III. RESEARCH METHOD

This chapter explains about the research design and how to collect data from the samples. The researcher encloses the procedure of this research and data collecting technique. The researcher also gives the scoring system and how the data were analyzed.

3.1. Research Design

This research was aimed at knowing whether oral error correction in storytelling could improve aspects of students’ speaking ability or not. Sugiyono (2008:114) states that experimental design is a study which aims at finding out the influence of particular treatment. This research used quantitative research as the research design. Quantitative research is a kind of research in which the data used to tend to use statistic measurement in deciding the conclusion (Hatch and Farhady, 1982:22). It was conducted using quisy *one group pre-test post-test design*. The result was gained from the comparison between the two tests (pre-test and post-test). According to Setiyadi (2000:40), the design is described as follows:

\[ T1 \times T2 \]

Where:

- **T1**: Pre-test
- **X**: Treatment
- **T2**: Post-test
The researcher used one class as experimental group which was selected by using purposive sampling. It was carried out in order to find out the result of the application of oral error correction to improve the students’ speaking ability. A pretest was an activity before treatment given. From the pre-test, it was known how far the ability of the students. After that, the researcher gave three treatments to the students using oral error correction in storytelling. Finally, a posttest was given to see the result of the research after the treatment was conducted.

3.2. Subjects

The subject of this research was the second grade of SMAN 1 Sidomulyo, South Lampung. The researcher used one experimental class to be treated. The researcher chose Eleven MIA 3 as the experimental class. There were 37 students in this class. Because 2 students did not come to the class in pretest and treatment 1, researcher only took 35 students as the subjects of the research. The researcher chose this class because they had potential to be subjects in this research. The Subjects were selected by using purposive sampling. The researcher chose the class that had moderate score in English subject. This research was conducted in five meetings; first meeting was for conducting the pretest, continued with three meetings for conducting treatments, and the last meeting was for conducting posttest.

3.3. Research Procedures

There were some procedures of research that was conducted in this research as follows:
3.3.1. Preparing the Lesson Plan
The researcher designed the lesson plan for three meetings of treatments. The first and the last meetings were allocated to conduct the pretest and posttest (out of the treatments). The lesson plan was designed based on the National curriculum of English for second grade students of senior high school which consists of Competence Standard, Basic Competence, Indicator, Instructional Objective, and Lesson Materials. In addition, method/ technique, steps of the activity, source of the material, and the evaluation were also involved.

3.3.2. Preparing the Material
The material made by the teacher (researcher) was based on the resources from some English books of senior high school. In this case, the researcher chose narrative text as the type of material.

3.3.3. Administering Pre-Test
This test was purposed to obtain the data of the students’ basic speaking skill and to ascertain that the students had similar capability and the same English proficiency before they received the treatment.

3.3.4. Conducting Treatment
This research was conducted to see the effect of using oral error correction in storytelling in teaching speaking in order to improve speaking ability. The treatment was designed for three meetings to the experimental group. Time allocation for each meeting was two hours of instruction (one hour of instruction was forty minutes).
3.3.5. Administering Post-Test
The study employed the post test at the end of the research. It was used to measure the students’ speaking skill after the treatments. The post test had the same procedures as in the administering the pretest.

3.3.6. Analyzing the Data
Both pretest and posttest results were analyzed by using repeated measure T-test to compare the data of two means score (Hatch and Farhady, 1982:108). The researcher analysed the improvement by comparing the scores of pretest and posttest from the experimental class. If the score of posttest was higher than pretest, it meant that there was a progress of students’ speaking skill achievement.

3.3.7. Concluding the Data Analysis
After analyzing the results of both pretest and posttest, the researcher searched the results and made conclusions of this research.

From the procedures of research above, there were two tests, pretest and posttest. It was conducted to answer the quantitative research question whether there was improvement on students’ speaking achievement through oral error correction in storytelling or not.

3.4 Data Collecting Technique
The speaking test in this research was interview. This research used interview as data collecting technique. The researcher gave several questions about the story.

In this research, there were four sections in collecting data as follows:
3.4.1 Pre-Test
Pretest was conducted to find out how far the students’ achievement in speaking before treatment. The pre-test was speaking test for assessing oral production. The researcher used interview as the tool to find out the achievement of the students before get the treatments.

3.4.2 Post-Test
Posttest was conducted in the end of the research. It was done after giving treatments and exercises to the experimental group. Like pretest, Researcher used interview to check the achievement of the students after getting treatments. The result of the post-test was used to compare the data of the pre-test and making conclusion whether oral error correction in retelling story can improve students’ speaking achievement or not. The procedure of post-test was the same as pre-test.

3.4.3 Recording
The researcher recorded the students’ speaking performance during pretest and posttest by using video recorder to collect the data. It was used to ease the researcher when analyzing and transcribing the data.

3.4.4 Transcribing
The last, the researcher transcribed the students’ speaking performance from the video recorder that had been conducted. The researcher transcribed the best and the worst students’ performance during pretest and posttest (See Appendix 20).

3.5. Criteria of Evaluating Students’ Speaking Performance
The form of the test is subjective test since there is not exact answer. In the test, the researcher used inter-rater to assess students’ performance. The researcher chose the English teacher to be his inter-rater. Inter rater is English teacher who
teach in SMAN 1 Sidomulyo. She had been teaching more than five years in this school. So, the experience in teaching is very good. Inter rater gave score and recorded together by researcher. The researcher recorded students’ utterances because it helped the rater more objective. The test of speaking measured based on two principles, reliability and validity.

