III. METHOD

This chapter described the design of the research, how to collect the data from the sample of the research and how to analyze the data. This chapter also described the research procedure, validity, and reliability of the instrument, and data treatment.

3.1 Design

Quantitative research was conducted in order to know whether there was influence of students’ speaking ability after picture strip story implemented or not. One-Group pre-test and Post-test design were used in this research because the writer used one class as the experimental class. The treatment was conducted in three times by using narrative text. The writer conducted pretest, treatment, and posttest. Here was the illustration of one group pretest and posttest design

\[ T_1 \times T_2 \]

Where :

T1 : Pretest

X : Treatment

T2 : Posttest

(Setiyadi, 2004: 40)

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

3.2 Sample and Population

This research was conducted at SMA Kartikatama Metro. There are 6 classes of first grade and every class had the same opportunity. The sample was class X consisting of 20 students that would be chosen through randomly sampling.

3.3 Data Collecting Technique

This research used speaking test in front of collecting the data. Every student had his/her turn to stand in front of the class and retelled the story. The first retelling as pre-test and then the writer who acted as the teacher teach speaking through picture strip story as the treatment and the last, the writer would ask the students to stand in front of class and performing narrative text in form picture strip story through retelling.

1. Pretest

This was done before presenting the treatment to know how far the students’ ability in speaking. The writer administered the pretest to all of the students. The researcher gave a narrative text and asked them to retell the story in the text, then the researcher recorded the students’ performance. In pretest the researcher divide 20 students into 4 groups, and gave the same story, that was Cinderella. In the first meeting, the students just read the story for 20
minutes, and then came in front of the class one group, but told the story one by one, and giving maximal time 7 minutes when they were telling the story, based on the arrange. And the researcher recorded it.

2. Treatment

This was done after pretest to teach narrative text actually in students speaking ability through picture strip story. There was three times of treatments. The researcher would treat the students until they could reach objectives. In the first, second, and third treatment, the researcher did the same thing, the English teacher were divide students into 4 groups, asked they to read for 20 minutes and then came in front of the class one group, but told the story one by one, and giving maximal time 7 minutes, but different from the pretest, in the treatment the researcher giving they a picture strip story when they were telling the story. The first treatment used “Snow White” the second was “Hansel & Gretel” and the third was “Timun Emas”. And the researcher recorded it.

3. Posttest

This was done after the treatment to know how far the student have mastered the material given by the writer. The test was designed to measure the increase of the students’ speaking ability after treatment were given. The writer administered the posttest to all of the students by recording them one by one. In posttest the researcher divide 20 students into 4 groups, and gave the same story, that was Malin Kundang. In the last meeting, the students looked brave than before, they read the story for 20 minutes, and then came in front of the
class one group, but told the story one by one, and giving maximal time 7 minutes when they were telling the story, based on the arrange. And the researcher recorded it.

4. Questionnaire

This step was done after the posttest, to know the students` responds towards picture strip story technique in teaching narrative text. The questionnaire was given by the researcher after the posttest, questionnaire consist of 10 questions, maximum score for one question was 5, so if the students gave positive respond so their score between 50 – 31 and if they gave negative respond the score was 30-1.

3.4 Procedure

In collecting the data, the researcher follow steps:

1. Determining the subject

There were six classes at first grade of SMA Kartikatama Metro which consisted of about 20 students for each class. The sample of this researcher was chosen by using probability sampling technique as the control and experimental class.

2. Selecting the materials

The researcher chose the materials from the students` book based on the syllabus. The materials was about understanding and using a problem that they had to solve. The researcher conducted three different topics in increasing students` speaking ability through picture strip story technique.
3. **Conducting pre-test**

The pre-test was administered to the students before the treatment of teaching speaking through picture strip story being implement in order to know the students’ basic speaking ability. Meanwhile, before administering the pre-test, the researcher explained the topic that would be tested. The tests were focused on oral test. The researcher conducted one test by giving the picture with the complete story, the title was *Cinderella*. The students just read the full text and then retelling it (without picture strip story). It was subjective test which focused on oral test. The researcher explained generally the test and asked the students to make 4 groups. The researcher gave a picture story that they spoke up clearly since the students’ voice would be recorded. Furthermore, the researcher and another English teacher judged the students’ performance.

