

CHAPTER III

RESEARCH METHODOLOGY

A. Research Design

This research design is experiment research because in this research aims to reveal the effect of watching an animated film on students writing ability. The research method used in this research is the quantitative method. According to Creswell the aims of quantitative method is to test objective theories by examining the effect of one variable to another variable.³¹ The type of this research is quasi-experiment research, this study involved two groups, namely the control group and the experiment group. The control group is the group that is not given treatment while the experiment group is the group that is given treatment.

Experiment group and control group have been determined by the researcher. In this design both the experiment group and the control group given a pretest and then searched for the results. After that, the group the experiment group received treatment while the control group received no treatment. Then both of them get a post-test For now the results of the treatment that has been done.

Table 3. 1 Quasi Experiment Design: Post-test and Pre-test

Group	Pre-test	Treatment	Post-test
Control	✓	Applying books as media in teaching writing	✓
Experiment	✓	Applying film as media in teaching writing	✓

³¹ John W. Creswell, *Research Design Qualitative, Quantitative and Mixed Methods Approaches*. (California Sage,2009), p.4.

The following are the steps involved in this research:

1. Pre-experiment stage, before doing treatment (experiment), both classes (experiment group and control group) were given a pretest, with the intention of knowing the second state class before being given treatment. If after conducted a preliminary test, the difference, it will proceed to the next stage, namely giving treatment (experiment).
2. Treatment stage (experiment). At this stage, giving treatment to the class experiment that has been planned previously, while the control class has not given treatment.
3. Post experiment stage. In this stage, the writer held another test, namely the final test. This final test is done to find out how big the effect of treatment is in the class experiment. The final test was given to the experiment class and control class. The final test results will be compared with the corresponding results obtained at the initial time (pretest).

B. Place and Time of the Research

This research will be conducted in SMAN 1 Panai Hulu, Labuhanbatu, North Sumatera. The researcher chose this school because the teachers still implement books as media in teaching writing that does not generate an effective results which brings the researcher to conduct this research.

C. Population and Sample

1. Population

The population in this research includes second grade students of SMAN 1 Panai Hulu in first semester consist two classes. So, total of students is 40 students. The population can be seen in the table 3.2

Table 3. 2 The population of research

No	Class	Population
1.	X-a	20
2.	X-b	20
Total		40

2. Sample

This research uses a total sampling technique that is all members of the population are used as a sample. The sample in this study is X-a and X-b which consist 20 of X-a class and 20 of X-b class. The two classes will be qualified as the experimental class and the control class. The sample of this research will be divided into two groups, namely:

- a. Experimental class; b group of students who will be taught with implementing technique
- b. Control class; a group of students who will be taught writing without implementing shadowing technique.

The sample can be seen in the table 3.3

Table 3. 3 The population of research

No	Class	Population
1.	X-a	20
2.	X-b	20
Total		40

D. Research Variable

Research variable is object of research that has some kind of cause and effect relationship.³² In this research, there are two kinds of variable namely independent variable and dependent variable.

- a. Independent variables, independent variable is variables that have an influence on changes that occurs other variables. In this research, watching film as media is independent variable because watching film are considered to affect changes that occur in other variables, namely writing ability.
- b. Dependent variables, dependent variable is variables that influenced by other variables. In this research, writing ability is dependent variable because writing ability is considered to be influenced by changes that occur in other variables, that is watching film.

E. Instrument of The Research

For collecting the data, a writing test was given to the students. The tests was administered to the students in both experimental and control group. They are pre-test and post-test. The pre-test is given to asses and to examine the students' writing ability without using animation film in the previous treatment while post-test is given after treatment of applying animation film as media to asses and examine the students' writing ability. The design of the test is in essay form. The students was instructed to write a narrative paragraph based on the topic given by the researcher. The tests was given to both groups: experimental and control group. The student's ability in learning narrative paragraph was analyzed by the collecting data in the tests.

F. Technique of Data Collection

Technique of collecting data is the technique or methods that can be used by researcher for collecting the data. Data collection can be interpreted as research

³² Sugiyono, *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R &D* (Bandung,2014), p.74.

activities in order to gather a number of field data needed to answer the research or test hypotheses.³³ In this research it will be used pre-test, treatment, and posttest.

