Jung, *Experimental Researches Volume Two* (London: Prinveton University Press,1973), p. 3

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In conducting this research, the writer took two classes; one class was as an experimental class taught by using Paired Reading method and the other was as a control class taught by using three phase technique. In the experimental class, the students were administered by a pre-test at the beginning of the teaching learning process in order to know the students' reading comprehension. Then, a treatment was given to this experimental class that was Paired Reading Method. During the treatment, the writer was corporated by the observer. At the end of the teaching learning process, there was a post test in order to know the effect of using Paired Reading Method towards students' reading comprehension.

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[3]C.G. Jung, *Experimental Researches Volume Two* (Prinveton University Pers:London 1973), p. 3

B. **Place and Time of The Research**

1. Place

    To collect the data, the writer conducted a research at Senior High School at SMK 19 Maret Kampung Salam. The writer has done the research on

2. Time

    The writter conducted this study on April 30th until Mei 14th 2018

C. **Population and Sample**

1. Population

    According to Nunan population is all cases situations, or individuals who share one or more characteristics.[4]The population of this study are the whole students in X grade of SMK 19 Maret Kampung Salam. It consists of two classes of Social Study Program. The total number of population is 50 students

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[4] David Nunan, *Research Method in Language*, (New York: Cambridge University Press, 1992), p. 231

2. Sample

    Nunan says that, a sample is subset individuals or cases from within population[5]. The research took class XA as a the control class and X B as the experimental class as sample and both them consist of 50 students.

D. Instrumen of the Research

    To obtain the necessary data, the instruments used in this research are:

Test

    Test can provide a wealth of information about the general ability of the students. Test used to know students competence before and after the experiment run. There are two kinds of test. They are pre-test and post-test.

    a) Pre-test used to know students capability about writing before the treatment.

    b) Post-test is used to know students achievements in learning writing after treatment.

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[5] David Nunan, *Research Method in Language,...,p.111*

E. Technique of Data Collecting

Then, to complete this data the writter will use some techniques to get authentic data including:

Test

a. Test

Test is a set of stimuli presented to individual in order to elicit responses on the basis of which a numerical score can be assigned.[6] The writer takes the objective test as one of the instrument used. It was the question that is used to measure the student achievement before and after they study. To know more the details of the test accomplished, the researcher put in plain words below:

1). Pre-Test

This research can be called pre test, which is done before research treatment. The goal is to determine the extent to which the students understanding in reading the text before the treatment. In this test process, students fill out a problem that has been provided by researchers about the text of the story.

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[6] Sukardi, *Metodolog Penelitian Pendidikan*, (Yogyakarta: Bumi Aksara, 2011), 138.

Because the text used by researchers is about narrative text. to be able to fill in the question, students read the text first so they understand the contents of the text. they read as usual.

2). Post Test

Post-test is done after the students get different treatments (X- B class is taught by using paired reading method and X-A is taught without using paired reading method). From the score of this test, the researcher is intended to find out the effectiveness of using paired reading method in teaching reading comprehension. The result of the scoring then is compared with pre-test. In this case, the researcher knows how far is the effectiveness of using paired reading method in teaching reading comprehension.

3. Documentation

In carrying out the method of documentation, researchers investigate written objects such as magazine books, documents, regulations, minutes, diaries, and so on.[7]

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[8] Anas Sudjiono, *Pengantar Statistic Pendidikan*, (Jakarta: PT Raja Grafindo Persada, 2003), 318

F. Technique of Data Analyzing

Because the writer wanted to compare result of the research between experiment class and control class student, he took step as follow:

1. Quantification of the data

The data from result of the test is qualified:

   a. For pre-test, the correct answer is given score 5 and the incorrect answer is 0 (zero) in multiple choice

   b. For post-test, the correct answer is given score 5 and the incorrect answer is 0 (zero) in multiple choice

      Multiple Choice : 20 Question, score $100 = 5 \times 20 = 100$

      Maximum Score $= 100$

      For scoring the test the writer will use standard of absolute:

$$\text{Standard score} = \frac{\text{Raw Score}}{\text{Ideal score Maximum}} \times 100$$

And than the steps for statistic analyze are:

1. Determining mean of variable X_1 with formula:

$$M_1 = \frac{\Sigma N_1}{項_1}$$

2. Determining mean of variable X_1, with formula:

$$M_2 = \frac{\Sigma N_2}{N_2}$$

3. Determining deviation score variable X_1, with formula:

$$x_1 = X_1 - M_1$$

4. Determining deviation score variable X_2, with formula:

$$X_2 = X_2 - M_2$$

5. To quadrate x_1, than summed; obtained $\sum x_1^2$

6. To quadrate x_2, than summed; obtained $\sum x_2^2$

7. To calculate t_o with formula;

$$t_o = \frac{M_1 - M_2}{\sqrt{\left(\frac{\sum x_1^2 + \sum x_2^2}{N_1 + N_2 - 2}\right)\left(\frac{N_1 + N_2}{N_1 . N_2}\right)}}$$

Notes:

t_o = The value t observation

M_1 = The average score of expereimental class (Mean X_1)

M_2 = The average score of control class (Mean X_2)

$\sum x_1^2$ = Sum of the squared deviation score of experimental class

$\sum x_2^2$ = Sum of the squared deviation of control class

N_1 = The number of student of experimental class

N_2 = The number of student of control class

c. = Constant number