

## **CHAPTER III**

### **METHODOLOGY OF THE RESEARCH**

This part present the method, population and sample, instrument of the researcher, procedure of data collection and the technique of data analysis.

#### **3.1 Design of the Research**

In this research, the researcher applied Quasi-experimental design which apply none equivalent control group and use two groups pretest-posttest design. The experiments involve two groups, an experimental group and a control group. The experimental group received treatment by edutainment, while the control group just got a conventional technique without applying edutainment, where students gave a reading text, the researcher gave a clue to the students about the general description of what student did and how to worked with the task given. The control group is needed for comparison purpose to see whether edutainment implicated or not to encourage students' reading comprehension.

Both groups are given a pretest and posttest. A pretest administer prior to treatment to assess their reading comprehension. Posttest administer to measure treatment effect.

In this research, there are two variables, namely edutainment media as independent variable (X) and the students' reading comprehension as dependent variable (Y). The design will be presented as follow:



3	VIII C	31
4	VIII D	38
5	VIII E	32
Total		165

*Data Source : Administration Staff of MTs N 2 Sidrap Academic Year 2018/2019*

### 3.3.2 Sample

The researcher used purposive sampling technique which involves two classes. Because, this class according to the teacher is the class with vary of students' ability, thus it can represent all the population. Therefore, the researcher chooses VIII A class as experiment class and VIII C as control class because they had similarity in amount. The total sample that will be used by researchers is 62 students from two different classes, namely the control class and the experimental class, each class consisting of 31 students.

### 3.4 Instrument of the Research

In this research, the researcher used test as an instrument to collect the data. The researcher gave the text about narrative text and the students can find out the information by using Edutainment. The purpose of this test is to know the students' comprehension in reading. The type of this test is multiple choice tests consist of 15 items. The time interval between the pre-test and post-test are four meetings, a period long enough to minimize the effects of the pre-test on the result and the conclusion of the experiment.

### 3.5 Procedure of Collecting Data

The procedure of collecting data described as follows:

#### 3.5.1 Pre-test

Before giving treatment, the researcher gave pre-test and post-test is intended to get information about the students' reading comprehension before giving treatment by Edutainment. The allocation time of the pre-test was 60 minutes and monitored by the researcher.

#### 3.5.2 Treatment

The researcher gave the treatment to the students and give some material that interesting to the students. Knowing the treatment of this research, the researcher conducts for four meetings and each meeting the students found different theme of the text. After giving the pre-test, the researcher gave the treatment for four meetings.

For the first meeting, the researcher explained the process which took place, then the researcher select an interesting book and video that is appropriate for the students' reading level. After that, the researcher helped students practice by reading out loud together by following from the sound of video. Then the researcher voice a little louder and faster than the students and run finger under the word simultaneously as the words are read, and then the researcher asked the students to reread the initial lines or paragraph several times to build confidence and comfort with the method before preceding the new material. After that the researcher guide the students to identify main ideas on each paragraph, grasp all information comprehensively and try to make some clues of the vocabularies. Then, the researcher discuss the text with the students along the way.

Second meeting, the researcher explained the process which took place and select an interesting book and video that is appropriate for the students' reading

level. After that the researcher helped students practice by reading out loud together by following from the sound of video. Then the researcher voice a little louder and faster than the students and the researcher run finger under the word simultaneously as the words are read. Then the researcher asked the students to read the text carefully and making the difficult words. Along these activities the researcher walked around in the classroom. The researcher explained about the tenses which consisted in the text. After that the researcher gave time to the students to ask about the material. Then, the researcher discuss the text with the students along the way.

Third meeting, the researcher explained the process which took place and select new book and video that is appropriate for the students' reading level. After that the researcher help students practice by reading out loud together by following from the sound of video. Then the researcher voice a little louder and faster than the students and run finger under the word simultaneously as the words are read. Then the researcher called one of the students to come forward in front of class, the student reads the text loudly and the researcher correct the pronunciation of the student. After that the researcher asked the students to read the initial lines or paragraph several times and the researcher guide the students to identify main ideas on each paragraph, grasp all information comprehensively and try to make some clues of the vocabularies, and then the researcher tried to evaluate students' reading comprehension of the reading text. The evaluation includes vocabulary, grammatical, pronunciation, meaning and summarizing by answer the question.

Fourth meeting, the researcher explained the process which took place and select an interesting book and video that is appropriate for the students' reading level. After that the researche helped students practice by reading out loud together by

following from the sound of video. Then the researcher voice little louder and faster than the students and run finger under the word simultaneously as the words are read. After that the students are lead to recognize the topic and understand the information. The students also guided to be familiar with some vocabularies including the reading text. Then the researcher asked the students to reread the initial lines or paragraph several times to build confidence and comfort with the method before preceding the new material. Next the researcher asked the students to retell their reading orally to potentially support students' unprompted memories of text. Then the researcher try to evaluate students' reading comprehension of the reading text, after that the researcher gave form of question to the students. Then, the researcher discuss the text with the students along the way.

