## CHAPTER III

## METHODOLOGY OF RESEARCH

## A. Research Design

The type of this research is field research which is the writer comes to the school directly to investigate and to find out how is the vocabulary mastery of the students who like and do not like watching western movies of MAN 2 Marabahan eleventh grade students.

While approach of this research is quantitative approach which is the data will be analyzed quantitatively to show the comparative study between students who like and do not like watching the western movies in vocabulary mastery.

## B. Research Setting

The research is conducted at MAN 2 Marabahan. This school lies on Jl. Dermawan, Desa Pulau Sugara RT. 09, Kecamatan Alalak, Kabupaten Barito Kuala.
C. Subject and Object of the Research

## 1. Subject of the Research

The subject of this research is all eleventh grade students of MAN 2 Marabahan. There are three classes of eleventh grade which are XI IPA 19, XI IPS 31 and XI Agama 21. The table can be seen below:

Table 3.1. The Population of Students in the Evelenth Grade of MAN 2 Marabahan.

| No | Classes | Number of Students |
| :---: | :---: | :---: |
| 1. | XI IPA | 19 |
| 2. | XI IPS | 31 |
| 3. | XI Agama | 21 |
|  | Total | 71 |

After doing the research by using questionnaire, the writer found that 21 students like watching movies and 50 students do not like watching western movies. To make the same variable, the writer takes 21 of 50 students who do not like watching western movies randomly. The variable X is 21 students who like watching western movies, while the variable Y is 21 students who do not like watching western movies.

## 2. Object of the Research

The object of this Research is the comparative study between eleventh grade students who like and do not like watching western movies on their vocabulary mastery at MAN 2 Marabahan school year 2015/2016.

## D. Research Instrument

The data of this research are the comparative study between students who like and do not like watching western movies in their vocabulary mastery of eleventh grade students at MAN 2 Marabahan school year 2015/2016.

In this research, in order to classify the students who like and do not like watching western movies, the writer uses questionnaire. The students must answers 5 questions about watching western movies. To know which students who like and do not like watching western movies, the students must answer the questions based on the criteria. The students who like watching western movies, will chose all the positive answers. If the student choses one or more negatif answer, the student will be rated as the student who does not like watching the western movies.

To measure their vocabulary mastery, the students will answers 20 multiple choice questions which are adopted from the material test of senior high schools students. The right answer will be marked 5 point and wrong answer will be marked 0 point. If the student does not answer, the point will be 0 . If the students answer all of the items correctly, they will get 100 points that is the highest score.

## E. Technique of Data Collection

The techniques of data collection will be used in this research are questionnaire, interview and test.

## 1. Interview

The interview is a technique used to obtain answers from the respondents by way of question and answer unilateral (Arikunto, 2002, p.143). According to Sugiyono (2013, p. 194), The Interview is used to get the data if the researcher want to preface study to get the problem.

Interview technique is used to find the information about the students and the school.
2. Questionnaire

This technique is conducted to know, collect and enrich the data from the students beside test. The questions in this questionnaire help the writer to classify which students like and do not like watching western movies.

The questionnaire includes 5 questions with 2 choices in one question. Every question includes criteria of students who like watching western movies. The students who like watching western movies will answer the questioner based on the criteria.

## 3. Test (written test)

This research uses achievement test, a test that is used to measure the achievement of a person having learned something (Arikunto, 2002, p.143). This is used to measure students' how good their vocabulary mastery is.

The test used is multiple choices. The test includes 20 questions. For every correct answer, the students will get 5 points. If all of students' answers are true, the students will get 100 points.

