III. METHODS

This chapter discusses about the methods of the research, such as: research design, population and sample, research instruments, criteria of evaluating students' speaking, data collecting technique, research procedures, analyzing the data, data analysis, and hypothesis testing.

3.1 Research Design

The research was quatitative research. The aimed of this research was to find out whether there was possitive impact of using song on teaching speaking and to find out what the aspects of speaking that improved the most on students speaking ability after being taught by using popular English songs. The design in this research was one group pretest-posttest design. It means before the first treatment, pretest was carried out and after third treatmeant, a posttest was conducted. The research design is presented as follows:

<div align="center">

T1 X T2

</div>

T1   : Pre-test

T2   : Post-test

X   : Treatment (teaching speaking using popular English song)

(Hatch and Farhady, 1982:20 in Setiyadi 2006:44)

In conducting this research, the researcher used inter-rater reliability and computed the average score of the oral test from the pre-test and post-test.

3.2 Population and Sample

The population in this research was the first grade students of SMAN 14 Bandar Lampung. One class was taken as the sample of this research. In determining the experimental class the researcher used the simple random sampling technique by using lottery. So those all the first grade class got the same chance to be the sample. The sample of this research was class X, second semester in 2013/2014 academic year, the pre test and post test were administered in this class.

3.3 Data Collecting Technique

The purpose of the research was to gain the data of students' speaking ability score before the treatment (pretest) and after treatment (posttest). The students' performance was organized as transactional dialogue concerning on five aspects of speaking namely pronunciation, vocabulary, fluency, comprehension, and grammar. It based on the rating scale by Harris (1978: 84).

Table of rating scales

Aspects of speaking	Rating scales	Description
Pronunciation	5	Speech is fluent and effortless as that native speaker.

	4	Always intelligible though one is conscious of a definite accent.
	3	Pronunciation problems necessitate concentrated listening and Occasionally lead to understanding.
	2	Very hard to understand because of pronunciation problem most Frequently be asked to repeat.
	1	Pronunciation problem so severe as to make speech unintelligible.
Vocabulary	5	Use of vocabulary and idiom virtually that is of native speaker.
	4	Sometimes use inappropriate terms and must rephrase ideas, because of inadequate vocabulary.
	3	Frequently use the wrong word, conversation somewhat limited because of inadequate vocabulary.
	2	Misuse of words and very limited vocabulary make comprehension quite difficult.
	1	Vocabulary limitations so extreme as to make conversation virtually impossible.
Fluency	5	Speech is fluent and effortless as that of native speaker.
	4	Speed of speech seems rather strongly 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 so halting and fragmentary as to make conversation virtually impossible.
Comprehension	5	Appear to understand everything without difficulty.
	4	Understand nearly everything at normal speed although occasionally repetition may be necessary.
	3	Understand most of what is said at slower that normal speed with repetition.
	2	Has great difficulty following what is said can comprehend only" social conversation" spoken slowly and with frequent repetition.
	1	Can not be said to understand even simple conversation in English.
Grammar	5	Grammar almost entirely in accurate phrases.

	4	Constant errors control of very few major patterns and frequently preventing communication.
	3	Frequent errors showing some major patterns uncontrolled and causing occasional irritation and misunderstanding.
	2	Few errors, with no patterns of failure.
	1	No more than two errors during the dialogue.

3.4 Research Procedures

a) Selecting Speaking Material

In selecting the speaking material, the researcher used the syllabus of the first year of SMA student based on school based curriculum or KTSP, which was the curriculum used by the school.

b) Determining the Instruments of the Research.

The instrument in this research was speaking test. The aim of this research was to find out the improvement of students' speaking ability. The researcher conducted the speaking test for the pretest and posttest. The purpose of these test was for gaining the data. The data was the students' speaking ability score before and after the treatment in performing paired conversations in terms of transactional dialogue. The test coverss on five aspects of speaking namely pronunciation, vocabulary, fluency, comprehension and grammar.

c) Conducting Pre-test.

Pretest was given before the treatment (teaching speaking by using popular English song). The test was speaking test in the forms of transactional dialogue. The material

of the test was related to the KTSP curriculum which is suitable with their level. Pretest was administered to the students before the treatment of teaching speaking through popular English song, to find out how far the competence of the students in speaking skill before the treatment. Meanwhile, before administered pretest, the researcher explained about the topic that would be tested. The test was focused on oral test. The researcher explained generally the material and asked the students to make a group that consisted of two person. The researcher gave the students situational dialogue, gave the topic to discuss and then they perform it in front of class. In performing the test, the students were asked to speak up clearly since the students' voice was recorded. The test was held for 90 minutes. The scoring system based on the rating scale by Harris.

d) Giving Treatment.