4. **Treatment**

In this research, the treatment was administered in 90 minutes that conducted three different topics in every meeting. The title that use in the first treatment was “*Snow White*”, the second was “*Hasel & Gretel*”, and the last was ”*Timun Emas*”. At the beginning of treatment the researcher gave the story with the full text and the picture strip story. After that, the researcher asked the students to read and rearrange the scrambled pictures. Before the students retelled the story in front of the class, the researcher helped the students in difficult word of the text and gave them the example how to retell the story used the picture strip story. And the next, the
researcher would give attention to the students` mistake, and gave the correct answer directly, actually in five aspect.

5. Administering post-test

The post test was conducted after the treatment. The post-test used to know the developing of students` speaking ability after using picture strip story technique. The researcher gave picture and complete story with the title *Malin Kundang* and then asked the students to retell what the story, different with the treatment, in this test they didn`t use picture strip story, to know how far their speaking ability after the treatment. And then, the researcher record the students` performance in posttest.

6. Analyzing Data

After conducting the final test, the researcher will analyzed the data. After collected the data, the students` score data was analyzed by questionnaire. This step was done after the posttest, to know the students` responds towards picture strip story technique in teaching narrative text. Based on the data (analyzing questionnaire) the researcher got, 40% had score 41-50, 60% had score 31-40. It`s mean that all of the students giving positive respond to the technique.

3.5 Validity and Reliability

a. Validity of the test
Validity refers to the extent to which the test measured what was intend to measure. This means that it related directly to the purpose of the test. Content of validity, the test was a good reflection of what had been taught and the knowledge which the teacher wanted her students to know. Content of validity can best be examined by the table of specification (shohamy, 1957: 74). Construct validity concerned on whether the test was actually in line with the theory of what it mean to the language. It mean that the test measured certain based on the indicator.

b. Reliability of the test

Reliability refers to the extend to which test was consistent in its score and gives us an indication of how accurate the score tests were. The concept of reliability stem from the ideas that no measurement was perfect even if we went to the same scale there would always be differences

The statistical formula for counting the reliability was as follow:

Formula:

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

\( R \) : Reliability

\( N \) : Number of students

\( D \) : The different of rank correlation

1-6 : Constant number
After finding the coefficient between raters, the researcher then analyzed 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 0.41 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)

- Inter-rater reliability

According to Ercan (2008) Inter-rater reliability is designed to observe the consistency in locating landmarks of the same or different rater replication on two three dimensional forms. Based on the Stemler (2007) Inter-rater reliability that is uniformly agreed upon in the statistical literature, there are generally two meanings associated with the term. For speaking test, to ensure the reliability of scores and to attend the subjectivity of the research, the writer used inter-rater reliability. It used when scores of their test are independently estimated by two or more judges or raters. It means there was another person who gave score besides the writer herself.

Table of Specification (Based on David P.harris’s Theory)

<table>
<thead>
<tr>
<th>No</th>
<th>Aspects</th>
<th>Score</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pronunciation</td>
<td>1</td>
<td>Pronunciation problems so severe as to make speech virtually unintelligible.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>Very hard to understand because of</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>pronunciation problems. Must frequently be asked to repeat.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Prununciation problems necessitate concentrtrated listening and occasionally lead to misunderstanding.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Always intelligible though one is conscious of a definite accent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Has few traces of foreign accent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Grammar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Errors in grammar and word order so severe as to make speech virtually unintelligible</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Grammar and word orders make comprehension difficult. Must often rephrase sentences and / or restrict him basic pattern.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Makes frequent errors of grammar and word order which obscure meaning.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Occasionally makes grammatical and /or word order errors which do not, however, obscure meaning.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Makes few (if any) noticeable errors of grammar or word order.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Vocabulary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Vocabulary limitation so extreme as to make conversation virtually impossible.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Misuses of words and very limited vocabulary make comprehension quite difficult.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Frequently use the wrong words: conversation somewhat limited because of inadequate vocabulary.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Sometimes uses inappropriate terms and/or must rephrase ideas because of lexical inadequacies.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Uses of vocabulary and idioms are virtually that of a native speaker.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Fluency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Speech as so halting and fragmentary as to make conversation virtually impossible.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Usually hesitant, often forced into silence by language problems.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Speed and fluency are rather strongly affected by language problems.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Score</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Speed of speech seems to be slightly affected by language problems.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Speech as fluent and effortless as that of a native speaker.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td><strong>Comprehensible</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Cannot be said to understand even simple conversation of English.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Has great difficulty following what is said. Can comprehend only “social conversation” spoken with frequent repetition.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Understand most of what is said at lower than normal speed with repetitions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Understands nearly everything at normal speed although occasional repetition may be necessary.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Appears to understand everything without difficulty.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The example of scores column:

