CHAPTER III

METHODOLOGY

This chapter will discuss the method that the researcher uses in conducting the study. It involves the Reserch Design, Population and Sample, Data Collection, and Data Analysis.

3.1 Research Design

This research was quantitative design. And using quasi experimental approach with design one group pre-test and post-test design. There will be one group students being treated in the experiment of the Effect of Teaching Students Listening using LINE Application. It is called pre experimental research, because this research is done by giving pre-test, treatment and post-test for one group, and there is no control group. The researcher uses quasi experimental because the school does not alow the researcher to do randomization and do true experiment in Senior High School of Muhammadiyah 8 Cerme.

The design in this research is formulated by Ali (1984:136 as follows:

Pre-test	Treatment	Posttest
T1	X	T2

Note:

T1: Pre-test

X: Treatment

T2: Post-test

This research consists of two variables those are independent and dependent variables. According to Ali (1984:131) independent variables is

the condition influencing the appearance of an indication appearing because of the implementation of an experiment called as X and the dependent variable is the implementation of an experiment and also called effect variable or called as :

1. Independent variable (X): The X variable of this research is the using LINE Application to teach students listening ability.

2. Dependent variable (Y): The Y variable of this research is listening ability of tenth grade students of Senior High School Muhammadiyah 8 Cerme.

3.2 Population and Sample

The population of this research is the students in Senior High School of Muhammadiyah 8 Cerme who are in tenth grade. One class there are 20 students of the tenth grade X MIPA 1.

3.3 Data Colection

Data collection is the process of collecting spesific information from both of students perception or students ability. The purpose of this process is to find the real data in the field which has been collected from the subject. Furthermore, the researcher will explain the procedure of data collection includes of the instrument, giving pre-test and post-test for the students. And the procedure of collecting the data and also picture as the data carried out in the field. Those process as :

3.3.1 Instrument

Research instrument is an important role in doing the research. In this study, the researcher uses tests as an instrument. The instrument is Listening Ability simple oral and written text in order to measure the students listening ability. It is very important to measure the validity of the test to make sure that the test were valid. Research instrument is a tool, which is used by the research to collect the data. The instrument is created whether the researcher succes or not.

3.3.2 Test

There are two test in this study, they are pre-test and post test. Pre-test will be given to the students before the treatment. It is to gain the data of the students entry in mastering listening comprehension ability. Besides, the post-test will be given to the students after giving the treatment. The test checks by the content validity. The content of item is based on the standard of competence in the syllabus (school based K13 curriculum) in tenth grade of Senior High School Muhammadiyah 8 Cerme. And the researcher adaptation the test from the article by Syafrini Rezeki HSB (2017) in tittle "Improving The Students Achievement in reading Narrative Text by Using Know-Want-Learned Strategy at Grade Eight, MTsN 3 Medan Academic Year of 2017-2018" and then from the article by Siti Masithoh (2017) in "Improving Students Reading Comprehension in Narrative Text Trough Picture-Stories". The researcher adaptation the test from those article, because the article is about reading skill. So the researcher just adaptation the test and find the audio based same with the test.

3.3.2.1 Pre-test

The pre-test will be given before gives treatment to the students. It is form is written test to measure student's listening comprehension about Analyzing social functions, text structure, and linguistic elements in simple narrative texts in the form of folk legends, according to the context of their use. The researcher give the students the listening task multiple choice about narrative text, and the students choose the best answer for the audio listening that they listen.

3.3.2.2 Post-test

Post-test is to find out whether the students make progress in their listening skill or not. Post-test will be given after the students get the treatment which is Teaching Listening using LINE Application. The test in this research is listening test multiple choice, especially Listening in Analyzing social

functions, text structure, and linguistic elements in simple narrative texts in the form of folk legends, according to the context of their use. Post-test before giving the treatment for the students.

3.3.2.3 Picture

When the process of taking the data such as giving the students pre-test and post-test and giving the treatment for the students. The researcher take documentation in the form of picture. To analyze the result of field research. So the researcher can see in the picture to analyze the improvements and developments that occur to the students.

3.3.3 Validity

Before doing pre-test and post test as an instrument of the research, the test should be tried out in terms of validity. In this study, the test will be analyzed by using content of validity. The content of validity is measured related to the content of the instrument in Indonesia Curriculum. To the test content validity, the researcher should compare the content of instrument to the materials based on English Curriculum and English syllabus. If its is content reflects the curriculum guides and syllabus, then the item of the test is valid. In this materials using English Curriculum K13 in English syllabus.

Theme	Narrative Text
Core Competency	- The students are able to analyze social functions, text structure, and linguistic elements in simple narrative texts in the form of folk legends, according to the context of their use.
Basic Competency	- The students linguistic elements in simple narrative texts in the form of folk legends, according to the context of their use.

Learning ability	- The students are listen the audio linguistic in simple narrative text in the form of folk legends.
	- The students summarize the audio linguistic in simple narrative text in the form of folk legends.
	- The students are identify the audio linguistic in simple narrative text in the form of folk legends.
Assesment	- Audio listening
	- Writtent test
Time	2 x 60 minute
Learning Source	- Audio
	- Video

3.3.4 Realiability of The Test

Realiability is the consistency of the measurement, or the degree to which an intrument measures the same way each time it. In this study, the researcher uses Inter-rater Reliability to find out the result of the reability test, because listening is concluded as subjective test. Based on Brown (2004:20), inter-rater realiability occured when the scores of the same test, possibly for lack of attention to scoring criteria, inexperience, inattention, or hypothesis. It was essentially a variation of the equivalent from type of reliability in that scores are ussually produced by two raters. It can be conclude that inter-rater reliability is the degree of agreeent between two raters.