The researcher present the material for treatment in experimental group by using popular English song. The students' would commanded by teacher to respond or answer the questions. There was three times treatments in this research. Each treatment was held for 90 minutes. And then, the researcher asked the students to make a group discussion that consist of two person. The procedure of teaching speaking through popular English song as follows:

a. Pre Activities

b. While Activities

c. Post Activities

e) Conducting Post-test.

The posttest was administered after treatment. It was to found out the progress of the students' speaking ability after being given the treatment using popular English song. The scoring system was based on the rating scale by Harris.

In conducting the posttest the students' was provided some topics to take a conversation in pairs. The test was oral test, and directly the teacher called the group one by one to come in front of the class to perform their dialogue or to answer the question from the teacher in order to knew how far the improvement on students' speaking ability after being taught through popular English song. The students' were asked to speak clearly since their voice was recorded during the test. The form of the test was subjective test since there was no exact answer.

   f)   Analyzing, Interpreting and Concluding The Data.

After collecting the data that was students' utterances in performing the dialogue, the recorded data was listened carefully by the two raters. The data were analyze was referring the rating scale namely pronunciation, vocabulary, fluency, comprehension and grammar.

First, scoring the pretest and posttest, and then tabulating the result of the test and calculating the mean of the pretest and posttest for experimental class. Finally, drawing the conclusion from the result of the pretest and post test, that used *Repeated Measures T-Test of SPSS (statistical package for social science)* version 17.0 for windows. The

data was gained from one group and the researcher intends to find out whether there was improvement of students' speaking ability.

3.5 Research Instruments

The instrument in this research was *speaking test.* The researcher was conducted the speaking test for the pretest and posttest. The purpose of the test was for gaining the data. The data was the students' speaking ability scores before and after the treatment in performing paired conversation in terms of transactional dialogue. The test focused on five aspects of speaking namely pronunciation, vocabulary, fluency, comprehension and grammar.

3.6 Criteria for Evaluating Students' Speaking Ability

The consideration of criteria for evaluating students' speaking ability was based on the oral rating sheet from Harris (1974; 48). There are five aspects to be tested: pronunciation, vocabulary, fluency, comprehension, and grammar.

In evaluating the students' speaking scores, the researcher and the second rater listened to the students' recorded voice. The students' utterance was recorded because it can help the raters to evaluate more objectively. Based on the oral rating sheet from Harris (1974:84).

3.1 Table of specification

Aspects of speaking	Rating scales	Description
Pronunciation	5	Speech is fluent and effortless as that native speaker.

	4	Always intelligible though one is conscious of a definite accent.
	3	Pronunciation problems necessitate concentrated listening and Occasionally lead to understanding.
	2	Very hard to understand because of pronunciation problem most Frequently be asked to repeat.
	1	Pronunciation problem so severe as to make speech unintelligible.
Vocabulary	5	Use of vocabulary and idiom virtually that is of native speaker.
	4	Sometimes use inappropriate terms and must rephrase ideas, because of inadequate vocabulary.
	3	Frequently use the wrong word, conversation somewhat limited because of inadequate vocabulary.
	2	Misuse of words and very limited vocabulary make comprehension quite difficult.
	1	Vocabulary limitations so extreme as to make conversation virtually impossible.
Fluency	5	Speech is fluent and effortless as that of native speaker.
	4	Speed of speech seems rather strongly 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 so halting and fragmentary as to make conversation virtually impossible .
Comprehension	5	Appear to understand everything without difficulty.
	4	Understand nearly everything at normal speed although occasionally repetition may be necessary.
	3	Understand most of what is said at slower that normal speed with repetition.
	2	Has great difficulty following what is said can comprehend only" social conversation" spoken slowly and with frequent repetition.
	1	Can not be said to understand even simple conversation in English.
Grammar	5	Grammar almost entirely in accurate phrases.
	4	Constant errors control of very few major patterns and frequently preventing communication.
	3	Frequent errors showing some major patterns uncontrolled and causing occasional irritation and misunderstanding.
	2	Few errors, with no patterns of failure.
	1	No more than two errors during the dialogue.

