

### III. METHOD OF THE RESEARCH

#### 3.1. Design

In this research, the researcher has used one group pretest-posttest design. This is used to know the students' paragraph writing achievement after the students have been given paragraph writing through ESA since the researcher wants to know the effect of ESA to the students' writing achievement.

T1        X        T2

Where    : T1    = pre-test

           T2    = post-test

           X     = treatment

Hatch and Hossein (1982:20) state that after the one pre-test, the treatment is then introduced, and finally a post-test is given to look at the improvement after the treatment.

#### 3.2. Population and Sample

The population of this experimental research was one of the second grade classes in SMKN 2 Bandar Lampung. Class II TKK was chosen through

lottery drawing as a sample. This class has 18 students. According to the syllabus in the curriculum, the second grade has some appropriate materials related to the issue of this research dealing with the daily activities description.

### **3.3. Data Collecting Technique**

For the purpose of collecting data, the writer applied:

1. Pre test

Hereby, the writer searched the initial condition of the population of the paragraph writing they write before the treatments. The task of the pre test before treatments was that the students were asked to describe people's activity in a given picture.

2. Post test

Post test was administered after the treatments to measure how far the improvement of the treatment to the students' paragraph writing.

### **3.4. Procedure**

The procedure of this research was as follows:

1. Finding the population and selecting the sample.

There are nine classes of the second year in SMKN 2 Bandar Lampung. In determining the sample, the researcher uses systematic probability sampling as what had been explained in previous section. Thus, clas II TKK was chosen as the sample.

2. Administering the pre-test

The researcher conducted the pre test before the treatment of ESA in group work. The pretest was administered to the experimental class in 90 minutes. It was to find out the students' entry point before giving the treatment. The pretest was conducted on Friday, October 2, 2009. There are 18 students followed the pre-test. It is a complete amount of students in that class.

3. Conducting the meetings ( 3 meeting treatments )

The treatment was consisted of 3 meetings. Each meeting was 90 minutes.

4. Giving the post-test

The posttest was administered to the experimental class in order to find out the students' ability in writing descriptive text after they got three meeting treatments. In line with the pretest, the posttest was administered in 90 minutes. The post-test was followed by all 18 students.

5. Calculating the result of the test

The researcher and rater calculated the score of the research result based on five aspects namely content, organization, vocabulary, language use, and mechanic.

6. Analyzing the data

To find out the effect of ESA in group work on students' ability in writing descriptive text, the researcher and rater statistically analyzed the tabulated result of the pre test and post test using *pretest-posttest design* to draw the conclusion of the research. The data was computed through SPSS version 16.

### 3.5. Instrument of the research

#### Writing Test

The researcher administered a post test to find out whether there is an improvement of students' ability in writing a paragraph or not after studying writing through ESA in group work. That is why, the students have been asked to write a descriptive text. Here, the researcher provided the students a picture of peoples' daily activity that they usually see in daily life. The students were asked to describe the pictures by writing a paragraph. The students were given a chance to write for about 90 minutes.

Direction:

1. Describe these peoples' daily activity in the picture into some good order descriptive paragraphs.
2. You can use simple present tense to show habit of people in their daily activities.
3. You may describe this picture from this guiding questions, *Where are they?, What do they do?, What can we see there?, etc.*
4. Pay attention to your grammatical structure. Check them carefully before submitting.

Since writing test is a subjective test, there were two raters to reduce the subjectivity in judging students' writing ability. The two raters were the researcher himself and another English teacher. Both of the raters worked collaboratively to score the result of the students writing. In the intention of increasing reliability of the test, the two raters treated the students' work

anonymously during scoring by folding back the top side of the paper where the students put their names on. It was done before scoring Anonymous scoring is highly desirable, for identification of papers (students' writing) often leads quite unconsciously to scorer bias, Harris (1974).

Then, before marking any papers, the two raters scanned a sample of papers to decide upon standards. They found, for example, a high, high medium, low-medium, and low paper to serve as models. Then, as they scored the papers, they returned occasionally to the models to ensure that their standards were not shifting.

Before scoring the test, it was important to make sure that both raters used the same scoring criteria. Reliability of the pre-test and post-test was examined by using statistical measurement:

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

Notes:

R: Reliability

N: Number of students

d : The different of rank correlation

1-6: Constant number

(Sugiyono, 2006:228)

The researcher considered it was reliable for the test if the test has reached range 0.60-0, 79. The standard of reliability:

- |                            |                           |
|----------------------------|---------------------------|
| A. a very low reliability  | ranges from 0.00 to 0.19  |
| B. a low reliability       | ranges from 0.20 to 0.39  |
| C. an average reliability  | ranges from 0.40 to 0.59  |
| D. a high reliability      | ranges from 0.60 to 0.79  |
| E. a very high reliability | ranges from 0.80 to 0.100 |

Slameto (1998:147)

The researcher considered that both raters had achieved the reliability if the inter-rater reliability had reached range 0.60-0.79 (a high reliability). In this research, it was found that the result of inter-rater reliability of pre test was as follows:

Inter – rater reliability of pre test:

$$\begin{aligned}
 R &= 1 - \frac{6 \cdot \sum d^2}{N \cdot (n^2 - 1)} \\
 &= 1 - \frac{6 \cdot (6)}{18 \cdot (324 - 1)} \\
 &= 1 - \frac{36}{5814} \\
 &= 1 - 0.006 \\
 &= 0.99
 \end{aligned}$$

It means that the raters have a very high reliability.

