

III. RESEARCH METHOD

This Research was intended to find out whether Three-Step Interview can be used to increase students' speaking achievement or not. This chapter included the research design, the population and sample, data collecting technique, research procedure, criteria for evaluating students' speaking, reliability, and validity of the instrument, speaking test, data analysis, and hypothesis testing

3.1 Research Design

This research was quantitative research. It was carried out to see and find out the result the use of song to improve students speaking ability. In conducting the research, the researcher used time series design by giving different topic of songs in every treatment and every test. The researcher used one class where the students were been given, three times treatment and three times post-test. The research design can be represented as follows:

$$X_1T_1X_2T_2X_3T_3$$

In which:

T1 : Post test 1

T2 : Post test 2

T3 : Post test 3

X1 : Treatment 1

X2 : Treatment 2

X3 : Treatment 3

(Hatch and Farhady, 1982:24)

3.2 Population and Sample

The population of the research was the students of the second year students at SMA N 5 Bandar Lampung that consisted of six classes, and class XI science 5 was taken as the sample. The sample of the research has been choose randomly from five classes by using lottery because the participant have similar chance to be chosen and in order to avoid the subjectivity in this research.

3.2 Data Collecting Technique

In collecting the data, the researcher used:

a. Treatments

The treatments conducted in three times. One treatment was 2 x 45 minutes of each meeting. The researcher presented the topics of expression felling. There were three title about song. First, My First love. Second, A Thousand Years . Third, How do I Live Without You. The topic was based on second semester of the second year students.

b. Posttest

The researcher administered the post test was taken 90 minutes. The purpose of this test was to know the students' increase in speaking ability after the research gave the treatment by using pair work activities in English song.

3.4 Research Procedure

The procedure of the research as followed:

1. Selecting Speaking material

In selecting the speaking material the researcher used the syllabus of the second years of Senior High School of SMAN 5 Bandar Lampung curriculum or KTSP (an English Operational Curriculum which arranged and applied by each education unit).

2. Determining the Instruments of the Research

The instrument in this research is speaking test. The writer conducted the speaking test for post-test, this test aimed at gaining the data is the students' speaking achievement score after the treatment by using pair work activities in English song. In achieving the reliability test, inter-rater reliability has been used in this research. The first rater was the researcher and the second rater was the English teacher. Both of them discussed and shared ideas of the speaking criteria in order to obtain the reliable result of the test. Construct validity, in this research the writer focused on speaking achievement by using pair work activities in English

song. Those topics were the representative of speaking materials of School Based Curriculum or KTSP.

3. Determining the Population and Sample

The population of this research was the second grade of SMA N 5 Bandar Lampung. There were five classes and XI science 5 was taken as sample. The sample was selected using sample probably sampling through lottery. The class chosen was science class consisting of 35 students.

4. Conducting Treatment

The researcher gave treatments using pair work activities in English song. The treatments were done in three meetings in which 90 minutes that conducted three different topics in every meeting. In selecting the material the researcher used the syllabus of the second year student of Senior High School students Based on Curriculum or KTSP. And the next, the researcher asked the students for doing cooperatively with their partner. The procedure of teaching speaking by using pair work activities as follows:

- a. Pre – Activities
- b. While – Activities
- c. Post – Activities

5. Conducting the Posttest

The researcher administered the post – test after treatment. It aimed to know the progress of students' speaking achievement after being given the treatment using pair work activities in English song. Based on the design of this research that is time series design, post – test conducted in three times, after each meeting or after each treatment. The researcher used a subjunctive test in oral test. Furthermore,

the researcher gave different topics in every test. The test was done orally and directly. The researcher asked the students to make some questions related to the topic, after that the students share their arguments by using interview practices. The teacher called each pair one by one in front of the class to perform about their discussion. The researcher asked the students to speak clearly since their voice was recorded during the test.

6. Analyzing the Data

After collecting the data referring the rating scales namely, pronunciation, fluency, and comprehensibility, then, analyzing, interpreting, and concluding the data gained were done.