1. Pre- Test

The pre-test was administered before treatment. The same pre- test was given to both experimental and control group in order to investigate the students' writing ability. Both experimental and control group were asked to write a narrative paragraph based on the topic given.

2. Treatment

The treatment will be conducted after pre- test in the experimental group, the students were taught by watching film while control group, the students were taught by using conventional method. Both experimental and control group were taught with the same material.

3. Post- Test

Post- test was given after the treatment has been completed. It is aimed to get the mean scores of experimental group and control group. It is applied to know the effect of teaching presentation in both groups.

G. Technique of Data Analysis

In order to find the different effect between Experimental and Control Group, the t-test formula was applied. The formula was stated as the following:

$$T\text{-tes} = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}}$$

Where:

T-test = The effect

\bar{x}_1 = Mean of Post-test – Pre-test in experimental group

\bar{x}_2 = Mean of Post-test – Pre-test in control group

S_1^2 = Variant of Pre-test – Post-test in experimental group

³³ Hendryadi, 2016, Metode Pengumpulan Data, <http://tepenr06.wordpress.com>, Accessed on 15th January 2017

S_{22} = Variant of Pre-test – Post-test in control group

n_1 = Sample in experimental group

n_2 = Sample in control group.

There are five scoring scales in scoring writing, namely content, organization, vocabulary, language use and mechanics.³⁴

Table 3. 4 The Scoring Guidance

Components	Criteria	Score
Levels		
1. Content The score of content depend of the students' ability to write ideas, information in the form of logical sentence.	Excellent to very good (Knowledge substantive, development of topic sentence, is relevant to and assigned topic.)	30 – 27
	Good to average (Some knowledge of subject-adequate range-etc)	26-22
	Fair to poor (Limited knowledge of subject – little substance-etc)	21-17
	Very poor (Does not show knowledge of subject- non-substantive-etc)	16-13
2. Organization The organization refers to the students' ability to	Excellent to very good (Fluent expression – ideas clearly stated- etc)	20-18

³⁴ Arthur Hughes, (2003), Testing for Language Teachers (Second Edition), Cambridge: Cambridge University Press, p.104

write the ideas, information in good logical order. The topic and supporting		
	Good to average (Somewhat choppy –loosely organized but main ideas stand out, etc)	17-14
	Fair to poor (Non fluent – ideas confused or disconnected – etc)	13-10
	Very poor (Does not communicate – no organization – etc)	9-7
3. Vocabulary Vocabulary refers to the students' ability in using word or idiom to express idea logically. It also refers to use synonym, antonym, prefix, and suffix exactly	Excellent to very good (Sophisticated range – effective word/ idiom choice and usage –	20-18
	Good to average (Adequate range- occasional errors of word/ idiom form, choice, usage but meaning not obscured).	17-14
	Fair to poor	13-10

	(Limited range–frequent errors of word/ idiom, form, choice, usage – etc)	
	Very poor Essentially translation – little knowledge of English vocabulary	9-7
4. Language Use Language use refers to the students’ ability in writing the sentence, simple, complex, and compound sentence correctly and logically it also refers to the ability to use arrangement in the sentence and some other words such as nouns, verbs and time signal.	Excellent to very good (Effective complex construction – etc) Fair to poor (Major problems in simple/ complex constructions – etc)	25 – 22
	Good to average (Effective but simple constructions – etc)	21 – 19
	Fair to poor (Major problems in simple/ complex constructions – etc)	17-11
	Very poor (Virtually no mastery of sentence construction rules)	10-5
5.Mechanism Mechanism refers to the students’ ability to use	Excellent to very good (Demonstrated mastery of conventions – etc)	5

words appropriately and function correctly, such as punctuation and spelling. Paragraph and text can be read correctly		
	Good to average (Occasional errors of spelling, punctuation – etc)	4
	Fair to poor (Frequent errors of spelling, punctuation, capitalization – etc)	3
	Very poor (No mastery of conventions – dominated by errors of spelling, punctuation, capitalization, paragraphing – etc)	2

(Taken from Arthur Hughes)

Table 3. 5 The Rubric to score the students

No	Students Name	Components				
		Content	Organization	Vocabulary	Language	Mechanism