

CHAPTER III

RESEARCH METHODOLOGY

This chapter elaborates the research methodology which has been briefly introduced in chapter one. In detail, this chapter involves formulation of problems, research method, research hypothesis, clarification of terms, data collection method, research procedure, and data analysis.

3.1 Formulation of Problems

This study tries to figure out the effectiveness of using journal in improving students' ability in writing recount texts. Specifically, it focuses on the effect of using journal to improve students' writing skills. Moreover, in order to reach the objectives, the researcher determines the following research questions as the basic point in conducting the research:

1. Is the use of Journal effective in improving students' ability in writing recount texts?
2. What are the students' responses toward the use of journal in writing recount texts?

Therefore, there are two problems involved in this study:

1. The use of journal as an independent variable.
2. Students' writing ability as dependent variable.

3.2 Research Method

This research is conducted to find out the significance of writing journal activity in improving students' writing recount texts. To get an empirical data, the researcher employed quasi-experimental design. It was decided due to the reason that there is a limit of time and the samples are not randomly selected. According to Shuttleworth (2008), quasi experimental design involves selecting groups, upon which a variable is tested, without any random pre-selection process. As stated by Fatch and Farhady (1982:24),

By using quasi-experimental design, we control as many variables as we can and also limit the kind of interpretations we make about cause-effect relationship and hedge the power of our generalization statements.

This study will use quasi-experimental method by using pre test-post test control group design to answer the research questions. because.

The formula of the research:

G1 T1 X T2

G2 T1. T2

Notes :

G1 : The experimental group

G2 : the control group

T1 : Pre test

X : Treatment

T2 : post test

3.3 The Research Hypothesis

A hypothesis is a tentative statement about the outcome of the research (Hatch and Farhady, 1982:85-86). According to Coolidge (2000), the hypothesis of this study was appropriate to be stated as follows:

$$H_0: \mu_1 = \mu_2$$

$$H_A: \mu_1 \neq \mu_2$$

H₀: null Hypothesis

H_A: alternative or research hypothesis

μ₁: control group

μ₂: experimental group

The null hypothesis (**H₀**) of this study is the use of journal in teaching recount text is not effective to improve students' writing ability of eighth grade of one Junior High School in Bandung. The alternative or research hypothesis (**H_A**) of this study is the use of journal in teaching recount text is effective in improving students' writing ability. So, the hypothesis of this study is

“There is no correlation between using journal and students' writing ability.”

3.4 Clarification of Terms

1. Writing journal: a daily written text about daily life experiences, ideas and thoughts which is written by the students (Nordquist, 2011). In this study, the journal was used as a treatment.

2. Effectiveness: The word “effectiveness” in this study is a measure of achievement of observation (Fraser, 1994). Effectiveness is indicated by improvements of writing ability, which is, the improved scores of writing class. The word “effective” in this study has some possibilities, namely, very effective, effective or less effective to improve students’ writing ability by using a journal.

3. Recount Text: a text which retells the activities of events that have occurred (Anderson and Anderson 1997).

3.5 Data Collection Method

3.5.1 Population and Sample

There are two variables in the research, independent variable and dependent variable. In this case, the independent variable investigated was writing journal, whereas the dependent variable was students’ achievement in writing recount texts.

The population of this research is the second grade students of one Junior High School in Bandung. The samples of this research were two classes (VIII B and VIII C) which were selected based on the classification made by the school.

Class VIII B acted as the control group and VIII C as the experimental group. Each class consists of 37 students. To anticipate the absence of some students during the research, the researcher only takes 32 students from each class as the sample. So the fix number of the sample is 64 students. During the experiment, the experimental group was given six treatments which were writing a journal in period 7 meetings.

3.5.2 Research Instrument

Two kinds of instruments were used in collecting the data; writing a recount text test and questionnaire.

1. Writing a Recount Text Test

To investigate students' writing recount texts skill, the students were given a test. The test is to write a recount text with a given theme. The writing recount texts test was used in pretest and posttest and given to both the experimental and the control group. Try out test was conducted before the test was given to both groups with the purpose to investigate the reliability and validity of the test items.

2. Questionnaire

To investigate students' perceptions toward the use of journal in writing recount texts, the questionnaire was used. Only the experimental group was given the questionnaire. The questionnaire was given in the end of the program. It consisted of 12 statements with of 'strongly agree', 'agree', 'disagree', and 'strongly disagree' statements (Adapted Likert Scale 1932).

3.6 Research Procedure

The procedures of this study covered the following steps, namely, organizing teaching procedures (preparing the materials and lesson plans for the control and experimental group), administering pilot test, administering pre-test, adapting the treatment (using journal) in teaching writing recount texts for experimental group, and teaching writing recount texts with conventional method (Demonstrating, Experiment and Recitation), administering post-test and administering questionnaires.

