

III. RESEARCH METHODS

This research was intended to find out whether sentence combining can be used to develop students' descriptive writing ability or not. This chapter includes the research design, research procedure, population of sample, data collecting technique, validity and reliability, scoring criteria.

3.1 Research Design

In this research, the researcher conducted quantitative research. The researcher used one group pre test-post test design. The researcher used one of ten classes at SMKN Bandar Lampung as the sample of the research. According to Hatch and Farhady (1982:22), the research design is presented as follows:

TI X T2

TI	The pretest
T2	The post test
X	The treatments (two treatments)

3.2 Research Procedure

The research procedures are;

1. Finding the population and then selecting the samples

In this stage, the researcher chose SMKN 2 Bandar Lampung as the population and sample of this research. There are 10 classes in the second year level. The

researcher took one class as the sample. The class was determined from students' scores on their previous class. Each class consists of 28-35 students.

2. Finding and selecting materials that were taught and tested.

In this time, the researcher found some topics for the pretest. The topics were taken from the students' handbook and based on the teaching and learning syllabus. The topics were describing person and place.

3. Giving pre tests, finding out the result.

The researcher gave some topics that had been prepared in the previous stage and students can choose one of topics to be written in their paragraph writing. The time was 45 minutes.

4. Applying the material by using sentence combining

Students were given the sentence that should be combined. The sentence that would be combined was about person and place in one sentence. They should combine by using conjunction or clauses that had been taught. So, students could arrange the words that would be written in their paragraph.

5. Administering the post tests to evaluate the result of the experiment

Having given treatments to the students, the researcher gave the same topics again to the students. Then, they would be asked to choose the same topics as they do in pre test but with different case and next, they would be asked to write descriptive paragraph by making sentence that must be combined first.

6. Analyzing the data.

The researcher analyzed the result of pre test and post test by combining the scores from two raters. The researcher used SPSS 16 to analyze it, and then compared their result.

3.3 Population and Sample

This research was conducted at SMKN 2 Bandar Lampung class eleven at second semester in the academic year of 2010/2011, that is class II TP3. There were ten classes and each class consist of 28-35 students. The researcher used one class as the sample of the research. The researcher took this sample randomly because the ability of the students at this period was not different from others. There was no class ranking, so the students' ability was homogenous.

3.4 Data Collecting Technique

The researcher collected the data by using test to the students. It was done at the pre test and the post test. The form of the test was an essay test.

3.5. Instrument Used for Collecting Data

In this research, the researcher used pre test that consist of the instruction to the students to make a descriptive paragraph, and then, at the post test, the researcher asked the students to make a descriptive paragraph by using the conjunction or the adjective clause that had been taught by the teacher.

1. Pre test

The researcher gave the pre test for the students. The teacher had the students write one descriptive paragraph that consists of 5 up to 8 sentences.

2. Post Test

The instrument type of this research is written test. The students were to write a paragraph especially in descriptive paragraph. In this case, they were supposed to make an effective paragraph through combining the sentences. The topic was based on their curriculum.

3. 6 Validity and Reliability

Validity is a matter of relevance. A test is said to be valid to the extent that it measures what it is supposed to measure. Content validity is concerned with whether or not the content of the test is sufficiently representative and comprehensive for the test to be valid measure it is supposed to measure. In the content validity, the material given should be suitable with the curriculum used.

Reliability is a measure of accuracy, consistency, dependability, or fairness of scores resulting from administration of particular examination. Here, the researcher used inter rater reliability. Inter rater reliability was used when score on the test were independently estimated by two or more judges or raters. (Henning, 1987; 82).

To determine the level of reliability of scoring system, the Spearman Rank Correlation was applied on the data. The formula of this is:

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

r: Coefficient of Rank correlation

d: difference of rank correlation

1 and 6: constant number

N: Number of students.

The criteria of reliability are:

0.90 – 1.00 : High

0.50- 0.89 : moderate

0.00 – 0.49 : low

(Suharsimi, 2006)

3.7. Scoring System

Harris (1974:48) states that the selection of writing test is relatively essay in achievement test. Dealing with Harris' opinion, this research used the achievement test in order to measure the students' writing achievement.

Adapted from Haris (1979: 68-89), it is considered based on the scoring criterion below:

1. **Content.** It means the substance of the writing, the idea expressed (unity)
2. **Grammar.** It means the employment of grammatical forms and synthetic patterns.
3. **Form.** It consists of the organization of content (coherence).
4. **Vocabulary.** It relates to the selection of word that suitable with the content.
5. **Mechanic.** It indicates the conventional devices used to clarify the meaning.