## F. Data Analysis Procedure

## 1. Data Processing

a. Editing

This technique is used to examine all the collected data to make certain whether the data have already completed or not.
b. Coding

The writer classifies the data according to their types by giving particular codes on each respond answers.
c. Tabulating

The writer composes and puts the data into a table and then counts its percentage by using the following formula:

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

Explanations:
P : Percentage
F: The frequency of answer from respondents for each item
N : Number of respondents
d. Data Interpretation

To classify which students like and do not like watching western movies, the writer analyzes the questionnaire based on the criteria of students who like watching e movies. Students who like watching movies are they who watch movies five until ten times in a week, always watch the movies from the beginning until the end of story, always feel enjoy while watching the movie, and always
concentrate in watching the movies from the beginning until the end of story, while the students who do not like watching western movies are they who watch the movies less than five times in a week, do not watch the movies from beginning until the end of story, do not feel enjoy while watching western movies, and do not concentrate in watching the movies from the beginning until the end of story.

To categorize each question on questionnaire, the writer uses the formula:

$$
\mathrm{i}=\frac{R}{b}
$$

where, $R=(H-L)+1$

## Explanations:

$\mathrm{i}=$ interval range
$\mathrm{R}=$ total range
$b=$ the number of category
$\mathrm{H}=$ highest percentage
$\mathrm{L}=$ lowest percentage (Sudjana, 2010, p. 196-197).
Therefore, the calculation of this research is as follows:
$\mathrm{R}=(\mathrm{H}-\mathrm{L})+1 \%$
$H=97.18 \%$
$\mathrm{L}=2.82 \%$
$R=(97.18 \%-2.82 \%)+1 \%$
$=94.36 \%+1 \%$

$$
\begin{aligned}
& =95.36 \% \\
\mathrm{i} & =\frac{R}{b} \\
& =\frac{95.36 \%}{3} \\
& =31.78 \%
\end{aligned}
$$

The interval class range can be seen in the table:
Table 3.2. Category interval of the questionnaire's percentage

| Score | Category |
| :---: | :---: |
| $68.4 \%-100 \%$ | High |
| $35.61-68.39 \%$ | Medium |
| $2.82 \%-35.6 \%$ | Low |

To categorize the percentages of the questionnaire, it is determined based on the total of students who have chosen the answer of the questionnaire. Before that, the table of category interval of the questionnaire must be made by using this formula (Sudjana, 2010, p. 196-197).

$$
\mathrm{i}=\frac{R}{b}
$$

$$
\text { where, } \mathrm{R}=(\mathrm{H}-\mathrm{L})+1
$$

Explanations:
$\mathrm{i}=$ interval range
$\mathrm{R}=$ total range
$b=$ the number of category
$\mathrm{H}=$ highest score
$\mathrm{L}=$ lowest score
Therefore, the calculation of this research is as follows:
$\mathrm{R}=(\mathrm{H}-\mathrm{L})+1$
$H=100$
$\mathrm{L}=50$
$R=(100-50)+1$
$=50+1$
$=51$
i $=\frac{R}{b}$
$=\frac{51}{4}$
$=12.75$ or 13

The interval class range can be seen in the table:

Table 3.3. Category interval of students' vocabulary mastery

| Score | Category |
| :---: | :---: |
| $89-100$ | Very good |
| $76-88$ | Good |
| $63-75$ | Fair |
| $50-62$ | Poor |

## 2. Data Analysis

All the collected and processed data are then analyzed descriptively and quantitatively. Data analysis in a process by which data simplified into a form can be read and interpreted easily.

After all collected data have been processed, the writer analyses them and makes conclusion by using " t " or " t " test formula (Sudijono, 2005, p.279). There are 7 steps to process the data until the writer gets the answer, including:
a. After doing the test and each sample has score, the writer counts the mean of each variable by using the following formula:

1) Mean of students who like watching western movies

$$
M=\frac{\sum x}{N}
$$

Explanations:
M : Mean of variable x
$\sum \mathrm{x}$ : Accumulative score of variety
$\mathrm{N} \quad$ : Number of respondents
2) Mean of students who do not like watching western movies

$$
M=\frac{\sum y}{N}
$$

Explanations:
M : Mean of variable y
$\sum \mathrm{x}:$ Accumulative score of variety
N : Number of respondents
b. The writer count standard deviation of each major by using formula:

