CHAPTER III
RESERCH 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, analysis the data, criterion for evaluating student's speaking, speaking test, and data analysis.

A. Research Design

This is a quantitative research. The objective of this research is 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 picture. The researcher conducted pretest, treatments and posttest.

The research design can be represented as follow:

T1   X   T2

T1   : Pretest

T2   : Posttest

X   : Treatment (using picture media)

(Setiyadi, 2004:4)

A pretest was administered to find out students' speaking ability before the treatments. Afterword, the students were given three treatments by using picture media. Eventually, a

posttest was administered to find out the students' speaking ability after being taught picture media.

B. Population and Sample

The population of this research was the sixth grade of the MIN (Madrasah Ibtidaiyah Negeri) Panjang. There are 2 (two) classes of the sixth year. The population was selected by using sample probably sampling through lottery drawing. It was applied based on the consideration that every student has the same opportunity to be selected and in other to avoid the subjectivity in the research (Setiyadi, 2006:36).

C.Data

The research aimed at gaining data that was 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 could see whether there was a significant increase of students speaking ability being taught through picture media.

In collecting data, the researcher used the following steps:

1. Selecting Speaking Materials

In selecting the speaking material the researcher used the syllabus of the sixth years 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 Instruments of the Research

The instrument in this research is speaking test. The writer conducted the speaking test for the pretest and posttest, these tests 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 pre test and post test of speaking, inter rater reliability will be used in this study. The first rater was the researcher herself and the second rater was the English class 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 ability in forms of transactional dialogue. The topic chosen were tell about like and dislike. Those topics were 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 sixth grade of the MIN (Madrasah Ibtidaiyah Negeri) Panjang. There are 2 (two) classes and one class which would be taken as the sample. The

sample is selected using sample probably sampling through lottery drawing. The researcher took one class, which consists of 20 students. In this research, the researcher only takes one class as a sample.

4. Conducting Pretest

Pretest was given before the writer applied the treatment to measure increase of students' speaking ability before being taught through picture. The test was speaking test in the form of transactional dialogue. The material tested in form transactional dialogue. The material was tested related to School based Curriculum or KTSP which are 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 hold for 70 minutes.

In selecting the speaking material the researcher used the syllabus of the sixth years of Elementary School based on school based curriculum or KTSP (an English Operational curriculum which is arranged and applied by each education nit) which is newest curriculum used. The topic chosen tell about like and dislike.

5. Conducting Treatment

After giving pretest to students, the researcher gave treatments using picture. Each treatment was hold for 70 minutes. The researcher presented the material for treatment in experimental class through picture. In selecting material the researcher used the syllabus of the sixth year of Elementary School students based on School Based Curriculum or KTSP (an English

Operational curriculum which is arranged and applied by each education nit) which is newest curriculum used by the school. In this research, the researcher used five treatments.

The topic chosen were told about like and dislike (the students described about the animal or everything about animal in front of the class) in the form of dialogue.

6. Conducting Posttest

Posttest was conducted to measure the increase of students' speaking ability after being taught through picture. The posttest was hold for 70 minutes. In selecting material the researcher used the syllabus of the sixth year of Elementary School students based on KTSP.

The researcher administered posttest after the treatment. It aimed to see the development of students' speaking ability after they used picture in speaking class. The form of the test was subjective test. The posttest was similar to the pretest by asking the students to perform the dialogue in front of the class but their partner in pair and the topic was changed. The researcher asked the students to make a short dialogue about expression like and dislike, after that the students perform their dialogue in front of the class in pair. In pre test and pos test the students had different pair.

7. Analyzing the data

After collecting the data, that was student's 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 will be done.

First, scoring the pretest – posttest, and then tabulating the result of the test and calculating the mean of the pretest and the posttest. Repeated Measure T – Test used to draw the 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 16. The hypothesis was analyzed at the significance level of 0.05 in which the hypothesis is approved if sig $< \alpha$.

D. Criterion for Evaluating Students' Speaking

The form of the test was subjective test since there is no exact answer. In this test the researchers used inter – rater to asses students' performance. The rater was the researcher herself and their English teacher. The rater gave the score by listening to the record. The researcher records 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.

1. Reliability

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

The statistical formula for counting the reliability is as follow:

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

R   = Reliability

N   = Number of Students

D   = The different of rank correlation

1-6   = Constant number

After find 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 (se appendix 14 - 15), the result of the reliability can be seen in following tables:

The Reliability of Rater

	Pretest	**Posttest**	**Criteria**
Reliability	0.95	0.94	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.

2. Validity

Validity refers to the extent to which the test measures what it was intended to measure. This means that it relates directly to the purpose of the test.

Content validity, the test is 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, 1985:74). Construct validity concerns with whether the test is actually in line with the theory of what it means to the language (Shoamy, 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 will measure certain aspect based on the indicator.

The researchers has to compare the test with table of specification to know whether the test is 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
1 Pronunciation	It refers to the ability to produce easily comprehensible articulation. (Sakur 1987). Pronunciation refers to the intonation patterns (Harris 1974:81)

2 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)
3 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 pauses. Brown (1997:4)
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)
5 Grammar	It is needed for students to arrange a correct sentence in conversation. (Syakur 1987). It is students' ability to manipulate and to distinguish appropriate grammatical form in appropriate ones. (Heaton (1978:5)

E. Speaking Test

The researcher conducted speaking test, which lasted 70 minutes. In conducting the tests the researcher provided a topic and picture. Each pair has to make a dialogue based on the

picture. The test was done orally and direct, 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 material for test was taken from their handbook. 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 provide. The teacher assessed the students concern on five aspect namely pronunciation, vocabulary, fluency, comprehension, and grammar. In the test the researcher will use inter rater, the researcher herself 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' utterances because it helps the raters to evaluate more objectively. Rating Sheet modified from Harris (1974:84). 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 speaker.

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 of 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　Avery limited vocabulary makes comprehension difficult.

4　1　Vocabulary limitations so extreme to make a virtual conversation

impossible.

Fluency

20　5　Fluently and easily 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 patterns so that they can blame the wrong sentence meaning

8   2   A few mistakes, with no pattern of failure.

4   1   Incorrect grammar

The scores of each point is multiplied by four;

Hence, the highest score is 100

Here is identification of the scores.

If the students gets   5, so 5 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 example:

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

Pronunciation   4 X 4 = 16

Vocabulary   3 X 4 = 12

Fluency   3 X 4 = 12

Comprehension   4 X 4 = 16

Grammar   3 X 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 student' score using the following step. The first was scoring the pre-test 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 bee 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												

□N=										

The table of score inter – rater reliability of pre-test and posttest

No	Students' code	Rater 1		Rater2	
		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 the pre test and post test administered statistically analyzed the data using the statistical computation i.e. repeated measure T – Test of SPSS version 16 to test weather increase of students gain is significant or not.

G. Hypothesis Testing

The hypothesis testing is stated as follow:

There is any significant difference of the increase students' speaking ability before and after pre test and post test by picture.

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