First, the data, in form of score, gained from post test were tabulated and calculate inter-rater reliability. *Then*, calculate minimal score, maximal score, and mean of the post test and its standard deviation. *Repeated Measures T-test (statistical package for social science) or paired sample T-test* was used to draw the conclusion. The comparison of two means counted using Repeated Measures T-test would tell us whether students speaking ability can improve significantly. *Finally*, The data were compute through SPSS version 17.0 that shown two tail significance for equal variances as the value of significance.

3.5 Criteria for Evaluating Students' Speaking

The form of the test was subjective test since there was no exact answer. In this test the researcher used inter-rater to assess students' performance. The performance were given score and recorded together by the researcher and the English teacher. The rater gave the score by record the students' performance. The

researcher recorded the student utterances because it helped the raters to evaluate more objectively. The test of speaking was measured based on two principles, reliability and validity.

3.6 Reliability

Reliability refers to extend to which test was consistent in its score and gave us an indication of how accurate the score test are. The concept of reliability stems from the ideas that no measurement is perfect even if we go to the same scale there was always be differences.

To be ensure the reliability of score and to avoid the subjectively of the researcher, inter-rater reliability applied in this research. Inter-rater reliability used when score independently of estimated by two or judge. To achieve such reliability, in judging the students' speaking performance. The researcher, used a speaking criteria based on Harris (1974). The focus of speaking skills that have been asses are: pronunciation, fluency, comprehensibility, vocabulary and grammar. And second rater in using the profile to give judgment for each students' speaking performance. The second rater was English teacher who has experience in rating students' speaking. This was means to provide consistent and fair judgment.

The statistical formula for counting the reliability is as follow :

$$R = \frac{1 - \frac{6 \cdot (d^2)}{N \cdot (n^2 - 1)}}{1}$$

R = Reliability

- N = Number of Students
- D = the different of rank correlation
- 1-6 = Constant number

(Shohamy, 1985)

After finding the coefficient between raters, researcher then analyzed the coefficient of reliability with the standard of reliability below :

- a. A very low reliability (range from 0.00 to 0.19)
- b. A low reliability (range from 0.20 to 0.39)
- c. An average reliability (range from 0.40 to 0.59)
- d. A high reliability (range from 0.60 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 the reliability can be sen 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 rater's way of scoring was similar to the researcher's. They had almost the same scoring system.

3.7 Validity

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

The researcher has to compare the test with table of specification to know whether the test was good reflection of what has been taught and the knowledge by the teacher wants the students to know. A table of specification is an instrument that helps the test constructor plans the test. The table of specification:

Aspect	Theories
Pronunciation	It refers to the ability to produce easily comprehensible articulation. (Syakur,1987)
Vocabulary	Vocabulary means the appropriate diction which is used in communication(Syakur,1987)
Fluency	Fluency refers to the ase and speed of the flow of the speech(Harris, 1974)
Comprehension	It difines that comprehension or oral communication that requires a subject to respond to speech as well as initiate it.(Syakur, 1987)
Grammar	It need for students to arrange a correct sentence in conversiation (Syakur, 1987)