1) Standard deviation of students who like watching western movies

$$
S D_{1}=\sqrt{\frac{\sum x^{2}}{N}}
$$

Explanations:
$S D_{1}:$ Standard deviation of students who like watching western movies
$\sum x^{2}$ : Accumulative of the quadrant of deviation of students who like watching western movies
2) Standard deviation of students who do not like watching western movies

$$
S D_{2}=\sqrt{\frac{\sum y^{2}}{N}}
$$

Explanations:
$S D_{2}$ : Standard deviation of students who do not like watching western movies
$\Sigma y^{2}$ : Accumulative of the quadrant of deviation of students who do not like watching western movies
c. The writer counts standard error of mean from each major by using formula:

1) Standard error of mean from students who like watching western movies:

$$
S E_{M 1}=\frac{S D}{\sqrt{N-1}}
$$

## Explanations:

$S E_{M 1}:$ Standard error of mean from students who like watching western movies

1 : Value of constant
2) Standard error of mean from students who do not like watching western movies:

$$
S E_{M 2}=\frac{S D}{\sqrt{N-1}}
$$

Explanations:
$S E_{M 2}$ : Standard error of mean from students who do not like watching western movies

1 : Value of constant
d. The writer counts standard error from both samples by using formula:

$$
S E_{M 1-M 2}=\sqrt{S E_{M 1^{2}}}+\sqrt{S E_{M 2^{2}}}
$$

$S E_{M 1-M 2} \quad:$ Standard error for comparative mean of students who like and do not like watching western movies $S E_{M 1^{2}} \quad:$ Quadrant result of standard error of mean of students who like watching western movies
$S E_{M 2^{2}} \quad:$ Quadrant result of standard error of mean of students who do not like watching western movies
e. The writer counts t-test by using formula:

$$
t=\frac{M_{1}-M_{2}}{S E_{M 1-M 2}}
$$

## Explanations:

| t | $:$ Tests are being sought |
| :--- | :--- |
| $M_{1}$ | $:$ Mean of students vocabulary mastery of students |
|  | who like watching western movies |
| $M_{2}$ | $:$ Mean of students vocabulary mastery of students |
|  | who do not like watching western movie |
| $S E_{M 1-M 2}$ | $:$ Standard error difference in mean students' |
|  | vocabulary mastery between students who like and |
|  | do not like watching western movies |

f. Giving interpretation for " t " with consulting t table.

- Looking for Degree of Freedom
$\mathrm{df} / \mathrm{db} \quad=(\mathrm{N} 1+\mathrm{N} 2-2)$
Explanation
df/db :Degree of Freedom
N1 :Number of Subject of the Students who like watching western movies

N2 :Number of Subject of the students who do not like watching western movies
:Value of degree of freedom for variables

- Consulting score of "db/df" with "t table"
t table : Value of critic " t "
- In significant degrees t table 5\%
- In significant degrees t table $1 \%$
g. The writer makes a conclusion.
- If t count $>\mathrm{t}$ table $=\mathrm{Ho}$ (Zero Hypothesis) will be rejected and Ha (Alternative Hypothesis) will be accepted.
- If t count $<\mathrm{t}$ table $=\mathrm{Ho}$ (Zero Hypothesis) will be accepted and Ha (Alternative Hypothesis) will be rejected.

Explanations:
$\mathrm{M} \quad=$ Average number of mean
$\sum \mathrm{x} \quad=$ Total score
$\mathrm{N} \quad=$ Total of sample
SD $\quad=$ Standard of Deviation
$\mathrm{SE}_{\mathrm{M}} \quad=$ Standard error of mean
$\mathrm{SE}_{\mathrm{M} 1-\mathrm{M} 2}=$ Standard error of both samples
= Students " $t$ " test score (Sudijono, 2005, p.279).

