III. RESEARCH METHODS

This chapter contains the methods used in writing the script. They are Research Design, Subject of the Research, Technique in Collecting the Data, Procedures of the Research, the Criteria of Scoring the Student's work, Validity, Reliability, the Treatment of the Data, and Hypothesis test. The explanation of each subtitle will be presented as follows:

A. Research Design

This research was intended to find out the development of the students' ability in writing recount text after being taught by using Guided writing in the form of guiding questions.

This research was conducted based on the experimental method. It applies the control group pre test – post test design modified from the idea suggested by Setiyadi (2006). This experimental method dealt with two groups; experimental class 1 and experimental class 2. The experimental class 1 is the class which gets the treatments by applying guided writing in the form of guiding questions technique and the experimental class 2 is the class which gets the treatments by

using the conventional technique. The use of experimental class 2 is aimed at proving whether the increase scores possibly got by the researcher in the experimental class 1 are really caused by the application of the treatments in the class but not because of the repetition of the test. So, the result of the research can be trusted. Both experimental class 1 and experimental class 2 received the same pre-test and post-test. The criteria whether guiding questions can increase the students' ability in writing recount text was determined by the differences between the scores of the pre-test and post-test.

The design can be presented as follows:

G1: T1 X_1 T2

G2: T1 X_0 T2

G1 : Experimental class 1

G2 : Experimental class 2

T1 : Pre-Test

T2 : Post-Test

X_1 : Treatments by using guiding questions technique

X_0 : Treatments by using conventional technique

(Setiyadi 2006: 135)

In this research, the researcher used three times treatments in both experimental class 1 and experimental class 2 which were given after Pre-test.

B. Population and Sample of the Research

The population of the research was the second year students of SMPN 1 Terbanggi Besar Central Lampung in the year 2009/2010. The researcher took two classes as the sample of the research. One class was an experimental class 1 and the other was an experimental class 2. In determining the experimental class 1 and the experimental class 2, the researcher used Simple Probability Sampling, using coin.

C. The Variables

This research consisted of the following variables:

1. The students' recount text writing as dependent variable (Y), and
2. Guided writing in the form of guiding questions as independent variable (X).

D. Data Collecting Technique

Since the data is in the form of students' ability in writing recount text, the data was collected by using two writing tests; pre-test and post-test. Each student had to write a recount text in each test. The students' scores from pre-test and post-test were analyzed to know the students' ability before and after having the treatments. The technique of collecting the data was clarified as follows:

1. Pre-test

This test was given in order to know how far the students' ability in writing recounts text before being given the treatment. It determined the readiness for instructional program, and to diagnosed individual's specific strengths and weaknesses in writing recount text. In the pre-test, students were asked to write a recount text based on the topic given (see Appendix 7).

2. Post-test

After conducting the teaching through guided writing in the form of guiding questions as the treatment, the researcher administered a post-test to the students. It was done in order to know the students' development in writing recount text after having the treatment. The topic tested had the same level of difficulty as in the pre-test (see Appendix 8).

E. Research Procedures

The procedures of this research were as follows:

1. Selecting and determining the sample

The population of the research was the second year students of SMPN 1 Terbanggi Besar Central Lampung in the year 2009/2010. The researcher chose the second year students because, based on the 2006 English curriculum; recount

text had been learned by them at the first semester. The researcher took VIII.1 and VIII.4 as the samples. In determining the samples, the researcher used simple probability sampling.

2. Selecting and Determining the Material

The materials used in the research were based on the 2006 English curriculum for the second year of SMP students. The researcher used *Smart Steps*, an English textbook for first semester of the second year students of junior high school adapted from the English curriculum of SMP 2006, School Based Curriculum.

3. Administering the pre-test

The pre-test was used to find out the result of the students' ability before treatment. Here, the students in experimental class 1 and experimental class 2 were assigned to write a recount text that consists of orientation, series of events, and re-orientation. The topic of the recount text is going recreation in long holiday or visiting friends in other town. The time was allocated for about 2 x 45 minutes (see Appendix 7).

4. Conducting the treatment

In this research, the researcher conducted three times treatments. The researcher assumed that three times treatments is enough to develop students' recount text

writing ability because based on the 2006 English curriculum; recount text had been learned by them at the first semester. The researcher applied the technique of using guided writing in the form of guiding questions in teaching recount text in experimental class 1. While in experimental class 2, the researcher taught recount text writing by using the conventional way. Each treatment lasts for 90 minutes. The topics which were discussed by the students in writing recount text were an unforgettable experience, an unforgettable trip, and visiting the doctor (see Appendices 1-6). The topics above were taken from Smart Steps based on the School Based Curriculum 2006 for the second year of SMP students.