3.6.1 Validity

A test can be considered valid if the test measure the object to be measured and suitable with the criteria (Hatch and Farhady, 1982: 250). According to the Hatch and Farhady (1982: 281) there are two basic types of validity; content validity and construct validity. Extend validity of the pretest and posttest in this research relate to the content and the construct validity of the test.

Content validity is concerned with whether the test is sufficiently representative and comprehensive for the test. In the content validity, the material was given suitable with the curriculum. Content validity is the extend to which a test measures a representative sample of the subject meter content, the focus of content validity is adequacy of the sample and simply on the appearance of the test. It is correlated the test with the educational goal stated on 2006 English curriculumn and the syllabus for the first year of SMA's students. It means in pretest and posttest the material suitable with their level in first grade of senior high school. Therefore, since the test instrument is conducted to get the data of the students' speaking ability, the content validity of the test was conducted by including authentic materials, in this case, the researcher used part of song as a material.

Construct Validity is concerned with whether the test is actually in line with the theory of what it means to know the language that is being measured, it will be examined whether the test actually reflect what it means to know a language. In this research the researcher focused on speaking ability in forms of interpersonal dialogue. It means that the pretest and posttest measured certain aspect based on the indicator. It is examined

by referring the aspect that measured with the theories of the aspect namely, pronunciation, vocabulary, fluency, comprehension, and grammar. A table of specification was an instrument that helps the raters plan the test.

3.2 The table of specification

Aspects of speaking	Rating scales	Description
Pronunciation	5	Speech is fluent and effortless as that native speaker.
	4	Always intelligible though one is conscious of a definite accent.
	3	Pronunciation problems necessitate concentrated listening and Occasionally lead to understanding.
	2	Very hard to understand because of pronunciation problem most Frequently be asked to repeat.
	1	Pronunciation problem so severe as to make speech unintelligible.
Vocabulary	5	Use of vocabulary and idiom virtually that is of native speaker.
	4	Sometimes use inappropriate terms and must rephrase ideas, because of inadequate vocabulary.
	3	Frequently use the wrong word, conversation somewhat limited because of inadequate vocabulary.
	2	Misuse of words and very limited vocabulary make comprehension quite difficult.
	1	Vocabulary limitations so extreme as to make conversation virtually impossible.
Fluency	5	Speech is fluent and effortless as that of native speaker.
	4	Speed of speech seems rather strongly 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 so halting and fragmentary as to make conversation virtually impossible .
Comprehension	5	Appear to understand everything without difficulty.
	4	Understand nearly everything at normal speed although occasionally repetition may be necessary.
	3	Understand most of what is said at slower that normal speed with repetition.
	2	Has great difficulty following what is said can comprehend only" social conversation" spoken slowly and with frequent repetition.

	1	Can not be said to understand even simple conversation in English.
Grammar	5	Grammar almost entirely in accurate phrases.
	4	Constant errors control of very few major patterns and frequently preventing communication.
	3	Frequent errors showing some major patterns uncontrolled and causing occasional irritation and misunderstanding.
	2	Few errors, with no patterns of failure.
	1	No more than two errors during the dialogue.

The scores of each point are multiplied by four;

Hence, the highest score was 100

Here the identification of the scores

If the students get   5, so5 X 4 = 20

4, so 4 X 4 = 16

3, so 3 X 4 = 12

2, so 2 X 4 = 8

1, so 1 X 4 = 4

For instance:

A student got 4 in Pronunciation, 3 in Vocabulary, and 3 in Fluency, 4 in comprehension and 3 in grammar.

Therefore, the student's total score will be:

Pronunciation   4 X 4 = 16

Vocabulary   4 X 4 = 12

Fluency   3 X 4 = 12

Comprehension   4 X 4 = 16

Grammar   3 X 4 = 12

Total   68

It means he or she got 68 for speaking.

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

follows:

Grammar   20%

Vocabulary   20%

Fluency   20%

Pronunciation   20%

Comprehension   20%

       Total   =   100%

3.3 Table of Rating Sheet Score

S's Codes	Pron. (1-20)	Fluen. (1-20)	Gram. (1-20)	Voc. (1-20)	Compr. (1-20)	Total (1-100)
1.						
2.						
3.						

3.6.2 Reliability

Reliability refers to extend to which the test is consistent in its score and gives us an

indication of how accurate the test score are (Shohamy, 1985:70). In achieving the

reliability of the pretest and posttest of speaking, *inter rater reliability* was used in this

study. The first rater is the researcher himself and the second rater is the English teacher

from SMAN 14 Bandar Lampung.

