

III. RESEARCH METHODS

This part discussed about research design, population and sample, selecting speaking material, determining the instrument, determining population and sample, conducting pre test, conducting treatment, conducting post test, analyze the data, criterion for evaluating students' speaking, speaking test and data analysis.

A. The Research Design

This is a quantitative research to increase students' speaking ability. The researcher used one group pretest-posttest, experimental design. The writer is intended to find out whether there was a significant difference of the increase students' speaking ability before and after pre test and post test through board game. The researcher conducted pretest, treatment and posttest.

The researcher's design can be represented as follow:

T1	X	T2
T1		: pretest
T2		: posttest
X		: Treatment

(Setiyadi, 2004:4).

A pre test was administrated to find out students' speaking ability before the treatment. Afterward, the students were given three treatments by using board game. Eventually a post test is administrated to find out the students' speaking ability after being taught by board game.

B. Population and Sample

The population of this research was the fifth grade of SD Al- Azhar 1 Bandar Lampung. There are five classes of the fifth year. The sample was class Vb which consists of 20 students. The sample was selected by using sample probably sampling trough lottery drawing. It was applied based on the consideration that every student had the same opportunity to be selected and in order to avoid the subjectivity in the research (Setiyadi, 2006:39).

C. Data Collecting Technique

The research aimed at gaining data of the students' speaking ability score before the treatment (pretest) and after the treatment (posttest) in performing transactional dialogue concerns on five aspects of speaking namely pronunciation, vocabulary, fluency, comprehension and grammar based on the rating scale by Harris (1978:84) so, we can see whether there was a significant increase of students' speaking ability after being taught through board game.

In collecting data, the researcher will use the following steps:

1. Selecting Speaking Material

In selecting the speaking material, the researcher used the syllabus of the fifth year of elementary school based on school based curriculum or KTSP (an English

operational Curriculum which is arranged and applied by each education unit). The topic chosen tell about like and dislike in the form of transactional dialogue

2. Determining the Instrument of the Research

The instrument in this research is speaking test. The writer conducted the speaking test for the pretest and posttest, these test aimed at gaining the data that is the students' speaking ability score before the treatment and after the treatment in performing dialogue in forms of transactional dialogue before and after the treatment.

In achieving the reliability of the pretest and posttest of speaking, inter rater reliability was used in this study. The first rater was the researcher herself and the second rater was the English class teacher. The reason why the reseracher chose the English teacher was because she has completed her bachelor in english education and she has experience in tesching English and can profesionally rate the students' speaking. Both of them discussed and share ideas of the speaking criteria in order to obtain the reliable result of the test.

Construct validity, in this research the writer focuses on speaking ability in forms of transactional dialogue. The topic chosen was the representative of speaking materials of School Based Curriculum or KTSP as a matter of tailoring the lesson to students' need.

3. Determining Population and Sample

The population of this research was the fifth grade of SD Al-Azhar 1 Bandar Lampung. There are five classes and one class which will be taken as the sample.

The sample was selected using sample probably sampling through lottery drawing. The researcher took one class, which consist of twenty students. In this research, the researcher only took one class as a sample.

4. Conducting Pretest

Pretest was given before the writer applied the treatment to measure the increase of students' speaking ability before being taught through board game. The test was speaking test in the form of transactional dialogue. The material tested in form transactional dialogue. The material was tested related to based on school based curriculum or KTSP which is suitable for their level. Pretest was given to know how far the competence of the students in speaking skill before the treatment. The test was held in 80 minutes.

