

CHAPTER III

METHODOLOGY OF RESEARCH

A. Research Method

This research attempted to find out the effectiveness of implementing a wordless picture book on the students' narrative writing achievement. Thereby, to achieve the precise measurement of the effectiveness of a wordless picture book media on students' narrative writing achievement, it is necessary to choose an appropriate research design. Thus, this study would be best conduct in an experimental design. There are two variables employed in this study: independent and dependent variables. The independent variable in this study is the wordless picture book media. The dependent variable is the students' narrative writing scores.

According Thyer, experimental method has contributed in large measure to the striking achievements of modern science. This method allows us to analyze our relations of cause and effect

more rapidly and clearly than by any other method.¹ Thereby, the experimental method is the research to know the influence or effect of variable that use. In the experimental method consist some variety, namely pre-experiment design, true experiment design, and quasi experiment. Then, this research use quasi experiment design.

There are, in fact, several quasi-experimental designs applicable to single groups which might be used to advantage, with an experimental logic and interpretation, in many situation in which a control group design is impossible. Cooperation and experimental access often come in natural administrative units: a teacher has her own classroom available able; a high school principal may be willing to introduce periodic morale surveys, etc. in such situations the differential treatment of segments within the administrative unit (required for the control group experiment) may be administratively impossible or, even if possible, experimentally undesirable owing to the reactive effects

¹ Bruce A. Thyer, *Quasi-Experimental Research Design*, (New York: Oxford University Press, 2012), 6.

of arrangements. For these settings, single-group experiments might well be considered.²

B. Place and Time of Research

The writer will conduct this research at SMP Negeri 3 Gunungsari. Thereby, the author will conduct the research at SMP Negeri 3 Gunungsari with use Wordless Picture Book Media to improve students writing in Narrative text and making student interest more. This research will conduct on November.

C. Population and Sample of Research

1. Population

According to Perry, “Population are all the members of the group of participants/objects to which researchers want to generalize their research findings, and criterion for defining a target population is determined by the group of people to which researchers would like to generalize the interpretations of the study”.³

² Donal T. Campbell and Julian C. Stanley, *Experimental and Quasi-Experiment Al Designs for Research* (London: Houghton Mifflin Company, 1963), 37.

³ Fred L. Perry, *Research In Applied Linguistics*, (Mahwah: Lawrence Erlbaum Associates, 2005), 59.

The writer takes population in the second grade students of SMP Negeri 3 Gunungsari, that consist 128 students divided into four classes, they are class VIII A, B, C, and D. Each class consists of 31, 33, 32 and 32 students.

2. Sample

According to Fraenkel and Wallen that “a sample is any part of a population of individuals on whom information is obtained”.⁴ In this research, this writer uses non probability sampling where to get the data using saturated sampling or known with census sampling saturated sampling is part of non probability sampling where all members of population are sample. The writers chooses two classes as sample research from the second grade students at SMP Negeri 3 Gunungsari. The writer will take class VIII A as Experimental Class with 31 students and VIII C as Control Class with 32 students.

⁴ Jack R. Fraenkel and Norman E Wallen, *How to Design and Evaluate Research in Education*, (New York: McGraw Hill, 2009), 105.

Table
Population of the research

Class	Total
X A	31 Students
X C	32 Students
Total of sample	63 Students

D. Research Instrument

The instrument for treatment in this research is written questions that the researcher will give to the students as the exercise during teaching learning process whether in experiment class or control class. For the experiment class the students will give wordless picture book, then they have to write the narrate base on the picture on book. For control class the students same as experimental class but not using wordless picture book.

The writer uses test to collect data related to the problems of research. Test is a set of stimuli presented to an individual in order to elicit responses on the basis of which a numerical score can be assigned. This score, base on representative sample of the

individual's behavior, is an indicator of the extent to which the subject has the characteristics being measured.⁵ In this research the writer used writing test to know the effect of wordless picture books media. The test divided into two parts; pre test and post test.

a. Pre-test

Before applying Wordless Picture Books in experimental class, the researcher gives the pre-test to experiment and control class in the first meeting to know the initial students' writing skill.

b. Post-test

Both experiment and control class will face the post-test after giving the treatment for experimental class. It will be used to measure the effect of Wordless Picture Books toward students' writing ability.

E. Technique of Data Analysis

The technique of analysis data in this research uses Test-t.

According to Anis Sudijono Test-t is used for testing the null

⁵ Donald Ary, et.al., *Introduction to Research in Education* (Belmount: Hracout Braca Publisher, 2010)

hypothesis of the mean differences of two samples.⁶ Because the quasi experiment use pre-test and post-test then the writer uses this test to measure the final test between experiment class and control class.

The steps for statistic analyze that are⁷ :

- a. Determining mean of variable X with formula :

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

- b. Determining mean of variable Y with formula :

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

- c. Determining derivation score variable X_2 with formula :

$$x_2 = x - M_x$$

- d. Determining derivation score variable Y_2 with formula :

$$y_2 = y - M_y$$

After collecting the data from pre-test and post-test, the researcher analyze it by using statistic calculation of t-test by

⁶ Anas Sudijono, *Pengantar Statistik Pendidikan*. (Jakarta: PT Raja Grafindo, 2014), 307.

⁷ Anas Sudijono, *Pengantar Statistik Pendidikan*, 317.

using fisher formula with significance degree 5% and 1%. The formula is as follow :

$$t = \frac{M_x - M_y}{\sqrt{\left(\frac{\sum x_1^2 + \sum y_2^2}{N_x + N_y - 2}\right) \left(\frac{N_x + N_y}{N_x \cdot N_y}\right)}}$$

Notes :

M_x = Mean score of the experiment class

M_y = Mean score of the control class

$\sum x_1^2$ = Sum of square deviation score in experiment

class

$\sum y_2^2$ = Sum of square deviation score in control class

N_x = Number of students of experiment class

N_y = Number of students of control class

2 = Constant number

df = Degree of Freedom (df = $N_1 + N_2 - 2$)

F. Research Procedure

1. Preparation

As preparation, the researcher does some procedures, such as preparing a research proposal until the proposal is

accepted, then preparing the needed permission for conducting the research, doing the observation in the research field and organizing the research instrument.

2. Research Implementation

After some preparations, the researcher begins to conduct the research. It is started by conducting the pre-test, then the researcher conduct the teaching and learning process with the narrative writing by using wordless picture book for experimental class and control class without using it, and the researcher conduct the post-test after the treatments have been given. The next step is analyzing and interpreting the data collected from pre-test, then draw the interpretation based on the result of the data collected analysis and reporting the conclusion of the result and propose some suggestion that will contribute for the further study, the last is writing down into a paper as a research report.