5. Administering the Post-test

The researcher conducted post-test in both experimental class 1 and experimental class 2. In both of two classes, post test was done to measure the increase of students' ability in writing recount text after being taught by using guiding questions technique and conventional technique. The students were assigned to write a recount text consisting of orientation, series of events, and reorientation. The topics of recount text were sad experiences and going camping. The time was allocated for about 2 x 45 minutes (see Appendix 8).

F. Scoring Procedures

The scoring procedures were clarified as follows:

1. Analyzing the test-result (pre-test and post-test)

After scoring the students' work, the researcher compared the result of pre-test and post-test, to see whether the score of the post-test was higher than the pre-test in each aspect of writing.

2. Analyzing the Data

After collecting the data, the researcher treated the data by using the following procedures: normality test, homogeneity test, random test, and hypothesis test (see Chapter 4).

G. Scoring Criteria

The students can succeed in writing if their writing includes five aspects of writing. Therefore, the researcher used five aspects of writing to evaluate the students' ability in writing recount text:

1. Content refers to substance of recount text (orientation, series of events and re-orientation), the experience of the main idea,
2. Organization refers to the logical organization of the recount text content (the coherence of events series),
3. Vocabulary refers to the selection of words those are suitable with the content,
4. Language use refers to the use of the correct grammatical and syntactic pattern,
5. Mechanic refers to the use graphic conventional of the language.

(Jacobs et al (1981:90).

The score of the test in writing recount text will be derived as follows:

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

The criteria of scoring are also devised from Jacobs et al (1981: 90) as follows:

Content

30 – 27	Excellent to very good: knowledgeable 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 substances, inadequate development, of topic.
16 – 13	Very poor: doesn't show knowledge, not pertinent, or not enough to evaluate.

Organization

20 – 18	Excellent to very good: fluent expression, ideas clearly stated/supported, succinct, well organized, logical sequencing, cohesive.

17 – 14	Good to average: somewhat choppy, loosely organized, but main idea stand out, limited support, logical but incomplete sequencing.
13 - 10	Fair to poor: not fluent, ideas confused or disconnect, lacks logical sequencing and development.
9 – 7	Very poor: doesn't communicate, no organization, or not enough to evaluate.

Vocabulary

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

Language used

25 – 22	Excellent to very good: effective complex construction, few errors of agreement, tense number, word order /function, articles, pronoun, preposition.
21 – 18	Good to average: effective but simple construction, minor problems in simple construction, several errors of agreement , tense, word order/function, articles, pronouns, prepositions, but meaning seldom obscure.

17 – 11	Fair to poor: major problem in complex/simple construction, frequent errors of negation, agreement, tense, number, word order/function, articles, pronouns, prepositions, 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 of conventions, dominated by errors of spelling, punctuations, capitalization, paragraphing, handwriting illegible, or not enough to evaluate.

G. Validity and Reliability

1. Validity of the Test

Validity is a matter of relevance. It means that the test measures what is supposed to be measured. To measure whether the test has a good validity, the researcher analyzed the test from content validity and constructs validity.

Content validity is concerned with whether the test is sufficiently representative and comprehensive for the test. In the content validity the material given is suitable with the curriculum used. Furthermore in the research, the researcher used recount text writing test that is supposed to be comprehended by the second grade of SMP students. The test was considered as valid in content validity since the test of writing constitutes a representatives sample of the language skill and structure and also the material was chosen based on 2006 English Curriculum for second year of SMP.

Construct validity is the process of determining the extent to which test performance can be interpreted in terms of one or more constructs (Gronlund N E, 1985:83). In this research, the researcher administered a writing test and the technique of scoring the students' writing is based on the five aspects of writing; they are content, organization, vocabulary, language use, and mechanic.

2. Reliability

Reliability is a measure of accuracy, consistency, dependability or fairness of scores resulting from administration of particular examination. To ensure the reliability of scores and to avoid the subjectivity of the researcher, he used inter-rater reliability. Inter-rater reliability is used when score on the test are independently estimated by two or more judges or raters. In this case, the first rater of the research was the researcher and he asked Siswanjaya, S.Pd., the English teacher of SMPN 1 Terbanggi Besar Lampung Tengah, as the second rater. Before scoring the students' recount text writing, it is important to make sure that both raters used the same criteria of scoring. Hereby, the first and the second rater used scoring criteria devised from Jacobs et al (1981: 90). To know how reliable the scoring was, the researcher used Spearman Rank Correlation with the formula:

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

r : Coefficient of rank correlation

d : Difference of rank correlation

1 and 6: Constant number

N : Number of students

(Sugiyono, 2006: 228)

In this case, the researcher then analyzes the coefficient of rank correlation with the standard of reliability below:

0.80 – 1.0 : high reliability

0.60 – 0.79 : high reliability

0.40 – 0.59 : medium reliability

0.20 – 0.39 : low reliability

0.0 – 0.19 : very low reliability

(Arikunto, 1998: 260)

