## CHAPTER III

## RESEARCH METHOD

## A. Type of the Research

The method of the research was a Pre-experimental research which was the One-Group Pretest-Posttest Design. L.R Gay (2000:389) said that the design involves a single group that is pretested ( O ), exposed to a treatment (X), and Posttested (O). According to john W Cresswel (2008:301) Pretest provides a measure on some attribute or characateristic that you asses for participants in an experiment before you receive a treatment. A posttest is a measure on some attribute or characteristic that is assessed for participants in an experimental after a treatment.

From the explanation above, the research design was a single group which was the one-group pretest-postest design due to the condition of the school and limitation of time. Therefore, the researcher took one class, in which the class was given pretest first, a treatment was done afterward by teaching Podcast media, and post test was done after the treatment. In this project paper, researcher researched the first year of Junior high school 2 kampar kiri tengah by teaching Podcast media in order to know whether the technique of Podcast media gives significant difference to students' speaking ability or not.

## B. The Location and the Time of the Research

The location of this research was at the first year of Junior High School 2 kampar kiri tengah. It is located at SP 2 village, Kampar kiri tengah in 20152016 of academic year.

## C. The Subject and the Object of the Research

The subject of the research was the first year of Junior High School 2 kampar kiri tengah. The object of this research was the effect of using Podcasts media on students' ability in speaking.

## D. The Population and the Sample of the Research

The population of this research was the first year of Junior High School 2 kampar kiri tengah in 2015-2016 academic years. The number of the the first year of Junior High School 2 kampar kiri tengah was 20 students. Since the design of the research referred to single group, the researcher took one class only as sample of the research. The researcher took the sample by using random sampling. The population of the research can be seen as follows:

Table III. 1
The Total Population of the first year of Junior High School 2 kampar kiri tengah 2015-2016

| No. | Class | Total students |
| :---: | :--- | :---: |
| 1 | VIIA(Experimental Class) | 20 |
| 2 | VIIB | 22 |
| Total |  | 42 |

## E. The Technique of Collecting Data

In this research, the writer used some techniques in collecting data as follows:

## 1. Test

In this research, the writer used test to measure the students' speaking ability. The test was divided into two tests, they were pre-test and post-test. in order to get the data required in this research, the researcher employed the procedures that can be seen in the following :
a. Pretest

The pretest was carried out in order to know the ability of the students before giving treatment in which the students were given a topic and then asked to do oral presentation.
b. Treatment

It was conducted after pretest. The researcher taught the students by using Podcasts media. It was done for six meetings.

## c. Posttest

The posttest was carried out in order to know the ability of the students after giving treatment in which the students were given a topic and then asked to do oral presentation.

Moreover, both pretest and posttest were done by recording the students' oral presentation. The recordings were given to two raters to assess students' speaking. According to Hughes (2003: 131), there are some components those have to be considered in assessing students'
speaking ability. They are: accent, grammar, vocabulary, fluency and comprehension. So, this research used this technique in assessing the students' ability. They have typical scale where each component has a set of qualities (level) to be rated and a series of possible rating. Hughes describes the rating as follows:

Table III. 2
Components to Assess Students'
Speaking Ability
a. Accent

| Score | Requirement |
| :--- | :--- |
| 1. | Pronunciation frequently unintelligible. <br> understanding difficult, require frequently repetition. |
| 2. | "Foreign accent" requires concentrated listening, and <br> mispronunciations lead to occasional misunderstanding <br> and apparent errors in grammar of vocabulary. |
| 3 | Marked "Foreign accent" and occasional <br> mispronunciations which do not interfere with <br> understanding. |
| 5 | No conspicuous, mispronunciations, but would not be <br> taken for a native speaker. |
| 6 | Native pronunciation, with no trace of "foreign accent" |

b. Grammar

| Score | Grammar |
| :--- | :--- |
| 1 | Grammar almost entirely inaccurate except in stock <br> phrase. |
| 2 | Constant errors showing control of view major patterns <br> and frequently preventing communication. <br> 3 |
| Frequent errors showing some major patterns uncontrolled <br> and causing occasional irritation and misunderstanding. |  |
| 4 | Occasional errors showing imperfect control of some <br> pattern but no weakness that causes misunderstanding. |
| 5 | Few errors, with no patterns of failure. |
| 6 | No more than two errors during the interview. |

c. Vocabulary

| Score | Requirement |
| :--- | :--- |
| 1 | Vocabulary inadequate for even the simple conversation. |
| 2 | Vocabulary limited to basic personal and survival areas <br> (time, food, transportation, family, etc.). |
| 3 | Choice of words sometimes inaccurate, limitations of <br> vocabulary prevent discussion of some common <br> professional and social topics. |
| 4 | Professional vocabulary adequate to discuss special <br> interest; general vocabulary permits discussion of any non- <br> technical subject with some circumlocutions. |
| 5 | Professional vocabulary broad and precise; general <br> vocabulary adequate to cope with complex practical <br> problems and varied social situations. |
| 6 | Vocabulary apparently as accurate and extensive as that of <br> an educated native speaker. |

d. Fluency

| Score | Requirement |
| :--- | :--- |
| 1 | Speech is so halting and fragmentary that conversation is <br> virtually impossible. |
| 2 | Speech is very slow and uneven except for short or routine <br> sentences. |
| 3 | Speech is frequently hesitant and jerky; sentences may be <br> left uncompleted. |
| 4 | Speech is occasionally hesitant, with some unevenness <br> caused by rephrasing and grouping for words. |
| 5 | Speech is effortless and smooth, but perceptively non- <br> native an speed and evenness. |
| 6 | Speech on all professional and general topics as effortless <br> and smooth as a native speaker's. |