Based on their needs at school in aspect of scoring system in writing, The score of the test in writing descriptive-paragraph was derived as follow:

Content	: 25%
Grammar	: 25%
Form	: 15%
Vocabulary	: 25%
Mechanic	: 10%

This system of scoring criterion basically covers five aspects of scoring systems in writing, and it will be elaborated as the explanation below:

A. Content. This aspect was evaluated from the idea expressed by using the criteria if scored 25 indicated that all the developing sentences support the main idea, and 15 means that three of developing sentences support the main idea.

Scored 10 denotes that two of developing sentences support the main idea, 5 shows that one of developing sentences support the main idea, and 0 characterizes that there is no developing sentences support the main idea.

B. Grammar. It refers to the employment of grammatical forms and synthetic patterns. In this case, it was scored like these characteristics, when scored 20 shows that all the sentences are written in the right form of required tenses, 15 denotes that three of the sentences are written in the right form of required tenses. Scored 10 indicates that two of the sentences are written in the right form of required tenses, 5 means that one of the sentences are written in the right form of required tenses, and 0 characterizes that there is no sentences that is written in the right form of required tenses.

C. Form. This component was scored by seeing the organization of content. The scoring criteria is occurred when scored shows that there are at least three right uses of transitional word and all the supporting sentences are written in chronological order, 15 means that there are at least two right uses of transitional word and all the supporting sentences are written in chronological order. Scored 10 indicates that there are at least one right uses of transitional word and all the supporting sentences are written in chronological order, 5 characterizes that one of all supporting sentences is written in chronological order, and 0 denotes that there is no supporting sentences written in chronological order.

D. Vocabulary. The evaluation of this aspect can be seen from the suitable word that they use, the characteristics of scoring are scored 25 denotes that all of the vocabularies are used correctly, 20-15 indicates that there fourth of all

vocabularies are used correctly. Scored 5 means that a quarter of all vocabularies are used correctly, and 0 shows that there is no vocabulary used correctly.

E. Mechanic. It indicates the conventional devices used to clarify the meaning. Scoring of this aspect was scored like scored 15 indicates that all the sentences are using correct punctuation, 10 shows that there fourth of all sentences are using correct punctuation. 5 means that a quarter of all sentences are using correct punctuation, and 0 denotes that there is no sentence using correct punctuation.

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

A. Content

- 25 all the developing sentences support the main idea.
- 20-15 Three of developing sentences support the main idea.
- 10 Two of developing sentences support the main idea
- 5 one of developing sentences support the main idea
- 0 there is no developing sentences support the main idea

B. Grammar

- 25 all the sentences are written in the right form of required tenses
- 20-15 three of the sentences are written in the right form of required tenses
- 10 two of the sentences are written in the right form of required tenses
- 5 one of the sentences are written in the right form of required tenses
- 0 there is no sentences that is written in the right form of required tenses.

C. Form

- 15 There are at least two right uses of transitional word and all the supporting sentences are written in chronological order.

10 There are at least one right uses of transitional word and all the supporting sentences are written in chronological order.

5 one of all supporting sentences is written in chronological order

0 there is no supporting sentences written in chronological order

D. Vocabulary

25 all of the vocabularies are used correctly.

20-15 here fourth of all vocabularies are used correctly

10 a quarter of all vocabularies are used correctly

5 one vocabulary is used correctly

0 no vocabulary is used correctly.

E. Mechanic

10 all the sentences are using correct punctuation

5 there fourth of all sentences are using correct punctuation

0 There is no sentence using correct punctuation.

3.8 Treatment of the Data

1. Random test

The statistical formula of lielifors test was used to determine whether the data of students' writing were taken from the population of random.

2. Normality test

The normality test was used to measure whether the data was normally distributed or not. The researcher used the lielifors formula to test the normality of the data.

3.9. Analyzing the Data

The researcher used SPSS 16 to analyze the data. Based on the research question, the research would know the improvement of descriptive paragraph ability in terms of effective writing, so the data that should be analyzed was each aspect of the scoring writing from pre test and post test.

3.10. Table of specification in writing test

Writing elements	Aspects in writing test	score
content	Find a topic of paragraph, make an effective descriptive paragraph	25
grammar	Make ten sentences, use the right connectors	25
Form	Use transitional words	15
Vocabulary	The suitable words that they use	25
mechanic	Conventional devices used to clarify the meaning	10