In selecting the speaking material the researcher used the syllabus of the fifth year of elementary school based on school based curriculum or KTSP (an English Operational Curriculum which is arranged and applied by each education unit) which is the latest curriculum used. The topic chosen tells about like and dislike

5. Conducting Treatment

After giving pretest to students, the researcher gave treatments using board game. Each treatment was hold in 80 minutes. The researcher presented the material for treatment in experimental class through board game. In selecting material the researcher used the syllabus of the fifth year of elementary school based on school based curriculum or KTSP (an English Operational Curriculum which is arranged

and applied by each education unit) which is the latest curriculum used by the school. In this research, the researcher will give three treatment

6. Conducting Posttest

Posttest was conducted to measure the increase of students' speaking ability after being taught through board game. The posttest was held in 80 minutes. The students were tested in pairs to make and perform a dialogue based on the topic. There were three options of topic given; like and dislike about food, like and dislike about sport, like and dislike about hobby. The students were given ten minutes for preparing their dialogue and 4-5 minutes to perform it. Their voices were recorded while they were performing the dialogue. The criteria in scoring were in terms of pronunciation, vocabulary, fluency, comprehension and grammar.

In selecting material the researcher used the syllabus of the fifth year of elementary school based on school based curriculum or KTSP.

The researcher administered posttest after the treatment. It aimed to see the development of students' speaking ability after using board game in speaking class. The form of the test is subjective test.

7. Analyzing the Data

After collecting the data, that was students' recorded utterance in performing the dialogue, the data were analyzed by referring to the rating scale namely speaking ability and then interpretation of the data was done

First, scoring the pretest - posttest, and then tabulating the result of the test and calculating the mean of the pretest and posttest. Repeated Measure T-Test used to

draw conclusion. The comparison of the two means counted using Repeated Measure T-Test tell us the significant increase of students' speaking ability. The data were computed through SPSS version 18. The hypothesis was analyzed at the significance level of 0.05 in which the hypothesis is approved is $\text{sig} < \alpha$.

D. Scoring Criteria of 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 asses students' performance. The rater was the researcher herself and their teacher. The rater gave the score by listening the record. The recording helps the raters to evaluate more objectively. The test of speaking was measured based on two principles, reliability and validity.

1. Reliability

Reliability refers to extend to which test is consistent in its score and gives us an indication of how accurate the tests score 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 diffenerence in our weight which are a result of the fact that measuring instrument is not perfect.

Inter-rater reliability of the pre-test and post-test was examined by using statistical measurement:

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

Notes:

R : Reliability.

N : Number of students.

d : The different of rank correlation.

1-6 : Constant number.

(Shohamy, 1985: 213)

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

- A. a very low reliability ranges from 0.00 to 0.19
- B. a low reliability ranges from 0.20 to 0.39
- C. an average reliability ranges from 0.40 to 0.59
- D. a high reliability ranges from 0.60 to 0.79
- E. a very high reliability ranges from 0.80 to 0.100

Slameto (1998:147) in Susan (2001:10)

After calculating the Data (see appendix 14 – 15), the result of reliability can be seen in following tables:

Inter-rater Reliabilit

	Pretest	posttest	Criteria
Reliability	0.94	0.95	Very high reliability

2. Validity

The validity of the pre and post speaking test of this research was related to face and construct validity. To get face validity, the instruction of speaking test was previously examined by advisor and colleagues until the test which is formed of instruction looks right and understandable. Construct validity concern with

whether the test is actually in the line with the theory of what it means to know the language. It means that the test measured certain aspect based on the indicator. The researcher had to compare the test with table of specification to know whether the test is a good reflection of what has been taught and knowledge by the teacher wants the students to know. A table of specification is an instrument that helps the tests constructor plans the test. The table of specification is as follow:

Aspect	Theories
Pronunciation	It refers to the ability to produce easily comprehensible articulation (Syakur 1987). Pronunciation refers to the intonation patterns (Harris 1974:81)
Vocabulary	Vocabulary means the appropriate diction which is used in communication (Syakur 1987). Vocabulary refers to the selection of words that suitable with content (Harris 1974:68-69)
Fluency	Fluency refers to the ease and speed of the flow of the speech (Harris 1974:81) Fluency can be defined as the ability to speak fluently and accurately. Signs of fluency include a reasonably fast speed of speaking and only a small numbers of pause. Brown (1997:4)
Comprehension	It defines that comprehension for oral communication that requires a subject to respond to speech as well as to initiate it. Syakur (1987)
Grammar	It is needed for students to arrange a correct sentence in conversation. (Syakur, 1987). It is students' ability to manipulate and distinguish appropriate grammatical form in appropriate ones. (Heaton, 1978:5).