Inter – rater reliability of post test:

$$\begin{aligned}
 R &= 1 - \frac{6 \cdot \sum d^2}{N \cdot (n^2 - 1)} \\
 &= 1 - \frac{6 \cdot (9)}{18 \cdot (324 - 1)}
 \end{aligned}$$

$$\begin{aligned} &= 1 - \frac{54}{5814} \\ &= 1 - 0.009 \\ &= 0.99 \end{aligned}$$

It means that the raters have a very high reliability.

The validity of the pre and post writing test of this research was related to face, content, and construct validity. To get face validity, the instruction of writing test was previously examined by advisors and colleagues until the test which is in form of instruction looked right and understandable. The Content validity meaning that the test is a good reflection of what has been taught and of the knowledge that the researcher wanted his students to know. The test measured the students' ability in writing descriptive paragraph. Construct validity concern with whether the test is actually in line with the theory of what it means to know the language. It means that the test measured certain aspect based on the indicator. The researcher examined it by correlating the aspects that were measured with the theories of those aspects.

In evaluating the students' writing score, the researcher and another rater based their judgment by considering five aspects of writing to be tested; they are content, organization, vocabulary, language use, and mechanic. These criteria adopted from Jacobs (1981:90).

Basically, there were five aspects to be evaluated by the researcher and another rater. They were:

1. Content referring to the substance of writing, the experience of the main idea (unity).
2. Organization analyzing the logical organization of the content (coherence).
3. Vocabularies denoting to the selection of words those are suitable with the content.
4. Language use viewing the use of correct grammatical and syntactic pattern.
5. Mechanic referring to the use of graphic convention of language.

The percentage of scoring from the writing components is derived as follow:

1. Content : 30%
2. Organization : 20%
3. Vocabulary : 20%
4. Language-use : 25%
5. Mechanic : 5%

The classification of scoring criteria adopted from Jacobs et al (1981:90), in general listed as follows:

#### **Content**

- |       |   |
|-------|---|
| 30-27 | Excellent to very good: knowledge substantive, development of thesis/topic, relevant to assign topic.                             |
| 26-22 | Good to average: some knowledge of subject, adequate range, limited development thesis, mostly relevant to topic but lack detail. |

- 21-17 Fair to poor: limited knowledge of subject, little substance, inadequate development of topic.
- 16-13 Very poor: limited knowledge of subject, non-substantive, not pertinent or not enough to evaluate.

### **Organization**

- 20-18 Excellent to very good: fluent expression, ideas clearly stated/supported, well organized, logical sequencing, cohesive.
- 17-14 Good to average: somewhat choppy, loosely organized but main ideas stand out, limited support, logical but incomplete sequencing.
- 13-10 Fair to poor: non-fluent, ideas confused or disconnected, lack logical sequencing and development.
- 9-7 Very poor: does not communicate, no organization, or not enough to evaluate.

### **Vocabulary**

- 20-18 Excellent to very good: sophisticated range, effective word/idiom choice and usage, word form mastery, appropriate register.
- 17-14 Good to average: adequate range, occasional errors of word/idiom, form, choice, usage but meaning not obscured.
- 13-10 Fair to poor: limited range, frequent errors of words/idiom form, choice, usage, meaning confused or obscured.
- 9-7 Very poor: essentially translation, little knowledge of English vocabulary, idioms, words form, or not enough to evaluate.

**Language- use**

- 25-22      Excellent to very good: effective complex construction, few errors of agreement, tense number, word order/function, articles, pronoun, and preposition.
- 21-18      Good to average: effective but simple construction, minor problems in simple construction, several errors of agreement, tense, word order/function, articles, pronoun, preposition, but meaning seldom obscure.
- 17-11      Fair to poor: major problems in complex/simple construction, frequent errors of negation, agreement, tense, number, word order/function, articles, pronoun, preposition and/or fragments, run-ons, deletions, meaning confused, or obscured.
- 10-5        Very poor: virtually no mastery of sentence construction rules, dominated by errors, does not communicate, or not enough to evaluate.

**Mechanics**

- 5            Excellent to very good: demonstrated mastery of conventions, few errors spelling, punctuation, capitalization, paragraphing
- 4            Good to average: occasional errors of spelling, punctuation, capitalization, paragraphing, but meaning not obscured.
- 3            Fair to poor: frequent errors of spelling, punctuation, capitalization, paragraphing, poor hand writing, meaning confused or obscured.

- 2           Very poor: no mastery convention, dominated by errors of spelling, punctuation, capitalization, paragraphing, hand writing illegible, or not enough to evaluate.

In more details, Jacobs (1981:92-96) explained the description and criteria of writing scoring system.

### **3.6. Data Analysis**

To analyze data, the researcher treated the data through the following steps:

#### *1. Scoring the data*

Each rater scored the students' writing of pre test and post test . Then, the scores between two raters were taken the average to be the final score that were analyzed statistically using Paired T-test.

#### *2. Drawing conclusion*

The scores of one pre test and one post test were statistically analyzed using *Paired T-Test* to draw a conclusion. It was computed through the Statistical Package for Social Science (SPSS) version 16.

### **3.7. Hypothesis Testing**

Hypothesis was stated as follow:

H: "ESA in group work can improve the students' writing ability in writir a descriptive paragraph".