e. Comprehension

| Score | Requirement |
| :--- | :--- |
| 1 | Understands too title for the simplest types of <br> conversation. |
| 2 | Understands only show, very simple speech on common <br> social and touristic topics; requires constant repetition and <br> rephrasing. |
| 3 | Understands careful, somewhat simplified speech when <br> engaged in a dialogue, but may require considerable <br> repetition and rephrasing. |
| 4 | Understands quite well normal educated speech when <br> engaged in a dialogue, but requires occasional repetition or <br> rephrasing. |
| 5 | Understands everything in normal educated conversation <br> except for very colloquial or low-frequency items, or |


|  | exceptionally rapid or slurred speech. |
| :--- | :--- |
| 6 | Understand everything in both formal and colloquial <br> speech to be expected of an educated native speaker. |

Note: for non-native speaker, 5 are the highest score.
The speaking result was evaluated by concerning five components and each component had score or level. Each component had 20 the highest score and the total of all components was 100. The specification of the test is as follows:

Table III. 3
The Specification of the Test

| No | Speaking skill | The highest score |
| :---: | :---: | :---: |
| 1 | Accent | 20 |
| 2 | Grammatical | 20 |
| 3 | Vocabulary | 20 |
| 4 | Fluency | 20 |
| 5 | Comprehension | 20 |
|  | Total | 100 |

## F. Validity and Reliability of the Test

## 1. Validity

In this research, oral test was given to students in order to find out their speaking ability. Content validity was used in constructing the instrument of the test. According to Henning (1987:94), "content validity is concerned with whether or not the content of the test is sufficiently representative and comprehensive for the test to be valid measure of what it is supposed to measure. From the statement above, it is clear that there
were two considerations made in this test. The first was the content of the test that should be representative for the test itself, the second, it should measure what it was supposed to measure. The purpose of conducting the test was to find out students' speaking ability, thus the students had been asked to speak in English within1-2 minutes, based on the topic related to their materials (content of the test). The material of the test was taken from the textbook used by students of Junior High School 2 Kampar Kiri Tengah. The textbook and syllabus of the school were the guidance in determining the materials in pretest, post test and also the treatment done in eight meetings.

## 2. Reliability

According to Brown (2003:19), reliability is has to be done with accuracy of measurement. This kind of accuracy was reflected in obtaining the similar results when measurement was repeated on different occasions, or with different instruments, or with different persons. The characteristic of reliability was sometimes termed consistency. It means that the test was reliable when an examiner's results were consistent on repeated measurement. The researcher used inter-rater reliability to find out reliability of the test. The inter-rater reliability is a measure of reliability used to assess the degree to which different judges or raters agree in their assessment decisions (www.uni.edu/chfasoa/reliabilityandvalidity). The researcher then describes the scale of the reliability of test by comparing the score of the student's test of both raters with Cronbach alpha, after
calculating in SPSS with the Cronbach alpha the researcher finds out the reliability scale of the test, following the result:

The criteria of reliability is if the score of Cronbach alpha >0.6 means that the test is reliable. Following the result of the SPSS analyze of Cronbach Alpha.

The Cronbach alpha result of pre-test score given by rater 1 and rater 2 is:

Reliability Statistics

| Cronbach's <br> Alpha | N of Items |
| ---: | ---: |
| .597 | 2 |

The Cronbach alpha result of post-test score given by rater 1 and rater 2 is:

## Reliability Statistics

| Reliability Statistics |  |
| :---: | ---: |
| Cronbach's <br> Alpha | N of Items |
| .040 | 2 |

Both of table above show that the test was reliable, and the reliability was high. The reliability category can be seen as follows (Heaton, 1988:164):

1. $0.0-0.20=$ reliability is low
2. $0.21-0.40=$ reliability is sufficient
3. $0.41-0.70=$ reliability is high
4. $0.71-1.0=$ reliability is very high

## G. The Technique of Data Analysis

In analyzing the data, the writer used scores of pre-test and posttest of experimental and control class. This score was analyzed statistically. In this research the researcher used these formulas:
a. Independent sample t-test

Hartono (2009: 208) said that to find out whether or not there is a significant difference between two or more variables can be analyzed by using independent sample t-test. Gay (484) added that the t-test for independent sample is used to determine whether or not there is probably a significant difference between the means of two independent samples.

In this research, the data were analyzed by using SPSS 16.0 version. The T-table was employed to see whether or not there is a significant difference among the mean scores both of experimental and control class. Statistical hypothesis:

1. $\mathrm{H}_{0}=\mathrm{t}_{0}<\mathrm{t}$-table
2. $\mathrm{H}_{\mathrm{a}}=\mathrm{t}_{0}>\mathrm{t}$-table

## b. Effect Size

According to Pallant (2005:199), effect size is the strength of the difference between groups or the influence of independent variable. There are a number of different effect size statistics, the most commonly
used being eta squared. Eta squared can range from 0 to 1 and represents the proportion of variance in the dependent variable that is explained by the independent (group) variable. The formula for eta squared is as follows:

$$
\eta^{2}=\frac{t^{2}}{t 2+(N 1+N 2-2)}
$$

Where :
$\eta^{2}=$ eta squared,
$\mathrm{t}^{2}=\mathrm{to}$,
$\mathrm{N}_{1}=$ Number of students in experimental class
N2 = Number of students in control class