E. Speaking Test

The researcher conducted speaking test which lasted 80 minutes. In conducting the tests the researcher provide a topic. Each pair has to make a dialogue based on

the topic given. The test was done orally and directly, the teacher called the pair one by one in front of the class to perform their dialogue. The researcher asked the students to speak clearly since the students' voice is being recorded during the test. The form of the test was subjective test, 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 concerning on five aspects namely pronunciation, vocabulary, fluency, comprehension and grammar. In the test the researcher used inter rater, the researcher herself and the English teacher.

In evaluating the students' speaking scores, the researcher and another rater listened to the students' record and used the oral English. The students' utterances were recorded to help raters to evaluate more objectively. Rating sheet was used for the research. Based on the oral rating sheet, there are four aspects to be tested namely; pronunciation, vocabulary, fluency, comprehension, and grammar. Here are the rating scales:

PRONUNCIATION

- 20 5 The students pronunciation is same as the native speakers.
- 16 4 It is easy to be understood though sometimes unclear
- 12 3 The pronunciation can be understood by the listener even though there is a difficulty
- 8 2 Pronunciation difficult to understand and often there is repetition
- 4 1 Pronunciation can not be understood by the listener

VOCABULARY

- 20 5 Use the vocabulary is appropriate to the material
- 16 4 The use of inappropriate words
- 12 3 Using the wrong word, conversation was rather limited because of inadequate vocabulary
- 8 5 A very limited vocabulary makes comprehension difficult
- 4 1 Vocabulary limitations so extreme to make a virtual conversation impossible.

FLUENCY

- 20 5 Fluently and easy as is done by native speakers.
- 16 4 Speed seems to be rather strongly influenced by the language problem
- 12 3 The speed and smoothness rather strongly influenced by the

- language problem
 8 2 There are a lot of repetition
 4 1 Speech is so halting and fragmentary to make conversation impossible virtua

COMPREHENSION

- 20 5 It is easy to understand by the listener.
 16 4 Easy to understand even though sometimes the repetition may be necessary
 12 3 Can be understood even though a bit difficult
 8 2 it can not be understood
 4 1 Can not be said to understand even simple conversation in English

GRAMMAR

- 20 5 Grammatically correct sentence seen from the pattern
 16 4 Bit errors in sentence patterns
 12 3 Usage pattern so that they can blame the wrong sentence meaning
 8 2 A few mistakes, with no pattern of failure
 4 1 incorrect grammar

The score of each point is multiplied by four;

Hence, the highest score is 100

Here is identification of the scores.

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

Pronunciation $4 \times 4 = 16$

Vocabulary $3 \times 4 = 12$

Fluency $3 \times 4 = 12$

Comprehension $4 \times 4 = 16$

Grammar $3 \times 4 = 12$

Total 68

It means he gets 68 for speaking

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

F. Data Analysis

In order to see whether there is significant increasing of students, speaking ability, the researcher examined the students' score using the following step. The first was scoring the pretest and posttest. The second was tabulating the score of the students' speaking result using rating scale.

The data of score of pretest (T1) and posttest (T2) can be seen on the table below:

Students' name	Aspect Of Speaking										TOTAL	
	Pronunciation		Vocabulary		Fluency		Comprehension		Grammar			
	R1	R2	R1	R2	R1	R2	R1	R2	R1	R2	R1	R2
A												
B												
$\sum N =$												

The table of score inter-rater reliability of pretest and posttest

no	Students' code	Rater 1		Rater 2	
		Pre-test	Post-test	Pre-test	Post-test
1	A				
2	B				
3	C				

The third was drawing conclusion from the tabulation of result of pre test and post test administered statistically analyzed the data using statistical computation i.e.

repeated measure T-Test of SPSS version 18 to test whether increase of students gain is significant or not.

G. Hypothesis Testing

The hypothesis testing is stated as follow:

There is a difference in students' speaking ability before and after pretest and posttest by board game.