3.8 Speaking Test

The researcher conducted speaking test, which lasted 90 minutes. In conducting the test the researcher provided a topic. Each group has to make some questions that the test was done orally directly, the teacher divided the students work in pair. The teacher called the group one by one in front of the class to perform their discussion about the song. The researcher asked the students to speak clearly since the students' performance was recorded during the test. The material for test was taken from the questions gave and their handbook. The form of the test was subjective test there was no exact answer. The teacher gave the score of the students' speaking ability based on the oral rating sheet provide. The teacher assessed the students concern on five aspect namely, pronunciation, Grammar, Vocabulary, fluency, and comprehensibility. In the test the researcher used the inter rater, that were the researcher and the English teacher. In evaluating the students' speaking scores, the researcher, and another 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). Based on the oral rating sheet, there are three aspects to be tested namely, pronunciation, grammar, vocabulary, fluency, comprehensibility. Here 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 and occasionally lead to misunderstanding
	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 or words order.
	4	Occasionally makes grammatical and/ or word order which do don't, however , obscure meaning
	3	Make frequent errors of grammar and words errors obscure meaning
	2	Grammar and word orders make comprehension difficult must often rephrase sentence and / or restrict him to basic pattern
	1	Errors grammar and word order to serve 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 lexical inadequacies.
	3	Frequently uses the wrong words, conversation somewhat limited, vocabulary
	2	Misues of words and very limited to extreme by language problems
	1	Vocabulary limitation extreme as to make comprehension virtually impossible.
Fluency	5	Speed as Fluent and effortless as that of native speaker 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 forces 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 to understand even simple conversation of English

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

Here is identification of the score.

If students get :

5, so $5 \times 4 = 20$
4, so $4 \times 4 = 16$
3, so $3 \times 4 = 12$
2, so $2 \times 4 = 8$
1, so $1 \times 4 = 4$

For example :

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

Pronunciation $4 \times 4 = 16$

Vocabulary $3 \times 4 = 12$

Fluency $3 \times 4 = 12$

Grammar $4 \times 4 = 16$

Comprehension $4 \times 4 = 16$

Total $= 72$

It means that the student gets 72 for speaking.

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

3.9 Data Analysis

Data analysis is a process for organizing the data in order to get the explanation form. The researcher will analyze the data by using these following steps:

1. Transcribing the Students' Speaking

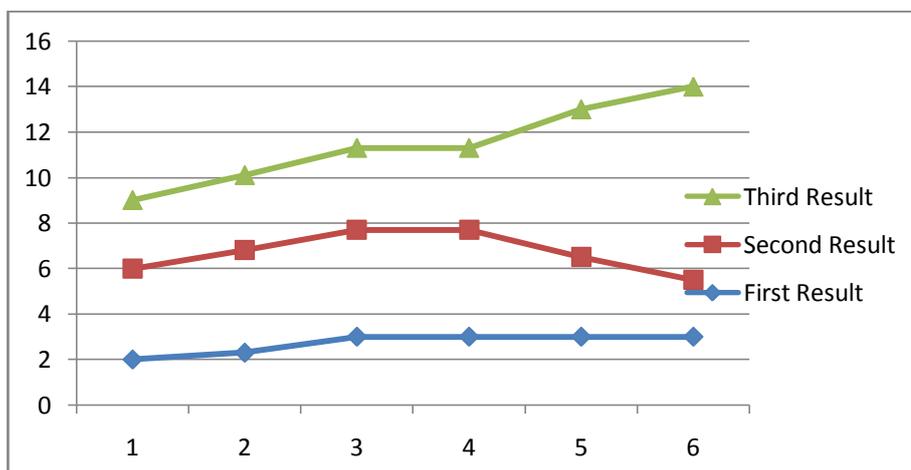
The researcher recorded the students' spoken, the researcher transcribed the record into written form.

2. Scoring Data

Each rater scored the students speaking performance in post test. Then, the scores between two raters are taken the average to be the final score that would be analyzed statistically by using Repeated Measures T-test

3. Drawing Conclusion

The researcher was calculated the data such as minimum score, maximum score, mean score, and standard deviations are counted. To draw conclude the means of students score in posttest was compared to see the value of significance by using Descriptive statistics of SPSS version 17.0. Hatch and Farhady (1982) states that there were three probabilities of analysis result. The graphic below:



3.10 Hypothesis Testing

Hypothesis testing of this research:

- H_0 : There is no effect of students speaking achievement after being taught by using English English song in pair work activity.
- H_1 : There is effect of students speaking achievement after being taught by using English English song in pair work activity.

The researcher used T-test in order to find out of treatment effect. The hypothesis was analyzed at significant level of 0.05 in which the hypothesis is approved if $Sign < \alpha$.