After calculating the result of the student's recount text writing, the researcher calculated the data by using the formula above (see Appendices 21 – 24). The result of the reliability could be seen in the following tables:

Table 1. The Reliability of Raters in the Experimental Class 1

Reliability	**Pre-test**	**Post test**	**Criteria**
	0.83	0.83	Very high reliability

Table 2. The Reliability of Raters in the Experimental Class 2

Reliability	**Pre-test**	**Post test**	**Criteria**
	0.80	0.92	Very high reliability

From the criteria of reliability and calculation above, it could be concluded that the reliability of the raters in both of two classes was very high. It means that the first rater's way of scoring was similar to the researcher's. They had almost the same scoring system so that there is no subjectivity in scoring the students'

writing. Besides that, the scoring criteria helped the raters in scoring the students' writing accurately. In addition, the result showed that both raters scored the students' writing consistently and fairly.

H. Data Treatment

Before testing the hypothesis using T-test, it was necessary to find out whether the data taken by the researcher in both of the classes were random, normally distributed, and homogenous or not. Therefore, the researcher used three following procedures:

1. Normality Test

The purpose of computing the normality test was to find out whether the data was distributed normally or not. In this research, the significant level of 0.05 was used to determine the normality of the data. The hypothesis of normal distribution was:

H0: the distribution of the data is normal

H1: the distribution of the data is not normal

The hypothesis is accepted if the result of the normality test is higher than 0.05 (sign > α). In this case, the researcher uses level of significance of 0.05

The result of normality test of pre test in experimental class 1 showed that the value of two tailed significance was 0.784 (see Appendix 25). It means that H0 was accepted and H1 was rejected since 0.784 > 0.05. It implied that the distribution of the test was normal. The result of Normality test of post test in

experimental class 1 showed that the value of two tailed significance was 0.450 (see Appendix 25). Since 0.450 > 0.05, it could be stated that the data of post test in experimental class 1 was normally distributed.

The same distribution was also showed in experimental class 2. The value of the normality test of pre test in this group was 0.620 (see Appendix 26). While in post test, the result of normality test was 0.736 (see Appendix 26). Since 0.620 and 0.736 > 0.05, it could be stated that the distribution of pre test and post test in experimental class 2 were normally distributed. In other words, H0 was accepted and H1 was rejected.

From the result of normality test above, it can be concluded that the hypothesis was accepted both in experimental class 1 and experimental class 2 which meant that the data in both classes were normally distributed.

2. Random Test

Random test was computed to know that the data in experimental class 1 and experimental class 2 were random or not. The hypotheses for Random test were:

H0: the data is random

H1: the data is not random

The criterion for the hypothesis was:

The hypothesis was accepted if the result of Random test is higher than 0.05 (sign > α). In this case, the researcher uses 0.05, level of significance.

Random test of pre test in experimental class 1 showed that the two tailed significance was 0.577 (see Appendix 28). Seeing the result, it could be inferred that the data was random since Sign > α (0.577 > 0.05). Meanwhile, the result of the random test of post test in experimental class 2 showed in the number of 0.507 (see Appendix 28). The value was also > α, in which 0.507 > 0.05. It could be stated that the data was random.

The computation of random test of pre test in experimental class 2 showed that the value of two tailed significance was 0.201 (see Appendix 27). It means that the data was random since 0.201 was higher than 0.05. Meanwhile, the random test of post test in experimental class 2 showed that the value of two tailed significance was 0.246 (Appendix 27). From the result, it can be inferred that H0 was accepted since Sign > α.

In short, the data from classes, experimental class 1 and experimental class 2 showed that the values of two tailed significance were higher than alpha (Sign > α). It was concluded that the data from both classes were random.

3. Homogeneity Test

This test is used to determine whether the data fulfill the criteria of the quality of variances. This test uses T-Test to analyze the data. The hypothesis for the homogeneity test of pre test is as follows:

H0: There is no significant difference in the level of ability (equal)

H1: There is a significant difference in the level of ability (not equal)

The criterion for the hypothesis is: H0 is accepted if the result of Homogeneity test of pre test is higher than 0.05 (Sign > α).

The result of Homogeneity test of pre test showed that the value of two tailed significance was 0.124 (see Appendix 29). In this case, H1 was rejected since 0.124 > 0.05. This meant that both classes had the same ability (equal).

I. Hypothesis Test

It is used to prove whether the hypothesis proposed by the researcher is accepted or not. He used T-test in order to know the significance of treatment effect. The hypothesis was analyzed at significant level of 0.05 in which the hypothesis is approved if Sig < α. It means that the probability of error in the hypothesis is only about 5 %. The hypotheses are as follows:

H_0 : There is no significant difference of the students' recount text writing ability after being taught by using guiding questions.

H_1 : There is significant difference of the students' recount text writing ability after being taught by using guiding questions.