3.6.1 Organizing Teaching Procedure

In this study, the researcher acted as both a teacher and a facilitator in the classroom reading process both in the experimental and control group. In preparing the teaching process, the researcher undertook two steps. First, the researcher prepared appropriate materials for teaching and learning process during the treatment. Second, the researcher organized teaching procedures in the control and the experimental group.

3.6.2 Administering Pilot Test

Before the instruments were used in the research, a try out test was administered to the students in different class to investigate the validity and the reliability of the instrument. Once the test was valid and reliable, the questions on the pilot test were used for pre test and post test. Try-out test consisted of the pre-

test for both experimental and control group to find out whether the instructions of the test was understandable for eight grade of junior high school as well as to find out whether the time to do this test is sufficient.

Then, the questionnaire was tested in order to know which statements were understandable for them. The try-out test was conducted in class VIII A of same school of the reseach on November 14, 2011 before the experimental teaching begun

3.6.3 Administering Pre-test

The researcher conducted the pre-test after the data from pilot test revealed and the instruments were feasible to use in this research. Pre-test was taken on November 15, 2011. The pre-test instrument used the instrument used the instrument which has been tested in pilot test. This test was conducted to gain the data about the students' writing ability in writing recount texts before the treatment. The test was administered to both experimental and control group.

3.6.4 Treatments

The treatments of this study were the use of journal in teaching recount text. The experimental group was given journals and the control group was taught by using conventional method. Conventional method consists of demonstrating, experiment and recitation. According to Arief (2002), demonstrating is a modeling to clarify an understanding or how to show the students about a process of a specific lesson. Experiment is providing opportunities for students

(individually or group) to be trained to do a process or experiment (Djamarah, cited in Sukardi, 2011). Ramayulius (2008:329) stated that recitation is a way of teaching where the teacher gives specific tasks to the students, and the result will be checked by the teacher. It is known as home work.

The schedule for experimental and control group will be described in the following table.

Table 3.1
Time Schedule of Research

No	Date	Control Group (VIII B)	Experimental Group (VIII)
1.	November 15, 2011	Pretest	-
2.	November 16, 2011	-	Pretest
3.	November 16, 2011	Text 1 Giving some recount texts and discussing the story of the text.	-
4.	November 17, 2011		Text 1 1 st treatment (writing journal)
5.	November 22, 2011	Text 2 Explaining generic structures of recount text and tenses, discussing the story of the text.	-
6.	November 23, 2011		Text 2 2 nd treatment (writing journal)
7.	November 23, 2011	Text 3 Discussing generic structures, simple past tense, making sentences using simple past tense.	-
8.	November 24, 2011		Text 3 3 rd treatment (writing journal)

9.	November 29, 2011	Text 4 Making sentence and paragraph using simple past tense, making recount text.	-
10.	November 30, 2011	-	Text 4 4 th treatment (writing journal)
11.	November 30, 2011	Text 5 Making recount text.	
12.	December 1, 2011		Text 5 5 th treatment (writing journal)
13.	December 7, 2011		Post Test and Questionnaire
14.	December 7, 2011	Post Test	

3.6.6. Administering Post-Test

The post-test was conducted at the end of the treatments. The post-test was given in order to find out whether or not the use of journal was effective in writing recount texts. Both of experimental and control group were given the test on the same day, December 7, 2011.

3.6.7. Administering Questionnaire

The questionnaire was administered after the experimental group had post-test. The questionnaire was only distributed to the experimental group which was had the treatments because the questionnaire was used to find out the students' responses toward the use of journal in writing recount texts, in order to answer the research question number 2.

3.7. Data Analysis

After collecting the data, the next step to be conducted was data analysis. Data analysis included scoring technique, data analysis on the pilot test, data analysis on pre-test and post-test, and data analysis on the questionnaire.

3.7.1. Scoring Technique

In this research, the criterion of writing scoring system was adapted from Jacob et al.'s scoring profile (1981, cited in Weigle, 2002). The aspects assessed covered content, organization, vocabulary and language use. The students' writing in pre-test and post-test tests were assessed by three examiners (the researcher, an English Teacher from another school and an English Education student). The rubric is presented as follows:

Table 3.2

Writing Scoring Rubric

Aspect	Score	Criteria
CONTENT	30-27	EXCELLENT TO VERY GOOD: Knowledgeable *Substantive * through development of story* relevant to assigned topic.
	26-22	GOOD TO AVERAGE: Some knowledge of subject * adequate range * limited development of story * mostly relevant to the story but lacks detail.
	21-17	FAIR TO POOR: Limited knowledge of subject * little substance * inadequate development of topic/story.
	16-13	VERY POOR: Does not show knowledge of subject * non-substantive * non-pertinent.
	25-20	EXCELLENT TO VERY GOOD: Expression * story flows clearly * well-

