**CHAPTER III**

 **RESEARCH METHODOLOGY**

* 1. **Research Design**

 In this research, the researcher will use the quantitative method. According to Sugiyono (2017 : 13), quantitative research method is research method based on positivism philosopy, that is used to research population or particular sample, generally the technique to take the sample is taken randomly. The type of this research is experimental method.

 The experimental method will specified an experimental group and control group. The independent variable is administrated to experimental group. It means that the experimental group was taught by using story telling and the control group was taught without using story telling . Both group will be measured on the same dependent variable

**Table 3.1**

**Research Design**

|  |  |  |  |
| --- | --- | --- | --- |
| Group | Pre-test | Treatment | Post-test |
| Experimental  | ✓ | Using Story telling | ✓ |
| Control | ✓ | Without using Story telling | ✓ |

* 1. **Population and sample**

Sugiono (2017: 117) states that population is a generalization region consisting of object or subjects that has set qualities and characteristic set by

 researcher to be learned and the conclusions. Population is the whole object and subject of reseach.

 The population of this research will be X grade students at SMA Negeri 1 Galang that consist of two classes, they are 30 students of X IPS-2 and X IPS-3 also 30 students. So, the total population in this study is 60 students.

 Sample is part of population that is being studied. This research will apply total sampling. The total population becomes sample.

**Table 3.2
SAMPLE**

|  |  |  |
| --- | --- | --- |
| Group | Sample | Number of Students |
| Experimental | X IPS 2 | 30 Students |
| Control | X IPS 3 | 30 Students |
| TOTAL |  | 1. Students
 |

**3.3 Variables and Indicators of the Research**

The variables in this study are:

Independent variable : Story telling

Dependent variable : Students’ vocabulary achievement

**INDICATORS OF VOCABULARY**

**Tabel 3.3**

|  |  |
| --- | --- |
| Classification | Factors |
| Excellent | Use of vocabulary to enhance English vocabulary. |
| Good | Students can identify the verb, noun and adjective. |
| Average | Students understand the meaning of words vocabulary. |
| Poor | Students are enthusiastic in responding teacher question.  |
| Very poor | Some times use to mastery English vocabulary although it is no fluently |

|  |  |
| --- | --- |
| Classification | Score |
| Excellent | 90-100 |
| Good | 70-89 |
| Average | 50-69 |
| Poor | 30-49 |
| Very Poor | 10-29 |

**3.4 Instrument of Collecting Data**

 The students will be asked to answer the question which is give by the teacher. The test is multiple choices form, that consist of 20 question and interviewed. The scoring would applying this formula :

Where, S: the score

 R : the number of the correct answer.

 n : the number of the test item

**3.5 Reliability and Validity**

**3.5.1 Validity**

 A fundamental notio in test validity is that score the score of a test should not be significantly influenced by factors other than the skill and knowledge that the text is intended to measured.

**3.5.2 Reliability**

 The reliability established in this test was inter-rater reliability. It was determined by having two person independently scorethe same set of the test papers. The reliability was computed by using the formula Kuder-Richardson in Sugiyono (2010) :

Ri=

Where :

k = number of items in the instrument

Pi = the proportion of the number of subjects who responded to the

item

qi = 1 - pi

s2i = Total varians

The caution for the evalution of coefficient (R) is:

 **Table 3.4**

 **The Score Range of The Criteria**

|  |  |
| --- | --- |
| 0,0 to 0,20  | Legible |
| 0,21 to 0,40 | Low |
| 0,41 to 0,60 | Moderate  |
| 0,61 to 0,80 | Substantial |
| 0,81 to above | High to Very High |

**3.6 Technique of Collecting Data**

In this research there are techniques to collect the data, there are as follows:

 1.Pre-test

 The researcher gave the pre-test to know the students ability on vocabulary. It is began know the students comprehension before treatment is given.

2. Treatment

 All conditions that happen in teaching and learning process by using story telling to improve the students’ vocabulary .

3. Post- test

 After doing treatment, the researcher will give post test to all students. Post test is used to know the students vocabulary mastery after teaching by story telling. The researcher wants to know how far the students understand and remember vocabularies that given after giving treatment process is done.

**3.7 Technique of Analaysis Data**

 To analyze the students’ score in pre-test and post-test , the researcher uses t-test. So, the post-test score from the control and experimental were calculated by using t-tes and SPSS to know whether or not there is a significance effect through story telling toward on students’ vocabulary. The data are analyzed by using the following formulation of t-test Sugiyono (2017: 273) :

t=

Where,

t : The effect

*x*1 : Mean of first set of values

*x2* : Mean of second set of value

*s1* : Standard deviation of first set of values

*S2* : Standard deviation of second set of values

: Total number of values in first set

: Total number of values in second set