III.   RESEARCH METHOD

This chapter discusses about following topics: research design, population and sample of the research, how the writer collects the data, research procedure, validity and reliability, scoring system, data analysis, data treatment, hypothesis testing.

3.1   Research Design

Since this research is quantitative research, the researcher applied peer correction in teaching. The research wants to find out the increase of students' ability in writing of recount text after they are taught using peer correction. The research used the one-group pretest posttest as research design. This was used to compare the students' ability in pre-test and post-test after the treatment was given. The one-group pretest posttest design referring to Hatch and Farhady (1982:20) is represented as follows:

T1 X T2

T1   : Pretest, students' first draft

X   : Treatment, is the application of peer correction in the class. The

Researcher conducts three treatments in this research.

T2   : Posttest.

3.2 Population and Sample

The population of this research was the students of the first grade of SMA Negeri 5 Bandar Lampung in the academic year of 2012/2013. There were seven classes of first year students. The first year students of SMA N 5 Bandar Lampung have the same ablity. The sample was selected by lottery, so that all of the first year classes got the same chance to be the sample. The researcher used only one class. The sample of this research was X 6 consisted of 30 students, 14 males and 16 females.

3.3 Data Collecting Technique

Based on the formulation of the problem in the first chapter, the research tried to compile the data through data collecting technique, which is test of writing recount text.

a.   Writing Test of Recount Text

The test was given to the student in writing test. According to Harris (1969:69), writing test is one testing devices which requires the students to compose their own and extend responses to problem set by the teacher. Writing test measures certain writing abilities more effectively than doing objectives test. Therefore, the researcher used writing test to get data of students' ability in writing recount text, by applying it in class.

Instruction that were used by the teacher to examine the writing test:

 a. Write a recount text that consists of orientation, series of events and re-orientation (optional).

b. Chose one of topics below:

- Good experience (happy, travelling, surprise, beach, camping, etc.)

- Bad experience (embarrasing, frightened, sad, etc.)

c. Recheck your work before you submit your work to the teacher.

3.4 Validity and Reliability

In this section there are two parts that will be discuss further that is validity and realibility.

3.4.1 Validity

A test can be said valid if the test measures the object to be measured and suitable with the criteria (Hatch and Farhady, 1982:250). According to Hatch and Farhady (1982: 251), there are two basic types of validity, content validity and construct validity. Content validity is concerned with whether the test is sufficiently representative and comprehensive for the test. In the test, students arrange a recount text of the event. The materials were adopted from students' handbook for the first year students SMA.

Construct validity is the process of determining the extent to which test performance can be interpreted in terms of one or more constructs. In this research, the researcher administed a writing test and the technique, and gave scores of students' writing based on five aspects of writing: content, organization, grammar, vocabulary, and mechanic.

Therefore, one test is valid because the writing test is composed based on indicators and the objectives in the syllabus of the School – Based Curriculum

2006. The test was made by considering indicators and the objectives in the syllabus of the School – Based Curriculum 2006 and also contained five aspects of writing.

1.4.2 Reliability

In ensuring the pre-test and post test scores, the reseacher used inter-rater reliability-taking other was from the English teacher in the school besides the score from the researcher herself. The researcher calculated the data by using Spearman Rank Correlation that the formula can be seen as follows:

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

Where:

r   = Coefficient of rank correlation

d   = Difference of rank correlation

N   =   Number of students   (Sugiyono, 2006: 228)

The researcher using standard of reliability (Arikunto, 1998: 260)

0.8 – 1.0   = very high

0.60 – 0.79   = high

0.40 – 0.59   = medium

0.20– 0.39   = low

0– 0.19   = very low

3.5 Research Procedure

The procedure of this research as follows:

1. Determining the sample of the research

The population of the research is the first year of SMA N 5 Bandar Lampung. First year students were choosen because recount text material had been learned by them in based on 2006 English curriculum. It was chosen one class out of seven classes of 10^{th}grade students of SMA N 5 Bandar Lampung as the research sample. The experimental class consists of 30 students. In determining the experimental class, simple probability sampling was used. In this research, class X 6 was chosen as the sample of the research.

2. Preparing the Pretest Materials

In this research, there was one pretest to 10th grade of Senior High School student. Pretest was used to measure the aspects of content, organization, vocabulary, grammar, and mechanic. The topics were "good experiences and bad experiences". The materials were taken from the students's handbook based on 206 Senior High School English Curriculum of KTSP.

3. Conducting the Pre-test

The pre-test was conducted to measure student's preliminary ability

before treatment. Here, the students in experimental class were assigned to

write recount text which consists orientation, series of events, and re-

orientation.

2. Giving Treatments

There were three times treatments conducted in this research. Each treatments had been conducted for 2 x 45 minutes consisting of procedures of teaching writing through peer correction.

3. Conducting the Post-test.

In order to see increase of students' writing ability, the post-test was conducted in experimental class after they were being the treatment.

4. Analyzing the Test Result (Pre-test and Post-test)

After scoring pretest and postest, the data were analyzed by using SPSS software program. It was used to find out the means of pre-test and post-test and how significant the increasing was.