**Teacher 1**

<table>
<thead>
<tr>
<th>NO</th>
<th>Name of Students</th>
<th>Score</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Flu</td>
<td>Gram</td>
</tr>
<tr>
<td></td>
<td></td>
<td>R1</td>
<td>R2</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 3.6 Instrument

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

#### 3.6.1 Speaking Test

The researcher divided speaking test into 4 sections which were pretest, treatments, posttest, and giving the questionnaires. The pretest, posttest, and distributing the questionnaires were conducted one time and treatments were conduct 3 times with 3 narrative stories, they were *Snow White, Hansel & Gretel, and Timun Mas* The materials were narrative text which were taken from the internet. The researcher asked the students to speak clearly since the students’
performance was being recorded during the test. The form of the test was subjective test since there was no exact answer, the teacher gave the score of the students` speaking ability based on the oral rating sheet provided. The teacher assessed the student concerned on five elements that must be fulfilled when the students were speaking according to Haris (1974:84) there were: 1) Fluency, if they had a good fluency, when they were retelling the story so the listener can gave respond well without difficulty. 2) Vocabulary, mean to make a communication more effectively. 3) Pronunciation, it was an articulation when speaking. 4) Comprehension, mean to make the listener were easily to understand what the speaker said. And 5) Grammar, made students mastered to create a good sentences. In the test the researcher used inter rater, that was the researcher and teacher of English. In evaluating the students` speaking scores, the researcher and other rater, which was the class teacher, listened to the students` recorded and used the oral English. The researcher the students` utterances because it helped the rater to evaluate more objectively.

There are the picture strip story:

**Snow White**

*Picture number 1*

*The Queen was wicked – Snow White grew very beautiful – The Queen was beautiful too*
Into the woods and kill her – The Huntsman had a kind heart – told her run away

Fled into woods – seven little dwarfs lived – clean up

Very tired – they surprised to find Snow White – decided to let her stay
The Queen discovered – poisoned apple – sank into unconsciousness

Thinking she was dead – a glass coffin – Prince leaned over and kissed her

3.6.2 Questionnaire

The questionnaire was conducted at the last meeting after conducting pretest, treatments, and posttest. The researcher distributed the questionnaire in the classroom. The researcher used questionnaire to know the students’ respond toward picture strip story technique. There were 10 kinds statements that was filled out by the students. Each of statements was related to the picture strip story
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 Data

The writer analyzed the data by comparing the average score (mean) of the pretest and posttest to know whether there was an influence of students’ speaking ability through picture strip story technique.

\[
\bar{X} = \frac{\Sigma x}{N}
\]

Where:

\(\bar{X}\) : mean

\(\Sigma x\) : total score

\(N\) : number of students

### 3.8 Data Analysis

In order to see whether there was an improvement of students’ speaking ability, the writer examined the students` score using these following steps:

1. Scoring the pretest and posttest
2. After getting the raw score, the writer tabulated the results of the test and calculating the score of the pretest and posttest. Then the writer used SPSS
to calculated mean of pretest and posttest to see whether there was an influence or not after the students were taught by using picture strip story

3. Drawing conclusion from the tabulated result of the pretest and posttest. The writer used statistical computerization i.e. repeated measures T-test of Statistical Package for Social Science (SPSS) for windows version 16 to test whether there was an influence or not. The writer used his formula.

4. And the last the writer gave questionnaire test to know the students respond after the students were taught by using picture strip story.

4.9 Hypothesis Testing

The hypothesis testing used to prove whether the hypothesis proposed in this research was accepted or not. The hypothesis was analyzed by using repeated measures T-test of Statistical Package for Social Science (SPSS) for windows version 16. The writer used the level of significance 0.05 in which the hypothesis was approved if sign < p, it means that probability of error in the hypothesis is only 5%.

\[ H_0 : \text{There's no influence} \]

\[ H_1 : \text{There's an influence} \]

If \( P < 0.05 \) \( H_1 \) is accepted

If \( P > 0.05 \) \( H_0 \) is accepted