3.5.1. Reliability

Reliability refers to extend to which test is consistent in its score and gives us an indication of how accurate the score tests are. Nitko (1983: 395) states that a reliable measure is one that provides consistent and stable indication of the characteristic being investigated. In this research, the researcher used inter-rater reliability to assess students’ performance; the researcher and one of the English teacher in school. They gave the score toward the students’ performance in pretest and posttest. The score of two raters were seen to know the consistency of the instrument.

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
\( D \) = Different of rank correlation (mean score from rater1/R1-rater2/R2)
\( 1-6 \) = Constant number

After find the coefficient between rates, then researcher analyzes 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)

3.5.2. Validity

Meizaliana (2009:82) states that the data is valid if the instruments used were also valid, and a test is reliable if it is constant, or it is reliable if the results of test show their constancy. Hatch and Farhady (1982:250) defined validity as “the extent to which the result of the procedure serves the uses for which they were intended”. Content validity, the test is a good reflection of what is thinking and the knowledge which the students to know. Shohamy (1985:74) states that is construct validity to measure the test will be examining to reflect what language. Based on that quotation, validity refers to the extent which the test measures what it is intend to measure. This means that relates to the purpose of the test. The test measured based on the indicator.

The speaking test in this research was valid. It was because the material on the interview was materials that were representative of given study materials in the school. The content of question in interview was appropriate to measure the students' knowledge and speaking ability. Moreover, the questions on the interview are based on the material in curriculum. So, it made the questions become easier to understand by the students.
3.5.3. Scores

In evaluating the students’ speaking scores, the researcher used the Oral English Rating sheet proposed by Harris (1974: 84). Based on the Oral English Rating sheet, there were five components tested to the students, namely: pronunciation, fluency, grammar, vocabulary and comprehension (See Appendix 1).

3.6. Instrument of the Research

In getting the data, the researcher used speaking test as the instrument of the research. The speaking test was Interview. Researcher recorded the students’ performance. Then, researcher gave scores about students’ performance.

The researcher divided speaking test into two sections which were pretest and posttest. The pretest was conducted by him before the students got the treatments. He took the data in pretest by using interview technique. He asked the students to tell a story what they know. Then the researcher gave the scores of the students’ speaking achievement based on the oral rating sheet provided. He asked the students to concerned on five elements of speaking namely pronunciation, fluency, grammar, vocabulary and comprehensible. The form of the test was subjective test since there was no exact answer.

In the test, the writer used the inter rater. They were the researcher and teacher of English class. In evaluating the students’ speaking performances, the researcher and one rater, who was the class teacher, listened to the students’ performance based on the recorder. The researcher recorded the students' utterances because it helped the rater to evaluate more objectively. In posttest, the writer conducted the same instructions like in the pretest section.
3.7. Data Analysis

In order to see whether there was an improvement of students’ speaking ability or not, the researcher examined the students’ score using these following steps:

1. Scoring the pretest and posttest.
2. After getting the raw score, the researcher tabulated the results of the test and calculating the score of pretest and posttest. Then, researcher used SPSS to calculate mean of pretest and posttest to see whether there was an improvement or not after the students were taught by using oral error correction in storytelling.
3. Repeated Measure T – test was used to search the increase of students’ performance, after that, it could be concluded that students had the significant improvement or not. The data computed using Statistical Package for Social Sciences (SPSS) 20 for windows. The hypothesis analyzed at the significance level of 0.05 in which hypothesis was approve if sig < α.

3.8. 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) version 20 for windows. The researcher uses the level difference of significance 0.05 in which the hypothesis was approved if sign < p. It means that the probability in hypothesis is only 5%. The hypothesis of this research was there is any significant
improvement of the students’ speaking achievement before and after being taught through oral error correction in storytelling.

Therefore, the hypothesis which can be stated is as follows:

\[ H_0 : \text{There is no significant improvement of the students’ speaking achievement before and after being taught through oral error correction in storytelling} \]

\[ H_1 : \text{There is a significant improvement of the students’ speaking achievement before and after being taught through oral error correction in storytelling} \]

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

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

### 3.9. Schedule of the Research

This research was conducted based on sequenced schedule which was appropriate at schedule of English subject in the class. On Monday, March 2\(^{nd} \) 2015 the pretest was carried out in XI MIA 3 in order to know the students’ achievement of speaking before giving treatments. The first meeting was on Wednesday, March 4\(^{th} \) 2015; the second meeting was on Friday, March 6\(^{th} \) 2015, and the third meeting was on Wednesday, March 11\(^{th} \) 2015. After the treatments had been administered, the post test was given in that class on Monday, March 13\(^{th} \) 2015 in order to know the gain of the students’ speaking achievement after being taught using Oral Error Correction technique in Storytelling. The schedule of the research can be seen in the following table:

**Table 3.1 Research Schedule in Conducting Research at SMAN 1 Sidomulyo**

<table>
<thead>
<tr>
<th>Date</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday, March 2(^{nd} ) 2015</td>
<td>Pre Test</td>
</tr>
<tr>
<td>Wednesday, March 4(^{th} ) 2015</td>
<td>Treatment 1</td>
</tr>
<tr>
<td>Date</td>
<td>Activity</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Friday, March 6th 2015</td>
<td>Treatment 2</td>
</tr>
<tr>
<td>Wednesday, March 11th 2015</td>
<td>Treatment 3</td>
</tr>
<tr>
<td>Monday, March 13th 2015</td>
<td>Post Test</td>
</tr>
</tbody>
</table>