In achieving the reliability of pretest and posttest of speaking test, first and second raters discussed and put mind of the speaking criteria in order to obtain the reliable result of the test.

Figure of Interaction in Performance Assessment of Speaking Skills

Raters

⬇

Scale/Criteria   **Score**

⬇

Performance

⬆

Task

⬆

Students
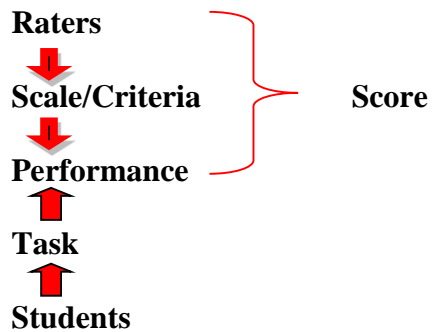
McNamara (1995)

Besides inter rater reliability that used in this research. The researcher also used the statistical formula for counting the reliability score between the first and second raters. The statistical formula of reliability is as follow:

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

R   = Reliability

N   = Number of students

D   = the different of rank correlation

1-6   = Constant number

After finding the coefficient between raters, the researcher 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 in Hayanti, 2010:38)

After calculating the data, the result of the reliability can be seen as the following table:

Rater's Reliability

	Pretest	Posttest	Criteria
Reliability	0.97	0.90	Very high reliability

From the calculating and the criteria of reliability above, it can be concluded that the reliability of the rater is high, in which it means that the way of the second's rater of scoring was similar to the researcher's. They have the same scoring system.

3.7 Data Analysis

To analyze the data of the students' mean score in the pretest and posttest, the researcher was computed them by using the formula as follows:

$$M = \frac{X}{N}$$

Notes:

M   = Mean (the average score)

X   = Students score

N = Total number of students

(Arikunto, 1999:68)

Then the mean of pre-test was compared to the mean of post-test to see whether popular English song has positive impact toward students' speaking ability. In order to find out whether the students get an improvement, the researcher used the following formula.

I=M2-M1

Notes:

I   = the improvement of students' speaking achievement.

M2   = the average score of post-test

M1   = the average score of pre-test

After the data were collected, the researcher treated the data by using the following procedures:

Putting the data of score of pretest (T1) and posttest (T2) on table below:

S' code	Pronunciation		Vocabulary		Fluency		Comprehension		Grammar		Total	
	R1	R2	R1	R2	R1	R2	R1	R2	R1	R2	R1	R2

1												
2												

Row data of oral test

No	Students' code	Rater 1		Rater2	
		Pre-test	Post-test	Pre-test	Post-test
1	A				
2	B				
3	C				
....					

3.8 Data Treatment

In order to find out the improvement of students' speaking ability after being taught by using popular English song, the researcher used statistical calculation to analyze the data using the statistical computation i.e. repeated measures T – Test of SPSS version 17.

According to Setiyadi (2006:168-169), using Repeated Measures T-Test for hypothesis testing has 3 basic assumptions, namely:

1. The data is interval or ratio

2. The data is taken from random sample in population (not absolute)

3. The data is distributed normally

3.9 Hypothesis Testing

The hypothesis testing was used to prove whether the hypothesis proposed in this research was accepted or not. The hypotheses were analyzed by using repeated measures T-test of Statistical Package for Social Sciences (SPSS) windows version 17. The researcher used the level of significance 0,05 in which the hypothesis was approved if $\alpha < 0,05$. It means that the probability of error in the hypothesis was only 5%.

The hypothesis testing stated as follow:

Ho : There is no significant difference on students' speaking score before and after pretest and posttest through popular English song. The criteria Ho is accepted if alpha level is higher than 0.05 ($\alpha > 0.05$).

H_1 : There is significant difference on students' speaking score before and after pretest and posttest through popular English song. The criteria H_1 is accepted if alpha level is lower than 0.05 ($\alpha < 0.05$).

And also

Ho : Vocabulary is not the most improve on students' speaking score before and after pretest and posttest through popular English song. The criteria Ho is accepted if alpha level is higher than 0.05 ($\alpha > 0.05$).

H1 : Vocabulary is the most improve on students' speaking score before and after pretest and posttest through popular English song. The criteria H_1 is accepted if alpha level is lower than 0.05 ($\alpha < 0.05$).