3.3.5 The Procedure of Collecting the Data

There are several procedures for collecting the data applied by the researcher. The first step, the researcher ask permission to Senior High School of Muhammadiyah 8 Cerme. After that, the researcher give a pre-test for the purpose of taking data from students listening comprehension narrative text before giving the treatment for the students listening test using LINE Aplication. Then the researcher give the treatment toward the experimental

Teaching Listening using LINE Application. The researcher will teach the experimental Teaching Listening using LINE Application will be implemented for six meetings. After that the researcher give post test to find out the existence of positive effect or not on students listening treatment. The schedule as follow :

Meeting's	Topic	Total of students
First Meeting	Pre-test	20
Second Meeting	Listening using LINE Application Passage 1	20
Third Meeting	Listening using LINE Application Passage 2	20
Fourth Meeting	Listening using LINE Application Passage 3	20
Five Meeting	Listening using LINE Application Passage 4	20
Six Meeting	Post-test	20

3.3.6 Scoring Guide

The scoring guide is used to guide the teacher to correct the students test. The rubrik adopted from article by Dara Yusnida, Asnawi Muslem, Abdul Manan (2017) in tittle "A Study Of Teaching Listening". Below the rubric scoring for pre-test and post-test to assess the students listening.

Table 1. Scoring Guide of Listening Assignment

Excellent To Very Good 100-90	Excellent at identifying the main idea, general, and specific information. Accurately infers implied information. No problems at recognizing vocabulary and expressions.

Very Good 89-80	Very good at identifying the main idea, general, and specific information. Shows good ability to infer implied information. Almost no problems at recognizing vocabulary and expressions.
Good 79-70	Good at identifying the main idea, general, and specific information. Shows some ability to infer implied information. Some minor problems at recognizing vocabulary and expressions.
Fair 69-60	Still able to identify the main idea, general, and specific information. Still shows ability to infer implied information. Some problems at recognizing vocabulary and expressions.
Unsatisfactory 59 or Below	Unable to identify the main idea, general, and Specific information. Fails to infer implied information. Many problems at recognizing vocabulary and expressions.

3.4 Data Analysis

After collecting the data through doing all of the procedure that mentioned above, the researcher analyzes the data by doing some steps in order to find the answer of the research question. Here, the researcher inputs the data from pre-test and post-test given by the students, and picture about activities in LINE Application. In students at Senior High School of

Muhammadiyah 8 Cerne into microsoft Exel and SPSS 16.0 program for doing statistical analysis.

3.4.1 Normality Distribution Test

To analyze the normal distribution, this study uses Kolmogorov Smirnov Sample Test in SPSS version 16.0. It is aim to find whether or not the distributions of pre-test score are normally distributed. In this case, the result of the normality distribution is also used to find out whether or not the hypothesis that has determined is accepted. The first step in calculating the normality distribution test state that the hypothesis: H0: the score of pre-test and post-test are normally distributed.

The second step is calculating the normality distribution test tried to compare the sig. with the level of significance for testing the hypothesis. If the sig. is more than level significance (0,05) the null hypothesis is accepted; the score normally distributed. On the other hand if the sig. is less than the level of significance (0,05) the null hypothesis is rejected. The procedure analyze is press menu, click analyze, click descriptive statistic, click explore and move all variable to dependent list box, click Plots and tick normality plots with test then continue.

3.4.2 Homogeneity Test of Variance

Homogeneity test of variance uses to know whether the score of pre-test and post-test are equal. For homogeneity test, the researcher using One Sample K-S in SPSS version 16.0 version. The purpose of this test is to analyze the score pre-test and score post-test are equal. To analyze the homogeneity, the researcher uses SPSS 16.0 version. The homogeneity will be checked in SPSS by One Sample K-S with the following procedure. The first step is Analyze, choose Nonparametric and then One Sample K-S. The last procedure is interpreting the homogeneity test output, the researcher looks (sig.) at the Mean test columns to know whether the quality of variance in score of Pre-test and score of Post-test was homogeneity or not. If the sig.

> α (0,05), two populations of variance were homogenous or equal but if sig. < α (0,05) two populations of variance were not homogenous or not equal.

3.4.3 Hypothesis Testing

Paired Sample T-test is used to find out the significant difference of Teaching Listening using LINE Application. The steps of Paired Sample T-test calculate are : first, test the hypothesis of the research and the setting α (alpha) level at 0,05 (two tailed test), the hypothesis in this research could be formulated as follow :

H0 : There is no significant difference of Teaching Listening using LINE Application.

H1 : There is significance difference of Teaching Listening using LINE Application

The second step is finding t-value using Paired Sample t-test and comparing the probably with the level of significance for testing the hypothesis. After the scores computed in SPSS 16.0 version, then to see the output of Paired Sample T-test and interpret the output that sig. (2 tailed) > α (0,05), the researcher should accept the H0, but if sig. (2 tailed) < α (0,05), the researcher can be rejected the H0, it means H1 is accepted.

In calculating t-test, the researcher uses SPSS 16.0 version. The first steps, input the data of score pre-test and score post-test in SPSS program, the click Analyze then Compare Mean then Paired Sample T-test after that click OK.