**CHAPTER III**

**METHODOLOGY OF RESEARCH**

* 1. **Design of the Research**

This research will use a quantitative design. This research will be designed to obtain information about the current status or phenomenon. Researcher explores and describes in order to explain and predict phenomena based on the data obtained. The research design will use a quantitative approach. Quantitative research is a type of research that is systematic, structured, from the beginning to the end of the study, and this research tends to use statistical figure analysis.

In this research the researcher collects and calculates data obtained from research and focuses on the number variable, namely the use movie on students achievement writing. This type of research is will be using experimental design. The design of the experiment is to collect research data. In this research will be divided into two groups namely the experimental and control groups, which the experimental group will be taught using video media while the control group is not.

**TABLE 3.1**

**RESEARCH DESIGN**

|  |  |  |  |
| --- | --- | --- | --- |
| Class | Pre-test | Treatment | Post test |
| XI AP1 | ✓ | Teaching review text with using short movie as media | ✓ |
| XI AP2 | ✓ | Teaching review text using a story on the paper as media | ✓ |

* 1. **The Population and Sample**
     1. **Population**

Population in generalization area that consist of subjects or objects that are agreed to be studied and concluded. According to Margono (2004) population is the whole data that is the center of attention of a researcher in the specified scope and time. Population is related to data. In this research as the population of the research at grade eleventh SMK Negeri 6 Medan. The research population is shown as follows:

**TABLE 3.2**

**POPULATION**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| NO | CLASS | GENDER | | |
| MALE | FEMALE | THE NUMBER OF STUDENTS |
| 1 | XI Ap1 | 2 | 30 | 32 Students |
| 2 | XI Ap2 | 3 | 28 | 31 Students |
| TOTAL | | 64 Students | | |

* + 1. **Sample**

Sugiono (2001) state that sample is some of numbers and characteristics possessed by the population. Arikunto (2006:130-131) states that sample is a part of the population is taken to be observed. In this study researcher took 64 students as research sample. The sample will be divided into two groups where students from the XI AP1 were the experimental group and students from XI AP2 were the control group.

* 1. **Procedure of The Research**

In order to get data of this study, there are three points were taken.

1. **Pre-test**

Pre-test is a form of question, which is asked by the teacher to students before starting a lesson. The questions about the material that will be taught on that day.

Task ability in Pre-Test : evaluating orally a product that is a bubble drink that students have drunk before, and asking them to explain and assess the taste of the drink.

1. **Treatment**

Treatment was applied to the experimental group short movie while the control group was taught without using short movie. In applying the treatment to the experimental group, the teacher will present a short movie of 10 to 15 duration that will be screened twice, then ask students to evaluate what they have seen or watched in the short movie.

1. **Post-test**

Post-test is a form of question that is given after the lesson/material has been delivered. Post test is the final evaluation when the material taught on that day has been given which a teacher gives a post test with the intention of whether students have understood about material.

Task activity in Post-Test : the teacher asks students to explain and evaluate the topic that have been delivered that is animation short movie.

After conducting a pre-test, treatment and post-test, the teacher will assess whether or not the student’s progress in writing and evaluating a topic in the review text writing.

* 1. **Variable and Indicator**
     1. **Variable**

There are two groups n giving scores, namely the experimental group scores as the X and the control group as Y variable.

**TABLE 3.3**

**VARIABLE OF RESEARCH**

|  |  |
| --- | --- |
| **Variable X** | **Variable Y** |
| Experimental group | Control group |

* + 1. **Indicator**

**TABLE 3.4**

**THE INDICATOR OF WRITING REVIEW TEXT**

According to WHO (1981), indicator is a variable that can help us in measuring various kinds of changes that occur directly or indirectly. That is a table that shows the students’ ability in writing review text put forward by Anamaryanti, Hermawati Syarif and Yenni Rozimella (2015):

|  |  |  |
| --- | --- | --- |
| **NO** | **Indicators** | **Average Score** |
| 1. | Vocabulary | 61,72 |
| 2. | Grammar | 58,9 |
| 3. | Generic Structure | 67,1 |
| 4. | Organizing Idea | 72,28 |
| 5. | Mechanic | 71,2 |

* 1. **Instrumentof Collecting Data**

The research instrument is a tool that is selected and used by researcher in gathering activities so that the activity becomes systematic and facilitated by it. Data collection instruments are ways that can be used by researchers to collect data. Instrument as a tool using data collection methods is a tool that can be realized in objects, such as questionnaire test kits, interview guidelines, observation guidelines, scale and so on. According (Arikunto,2003:136) research instrument is a devise used by researcher while collecting data to make the subject become easier and to get better result, complete, and systematic in order to make the data to be processed.

* 1. **Technique of Collecting Data**

To collect the data, the first the researcher will use the writing test. And the writing test deal with some exercise given by the researcher to all students and thy will be answer the exercise. And the researcher will correct their answer and give the score. Scoring will be given as follows :

1. The researcher give test of writing review text to the students. The function of the test is o know the mean score.
2. Checking the test answer, if the students could answer the test correctly the researcher will giving the score.
3. Counting the percentage of the students’ score in the data from the test which given to the students.
4. Calculating the percentage of the students’ ability
   1. **Technique of Analyzing Data**

Giving tests to students is a technique of analyzing data in this research. Data has been analyzed after collecting data through tests. To prove the hypothesis, it was needed to analyze the data by applying the t-test for independent sample formula as follows:

t = 

Where:

X : The mean of experimental group

X : The mean of control group

X : The deviation of experimental

X : The deviation of control group

n : The total sample of experiment group

n : The total sample of control group

Reliability of the test is one the characteristic of a good test; reliability refers to the consistency of the measurement. To obtain the reliability of the test, the researcher is using a formula that is:



(Muhibin Syah, 2000:280)

Where:

X : The number of items in the test

Y : The mean of the test scores

N : The number of the students

X : The Square of the deviation scores of experimental group

Y : The Square of deviation scores of control group

The criteria of value :

1. If tcount more bigger than tobserved on significance level 0.05% it means: “There are a significant effect of using short film on the students’ achievement in reading comprehension” and the hypothesis is accepted.
2. If tcountmore less than tobserved on significance level 0.05% it means: “There are no significant effect of using short film on the students’ achievement in reading comprehension” and the hypothesis is rejected.