3.6 Scoring System

In scoring the student's draft, the researcher uses the scoring criteria (adopted from Harris, 1979: 68-89)

1. Content   : the substance of the writing, the idea expressed (unity).

2. Grammar   : the employment of grammatical forms and syntacticpatterns.

3. Organization: the organization of content (coherence).

4. Vocabulary   : the selection of word that suitable with the content.

5. Mechanic   : the conventional devices used to clarify the meaning.

Scoring criteria (adopted from Harris, 1979: 68-89)

Aspect	Criteria	Score
Content	- Excellent. All developing sentences support main idea.and relevant to assign topic. - Good. There are at least three developing	20 15

		sentences support main idea and relevant to assign topic.	10
	-	Fair. There are at least two developing sentences support main idea and mostly relevant to the topic but lack detail.	5
	-	Poor. There are at least one developing sentence support main idea and inadequate developing of topic.	0
	-	Very poor. There is no developing sentence support the main idea.	
Grammar	-	Excellent. All sentences written in the correct grammar	20
	-	Good. There are at least three sentences written in the correct grammar	15
	-	Pair. There are at least two sentences written in the correct grammar	10
	-	Poor. There is at least one sentence written in the correct grammar	5
	-	Very poor. No sentence written in the correct grammar	0
Organization	-	Excellent. All supporting are well developed and the relationship writing ideas flow smoothly because of sufficient transitional signals.	20
	-	Good.There are at least three supporting sentences are developed in chronological order.	15
	-	Fair. There are at least two supporting sentences are developed and paragraph writing is lack of logical sequencing idea. Poor.	10
	-	There is at least one supporting sentences written and has lottle or no attemp at connectivity.	5
	-	Very poor. No supporting sentences written in chronological order	0
Vocabulary	-	Excellent. All vocabulary used correctly	20
	-	Good. 75% vocabulary used correctly	15
	-	Fair. 50% vocabulary used correctly	10
	-	Poor. 25% vocabulary used correctly	5
	-	Very poor. No vocabulary used correctly	0
Mechanic	-	Excellent. All punctuation, spelling, and capitalization used correctly	20
	-	Good. 75% punctuation, spelling, and capitalization used correctly	15
	-	Fair. 50% punctuation, spelling, and capitalization used correctly	10
	-	Poor. 25% punctuation, spelling, and capitalization used correctly	5
	-	Very poor. No punctuation, spelling, and capitalization used correctly	0

To simplify the idea above, here are the scoring criteria used in writing skill:

Table 3.1 Table of Specification in Writing Test:

Writing Aspect	Criteria in writing test	Score
Content	Make an effective recount text by seeing the topic sentence and controlling the idea	20%
Organization	Use the transitional words in spatial order	20%
Grammar	Use past tense, correct grammatical and syntactic pattern	20%
Vocabulary	Use the suitable words	20%
Mechanics	Use correct graphic conventional of the language, including, spelling, punctuation, capitalization, and paragraphs	20%

Based on the explanation above, the researcher evaluated the aspects of recount text writing based on content, grammar, organization, vocabulary, and mechanics. The lower score is 0 and the highest score is 100.

Table 3.2 Students' Score in Each Component of Writing

No	Name	Content	Organization	Grammar	Vocabulary	Mechanic	Total
1							
2							
3							
4							
5							
6							
7							
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11							
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3.7 The Data Analysis

The researcher computed students' score in order to find out the students' achievement in writing recount text by using peer correction:

1. Scoring the pretest and posttest and tabulate the result.

2. Finding the mean of pretest and posttest, as follows:

$$m = \frac{\sum d}{N}$$

m : mean

$\sum$d: total score students

N : number of students

3. Drawing conclusion from tabulates result of the test given by comparing the means of pretest and post test.

3.8 Data Treatment

a. Normality Test

The researcher used normal test to treatment the data. This test was used to Measure whether the data are normally distributed or not. The criteria of normal distribution are:

Ho: The distribution of the data is normal

Ha: The distribution of the data is not normal

The Hypothesis is accepted if the result of the normality test is higher than 0.05 (sig> α). In this case the researcher used the One Sample – Kolmogorov – Smirnov Test (SPSS 15) to test the normality test.

3.9 Hypothesis Testing

After collecting the data, the researcher recorded and analyzed them in order to find out whether there was an increasing in students' ability in writing or not after the treatment.The researcher used Paired Sample T-test to know the level of significance of the treatment effect.

The formulation is:

$$t = t = \frac{Md}{\sqrt{\frac{\sum x^2 d}{N(獐-1)}}}$$

and

$$\sum x^2 d = \sum d^2 - \frac{(\sum d)^2}{N}$$

Md = mean from the differences pretest and posttest (posttest-pretest)

Xd = deviation of each subject (d – md)

$\sum x^2 d$ = total of quadratic deviation

N = subjects on sample

(Arikunto, 2010: 349-350)

The criteria are:

Ho = There is no increase of students' recount text writing by using Peer Correction.

The criteria is Ho (null hypothesis) is accepted if alpha level is higher than 0.05

($\alpha > 0.05$)

Ha = There is an increase of students' recount text writing by using Peer

   Correction.

The criteria is Ha (alternative hypothesis) is accepted if alpha level is lower than

$0.05(\alpha < 0.05)$.