### 3.5.3 Post-test

The post-test gave after the students getting treatment. It was to know significant different between the students' comprehension before and after applying Edutainment media in learning. The allocation pre-test was 60 minutes and monitored by the researcher.

## 3.6 Technique of Data Analysis

In the research the writer use statistic descriptive. To analyze the data, the researcher conducts the Quantitative analysis to classification the students' assessment in procedure reading comprehension at the eighth grade student of MTsN 2 Sidrap.

The data classified into the following ways of classification as in the table below:

Scoring the students' correct answer of pre-test and post-test by using a formula:

$$\text{Score} = \frac{\text{Student's correct answer}}{\text{The total number of item}} \times 100$$

Classifying the score of the students into five levels as follows:

Table 3.2 Classification the students' reading comprehension

No	Score	Classification
1	80 – 100	Very good
2	66 – 79	Good
3	56 – 65	Fair
4	40 – 55	Poor
5	≤ 39	Very poor <sup>2</sup>

Percentage of each statement using the following formula:

$$P = \frac{F}{N} \times 100\%$$

Where:

P : Percentage

F : Frequency

N : total number of sample

<sup>2</sup>Suharsimi Arikunto, *Dasar-dasar Evaluasi Pendidikan, Edition of Revision* (Cet. X; Jakarta: Bumi Aksara, 2009), p. 245.

To find out the mean score and percentage of each cycle, the researcher will use the following formula:

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

Where:

$X$  : Mean score

$\sum X$  : Total score

$N$  : number of student<sup>3</sup>

Calculating the standard deviation of the students' score in pre-test and post-test will use the following formula:

$$SD = \sqrt{\frac{SS}{N}}, \text{ Where } SS = \sum X^2 - \frac{(\sum x)^2}{N}$$

Where:

$SD$  : The standard deviation

$SS$  : The square root of the sum of square

$\sum X^2$  : The sum of square

$(\sum X)^2$  : Total square of the sum

$N$  : Total number of subject<sup>4</sup>

In analyzing the data, that is collected through the pre-test and post-test, the writer

<sup>3</sup>L. R. Gay, *Educational Research Competencies for Analysis and Applications, Second Edition* (Columbus Ohio: Person Merrill Prentice Hall, 1981), p. 282.

<sup>4</sup>L. R. Gay, *Educational Research Competencies for Analysis and Applications, Second Edition*. p. 298.

will use t-test by using formula:

$$t = \frac{X_1 - X_2}{\sqrt{\left(\frac{SS_1 + SS_2}{n_1 + n_2 - 2}\right)}}$$

$$SS_1 = \sum X_1^2 - \frac{(\sum)(X_1)}{n_1}$$

$$SS_2 = \sum X_2^2 - \frac{(\sum)(X_2)}{n_2}$$

Where:

- T : Test of significance
- $X_1$  : Mean score of experimental group
- $X_2$  : Mean score of control group
- $SS_1$  : The sum of squares of experimental group
- $SS_2$  : The sum of squares of control group
- $n_1$  : Total number of subject of experimental group
- $n_2$  : Total number of subject of control group
- $\sum X_1$  : The sum of all squares of experimental group
- $\sum X_2$  : The sum of all squares of control group
- $(\sum X_1)^1$  : The sum scores of experimental group
- $(\sum X_1)^2$  : The sum scores of control group<sup>5</sup>

The researcher used SPSS version 15 in applying these formula. Criteria of testing hypothesis. The statistical hypothesis in this research is as follows:

To test hypothesis the researcher used one tail with 0,05 level of significance.

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<sup>5</sup>L. R. Gay, *Educational Research Competencies for Analysis and Applications, Second Edition* (Columbus Ohio: Person Merrill Prentice Hall, 1981), p. 297.

For independent sample, the formula of freedom (DF) is  $N-1$ .

1. If  $t\text{-table} > t\text{-test}$ ,  $H_0$  is accepted. The result of  $t\text{-table}$  is higher than  $t\text{-test}$  value. It means that applying the Edutainment media is not implemented to encourage the students reading comprehension at the eighth grade students of MTsN 2 Sidrap.
2. If  $t\text{-table} < t\text{-test}$ ,  $H_a$  is accepted and  $H_0$  is rejected. The result of  $t\text{-table}$  is smaller than  $t\text{-test}$  value. It means that applying the Edutainment media is implemented to encourage the students reading comprehension at the eighth grade students of MTsN 2 Sidrap.

