III. RESEARCH METODOLOGY

This chapter discusses about the methods of research will be used in this study, such as: research design, population and sample, data collecting technique, research procedures, analyzing the data, data analysis, hypothesis testing.

3.1 Research Designs

This quantitative research was conducted in order to know whether there is influence of students' speaking ability after being taught through storytelling or not. *One-Group pre-test and Post-test design* was used to this research because the writer used one class as the experimental class. The treatment was conducted three times by using narrative text. The writer conducts pretest, treatment, and posttest. Here is the illustration of one group pretest posttest design

$$T1 \quad X \quad T2$$

Where:

T1: Pretest

X: Treatment

T2: Posttest

(Setiyadi, 2004: 40)

There are several reasons for choosing one group pretest-posttest design to be employed in the research. This design is chosen since it is not feasible to apply true experimental design. The sample of the research is chosen randomly. Thus, one group pretest-posttest design is chosen. Besides, it is impossible to involve control group in the research because of the limitation of time and cost which also became consideration.

3.2 Population and Sample

The population of this research is the students of the first year of SMAN 10 Bandar Lampung in 2012. There are eight classes. The writer chose one class randomly by using simple random sampling. And writer chose X6 as the sample. The number of students in the class is 30 students. The rasearcher test all the students in class X6 one by one. This research was conducted 5 meetings, which is 1 meeting for conducting pretest, 3 meetings for conducting treatments, and 1 last meeting for conducting posttest and distributing the questionnaires.

3.3 Data Collecting Technique

This research used speaking test in form of collecting the data. Every student had his/ her turn to stand in front of class and to tell story. The first storytelling became as pre-test and then the writer who acted as the teacher taught speaking through storytelling as the treatment and the last, the writer would ask the students to stand in front of class and performed storytelling.

1. Pretest

This is done before presenting the treatment to know how far the students' ability in speaking. The writer administers the pretest to all of the students. The researcher gave 3 options of story and the students will chose one of the stories then the researcher recorded the students' performance.

2. Treatment

This is done after pretest to teach the students speaking through storytelling. There will be three times of treatments. The researcher will treat the students until they can reach the objectives.

3. Posttest

This is done after the treatment to know how far the students master the material given by the writer. The test is designed to measure the increase of the students' speaking ability after treatments are given. The writer will administer the posttest to all of the students by recording them one by one.

4. Questionnaire

This step is done after the posttest, to know the students' responds towards storytelling technique in teaching speaking.

3.4 Research Procedures

The material is based on the following procedures.

1. Selecting the instrument material. The instrument is chosen from Students' book.

2. Determining the population and sample of the research: the sample of the research is determined through simple random sampling. It means that the sample is selected randomly by using lottery.

3. Administering pretest. The writer asks the student to stand in front and storytelling to know the students' basic speaking ability. This step, the writer uses video recorder to record all the activities done by students.

4. Giving treatment. The writer gives three times treatments by using narrative text.

5. Conducting Post-test. The posttest is aimed to find out the students' speaking ability given the instruments which is used as their speaking technique.

6. Giving the questionnaire.

3.5 Criteria of Evaluating Students' Speaking

The form of the test is subjective test since there is no exact answer. In this test the researcher used inter-rater to assess students' performance, the performances were given score and recorded together by the researcher and English teacher. The rater gave the score by recording the students' performances. The researcher recorded the students' utterances because it helped the raters to evaluate more objectively. The test of speaking was measured based on two principles, reliability and validity.

3.5.1 Reliability

Reliability refers to extend to which test is consistent in its score and gives us an indication of how accurate the score tests are. The concept of reliability stems from

the ideas that no measurement is perfect even if we go to the same scale there will always be differences.

The statistical formula for counting the reliability is as follow:

Formula:

$$R = 1 - \left(\frac{6(\sum d^2)}{N(N^2 - 1)}\right)$$

R   : Reliability

N   : Number of Students

D   : The different of Rank Correlation

1-6   : Constant Number

After finding the coefficients between raters, the researcher then analyze the coefficient reliability with standard reliability below:

  a. A very low reliability   (range from 0.00 to 0.19)

  b. A low reliability   (range from 0.21 to 0.39)

  c. An average reliability   (range from 0.40 to 0.59)

  d. A high reliability   (range from0.60 to 0.79)

  e. A very high reliability   (range from 0.80 to 0.100)

  Slameto (1998: 147)

After calculating the data, the result of reliability can be seen in following tables:

Raters reliability

Reliability	pretest	Posttest	Criteria
	0.86	0.99	Very high reliability

From the criteria of the reliability and the calculating above, it can be concluded that the reliability of the rater is very high. it means that the first raters' way of scoring was similar to the researchers'. They had almost the same scoring system.

3.5.2 Validity

Validity refers to the extent to which the test measures what was intended to measure. This means that it relates directly to the purpose of the test. Content of validity, the test is a good reflection of what has been taught and the knowledge which the teacher wants her students to know. Content of validity can best be examined by the table of specification (shohamy, 1957: 74). Construct validity concerns with whether the test is actually in line with the theory of what it means to the language (shohamy, 1985:74) that is being measured. It would be examined whether the test actually reflect what it means to know a language. It means that the test measured certain aspect based on the indicator.

3.6Instrument of The Research

In getting the data, the researcher uses two kinds of instruments. The instruments are the speaking test and the questionnaire.