ORGANIZATION		organized (orientation, events and reorientation) * chronological order * cohesive.
	19-15	GOOD TO AVERAGE: Somewhat choppy * loosely organized but main ideas stand out * limited support * chronological but incomplete sequencing.
	14-11	FAIR TO POOR: Non-fluent * ideas/story confused or disconnected * lacks chronological and development.
	10-7	VERY POOR: Does not communicate * no organization.
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 word/idiom form, choice, usage * meaning confused or obscured.
	9-7	VERY POOR: Essentially translation * little knowledge of English vocabulary, idioms, word form * or not enough to evaluate.
LANGUAGE USE/ SYNTAX	25-22	EXCELLENT TO VERY GOOD: Effective complex constructions * few errors of agreement, the use of simple past tense, pronouns.
	21-18	GOOD TO AVERAGE: Effective but simple constructions * minor problems in complex constructions * several errors of agreements, the use of simple past tense, pronouns, but meaning not obscured.
	17-11	FAIR TO POOR: Major problems in simple/complex constructions * frequent errors of agreement. The use of simple past tense, pronouns * meaning confused or obscured.
	10-5	VERY POOR: Virtually no mastery of sentence constructions rules * dominated by errors * does not communicate.

Adapted from Jacob et al.'s (1981) Scoring Profile (cited in Weigle, 2002)

3.7.2 Data Analysis on Pre-test and Post-test

Both pre-test and post-test were given to the experimental and control groups in the same procedures. A hypothesis started with the Alpha level at 0.05. The data were collected through pre-test and post-test and computed using IBM SPSS Statistics 16.0 for Windows.

The steps which were used in analyzing pre-test and post-test were: normal distribution test, homogeneity variance and independent t-test. The details of statistical procedures are showed as follows:

3.7.2.1 Normal Distribution Test

Normal distribution is a statistic distribution which has aims to measure the distribution of the data was normal (Weisstein, 1999). The normal distribution test was used in this study to find out whether or not the distribution of pre-test and post-test scores were normal. This test was calculated before t-test. The normality test used Kolmogorov-Smirnov by following four steps below:

- a. Setting the hypothesis, H_0 = the scores between experimental and control groups are normally distributed.
- b. Setting the level of significance (α) at 0.05.
- c. Analyzing the normality distribution using Kolmogorov-Smirnov test.
- d. Comparing scores between test result and level of significant value. If $Asymp. Sig > 0.05$, the null hypothesis is accepted. It means the sample scores are normally distributed.

3.7.2.2. Homogeneity of Variance

The homogeneity of variance test used to measures the differences or similarities between the studies. The Levene test was used to find out whether or not the data in pre-test and post-test scores were homogenous. The steps for the test as follows:

1. Setting the hypothesis, H_0 = data between the two groups are homogenous
2. Setting the level of significant (α) at 0.05
3. Measuring the homogeneity variance using Levene's test
4. Comparing the result of Levene's test and Alpha level of significance

If Asymp. Sig<0.05, the null hypothesis is rejected, it infers that the two groups were not equal. In contrast, if Asymp. Sig>0.05, the null hypothesis is accepted, it infers that the variance data of the two groups are equal; the data are homogenous.

3.7.2.3 Independent T-test

The independent t-test was used to analyze the difference between two groups' means. In this study, the independent sample test was calculated by computation of SPSS Statistics 16.00 for Windows. The steps were as follows:

1. Setting the hypothesis, H_0 = there is no significant between the students' writing scores in experimental and control groups.
2. Setting the level of significance (α) at 0.05 with two-tailed of significance

3. Calculating t-test scores using SPSS Statistics 16.0
4. Comparing t-obtained and t-critical.

If $t\text{-obtained} > t\text{-critical}$, there is a significant difference between two groups. It means that the null hypothesis is rejected.

3.7.3 Data Analysis of Questionnaire

The questionnaires were aimed to find out the students' responses toward the use of journal in teaching recount text. To calculate the validity and reliability of each statement, this study used Pearson correlation coefficient in SPSS 16.0 for windows. The criteria of reliability are shown:

Table 3.3

r Coefficient Correlation

Raw Score	Interpretation
0.8 – 1.0	Very high
0.6 – 0.8	High
0.4 – 0.6	Moderate
0.2 – 0.4	Low
0.0 – 0.2	Very low

(Arikunto, 2006)

The data gathered from the questionnaires were analyzed based on the frequency of students' answers. The result of the questionnaires was put in the percentage below:

$$P = \frac{fo}{n} \times 100\%$$

Where:

P = percentage

f_o = frequency of observed

n = number of samples

Once the statements of the questionnaire were valid (the validity can be seen on Appendix 3. (*) means valid (**) means very valid), and the number of reliability of the statements are ≥ 0.4 (from moderate to very high), then the statements can be used for questionnaire to administered to the experimental group after the treatments.