3.6.1 Speaking Test

The researcher conducted speaking test into 4 sections which are pretest, treatments, posttest, and giving the questionnaires. The pretest, posttest, and distributing the questionnaires were conducted one time and the treatments were conducted 3 times with 3 narrative stories, they are *timun emas, bawang merah bawang putih and queen aji bidara putih*. The materials are narrative short story which was taken from students' handbooks. The researcher asked the students to speak clearly since the students' performance is being recorded during the test. The form of the test was subjective test since there is no exact answer, the teacher gave the score of the students' speaking ability based on the oral rating sheet provided. The teacher assessed the students concern on five aspects namely pronunciation, vocabulary, fluency, grammar, and comprehension. In the test the researcher used inter rater, that was the researcher and the English teacher. In evaluating the students' speaking scores, the researcher and other rater, which is the class teacher, listened to the students' record and used the oral English. The researcher recorded the students' utterance because it helps the raters to evaluate more objectively. Rating sheet modified from Harris (1974:84). Based on the oral rating sheet, there are five aspects to be tested namely pronunciation, vocabulary, fluency, grammar, and comprehension. Here are the rating scales.

Pronunciation

 5. Has few traces of foreign accent

4. Always intelligible though one is conscious of a definite accent.

3. Pronunciation problems necessitate concentrated listening occasionally lead to miss understanding.

2. Very hard to understand because of pronunciation problems must frequently be asked to repeat.

1. Pronunciation problems to serve as to make speech virtually unintelligible.

Grammar

5. Make few (if any) noticeable errors of grammar of word order.

4. Occasionally makes grammatical and/ or word order which do not, however, obscure meaning.

3. Make frequent errors of grammar and word order errors, obscure meaning.

2. Grammar and word orders make comprehension difficult must often rephrase sentences and/ or restrict him to basic pattern.

1. Errors in grammar and word order to severe as to make speech virtually unintelligible.

Vocabulary

5. Use of vocabulary and idioms is virtually that of native speaker.

4. Sometimes uses inappropriate terms and / or must rephrase ideas because of lexical inadequacies.

3. Frequently uses the wrong words, conversation somewhat limited because of inadequate vocabulary.

2. Misuses of words and very limited vocabulary make comprehension quite difficult.

1. Vocabulary limitation to extreme as to make comprehension virtually impossible.

Fluency

5. Speed as fluent and effortless as that of native speakers problems.

4. Speed of speech seems to be slightly affected by language problems.

3. Speed and fluency are rather strongly affected by language problems.

2. Usually hesitant, often forced into silence by language problems.

1. Speech is as halting and fragmentary as to make conversation virtually impossible.

Comprehension

5. Appears to understand everything without difficulty.

4. Understand nearly everything at normal speed although occasionally repetition maybe necessary.

3. Understand most of what is said at lowers that normal speed with repetition.

2. Has great difficulty following what is said. The students can comprehend only "social conversation" spoken with frequent repetition.

1. Cannot be said understand even simple conversation of English.

The score of each point was multiplied by four, so the highest score is 100.

Here is the identification of the scores.

If the students get 5, so 5 x 4 = 20

get 4, so 4 x 4 = 16

get 3, so 3 x 4 = 12

get 2, so 2 x 4 =8

get 1, so 1 x 4 = 4

For example:

A student gets 3 in pronunciation, 4 in vocabulary, 4 in fluency, 3 in grammar, and 4 in comprehension. Therefore, the student's total score will be:

Pronunciation   3 x 4= 12

Vocabulary   4 x 4= 16

Fluency   4 x 4= 16

Grammar   3 x 4= 12

Comprehension   4 x 4= 16

Total   72

It means he gets 68 for speaking

The score of speaking based on the five components can be compared in the percentage.

Scoring sheet of Speaking:

Table: Linguistic Evaluation Form of Story Telling

Student' code	Pronunciation	Grammar	Fluency	Vocabulary	Comprehension	Total Score
1.AAI						
2.BFH						
3.DAK						
4.TOP						
5.RTS						

3.6.2 Questionnaire

Giving questionnaire was conducted at the last time after conducting pretest, treatments, and posttest. The researcher distributed the questionnaire in the classroom. The researcher used questionnaire to know the students' respond toward storytelling technique. There were 10 kinds statements that was filled out by the students. Each of statements is related to the storytelling technique. To score the questionnaire, the researcher used the guidelines from Osgood et al.(1957). There were 5 options of scoring the questionnaire. They are "Strongly Agree/SA" scored 5, "Agree/S " scored 4, "Neutral/BS" scored 3, "Disagree/TS" scored 2 and "Strongly Disagree/STS" scored 1.

3.7 Analyzing the Data

The writer analyzes the data by comparing the average score (mean) of the pretest and posttest to know whether there is an influence of students' speaking ability through storytelling technique.

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

Where:

x: mean

$\sum$x: total score

N: number of students

3.8 Data Analysis

In order to see whether there is an improvement of students' speaking ability, the writer examines the students' score using these following steps:

1. Scoring the pretest and posttest.

2. After getting the raw score, the writer tabulates the results of the test and calculating the score of the pretest and posttest. Then the writer uses SPSS to calculate mean of pretest and posttest to see whether there is an influence or not after the students are taught by using storytelling.

3. Drawing conclusion from the tabulated result of the pretest and posttest. The writer uses statistical computerization i.e. repeated measures T-test of Statistical Package for Social Sciences (SPSS) for windows version 15 to test whether there is an influence or not. The writer uses this formula:

3.9 Hypothesis Testing

Hypothesis of this research is:

There is an influence of students' speaking ability after the students are taught by storytelling technique. The hypothesis testing is used to prove whether the hypothesis proposed in this research is accepted or not. The hypotheses are analyzed by using repeated measures T-test of Statistical Package for Social Sciences (SPSS) for windows version 15. The writer uses the level of significance 0,05 in which the hypothesis is approved if sign < p. it means that the probability of error in the hypothesis is only 5%.

H_0 : There's no influence

H_1 : There's an influence

If $P < 0,05$ H_1 is accepted

If $P > 0,05$ H_0 is accepted