# CHAPTER III

# METHODOLOGY

The focus of the study is the use of webbing technique and the students'
perceptions towards the use of webbing technique in writing recount text. These
are formulated into a specific statement of the problems as stated in the first
chapter. Further, this chapter describes the method of the study which consists of
some main part reviews the statement of the study and hypothesis, design of the
study, data collection, procedure of the study, and data analysis.

## 3.1    Hypothesis

As the specific statements that formulated into a prediction, there was a
null hypothesis that the researcher was rejected and symbolized as $H_O$ (Hatch &
Farhady, 1982; Trochim, 2006; Kranzler & Moursund, 1999). In contrast, there
was also the alternative hypothesis as the prediction that the researcher supported
and symbolized as $H_1$ or Ha (Hatch & Farhady, 1982; Trochim, 2006; Kranzler &
Moursund, 1999), as follows:

The null hypothesis ($H_O$)            = the use of webbing technique does not
improve the students' skill in writing recount text.

The alternative hypothesis (Ha)       = the use of webbing technique improves the
students' skill in writing recount text.

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**3.2     Design of the Study**

The study on the use of webbing technique in writing recount text was adopting a quasi-experimental research design where there were pre test, treatment and post test used in collecting and analyzing the data (Berry, 2006; Campbell & Stanley, 1963; Campbell & Stanley, 1966 cited in Walliman & Bousmaha, 2001; Walliman & Bousmaha, 2001). It was a formal, objective, systemic process in which numerical data were utilised to obtain information about the study and a common research approach in educational research (Burns, cited in Cormack 1991:140). It was designed to test theories and also hypothesis but did not use randomization since the experimental and control groups classes were set based on the English teacher's of the population suggestion (Berry, 2006; Collidge, 2000; Harris & McGregor, et.al, 2006; Walliman & Bousmaha, 2001).

Further, there were the independent variable and dependent variable were involved in to see the improvement of students' writing skill towards the given treatments (Selltiz, et.al in Devi, 1997; Devi, 1997) where the use of webbing was the independent variable and recount writing score was the dependent variable (Selltiz, et.al in Devi, 1997; Devi, 1997). In addition, there was also an arrangement of the essential conditions to collect and analysis the data on the proposed research work and has to answer the general findings of the study and applicable to population and sample (Selltiz, et.al in Devi, 1997; Devi, 1997) where the design of this study can be described as follows:

**Table 3.1**

**Design of the Study**

(Source: Arikunto, 2010; Berry, 2006; Campbell & Stanley, 1963)

| Experimental Group | O1 | *X* | O2 |
|---|---|---|---|
| Control Group | O3 | | O4 |

From the table above, O1 and O3 represent initial testing of the two groups (pre-test), while *X* represents some intervention or experimentation strategy with one of the groups (treatment), then O2 and O4 represent final testing of the two groups (post test) (Arikunto, 2010; Berry, 2006; Campbell & Stanley, 1963) . The test result was used to investigate whether the experimental teaching approach has led to an improvement in the feature being tested to confirm the students' effect before and after the technique given.

**3.3    Data Collection**

The reviews about population, sample, and instruments of the study are given bellow.

**3.3.1   Population and sample**

The study was conducted in one SMP (junior high school) in Bandung. The place was chosen because it was the place where the researcher did PLP (teaching practice). So, the researcher has already known the population's characteristics. The characteristics of the population are Indonesian native

students, the age is around 14 years old and most of the students have difficulty in writing English. Meanwhile, the second grade students of SMP was chosen as a population based on the English syllabus of the second semester in the KTSP curriculum that recount text has to be taught (Depdiknas, 2006).

Next, the researcher had chosen 2 classes; the first class was experimental group and the second was the control group. It used the cluster sample where the sample formed naturally in social setting, represents the characteristic of the population (Arikunto, 1997; Encyclopedia of Educational Evaluation in Arikunto, 2010; Arikunto, 2010) and did not use randomization since the experimental and control groups classes were set based on the English teacher's of the population suggestion (Berry, 2006; Collidge, 2000; Harris & McGregor, et.al, 2006; Walliman & Bousmaha, 2001)..

### 3.3.2   Instruments of the study

The study was utilized two instruments as the tools in collecting the data (Fraenkel and Wallen, 2006). The instruments were test and questionnaire, as follows:

### 3.3.2.1 Test

The test was organized in order to find the students' writing skill improvement towards the use of webbing technique in teaching writing recount text. It was carried out as the instrumentation to collect the data of the students' scores in pre-test and post test in both of two groups (control group and

experimental group). Written test was used as the test instrument where the students' works were examined. The first written test (pre-test) was aimed to know the students' skill in writing recount text before the study was conducted. Then, the written test in post test was aimed to find out the students' skill in writing recount text after the study was conducted. In addition, there were three main aspects in scoring and analyzing the recount text created by the students. They were the content of the text, the schematic structure of the text and the language use that has been presented on the appendix page (Emilia, 2011).

### 3.3.2.2 Questionnaire

Moreover, there was an addition on the instrument used in the study. It was the use of questionnaire in order to strengthen the findings of the study and answer the second problem of the study where a set of written questions was used to get information from the students in terms of their perception on the use of webbing technique in writing recount text (Nunan, 1992; Devi, 1997; Walliman & Bousmaha, 2001). It was the tool or instrument of data collection that typed in a number of questions and the form was closed questions, simple and avoiding the personal questions which requires in making a judgment about the students' perception (Arikunto, 2010; Devi, 1997; Nunan, 1992).

Moreover, the close-ended questionnaire was used in the study in order to provide consistency of response across the students and generally easier to use and analyze related to the objectives of the study (Nunan, 1992). The several questions given to the students were related to their experience in writing recount

dealing with their perception towards the use of webbing technique (Cherry, 2011; Romanov, 2011; Lindsay and Norman: 1977). In constructing each question in the questionnaire, it is important to determine the data that should be gathered related to the objective of the study (Nunan, 1992). Thus, the questionnaire items were divided into three general aspects, as follows:

Aspect 1: The first aspect is based on general perception on their skill in writing recount text before the treatment was conducted. The ideas stated on the 1st (*Apakah kamu menyukai pembelajaran menulis dalam bahasa Inggris?*), 2nd (*Apakah menulis dalam bahasa Inggris itu mudah?*), and 3th (*Sebelum mempelajari teks Recount dengan tehnik Webbing, apakah kamu sudah memahami tentang teks Recount?)* questions in the questionnaire. It was aimed at finding out the students' sense and feeling in writing recount text, before conducting the treatment on the use of webbing technique (Cherry, 201; Romanov, 2011; Lindsay and Norman: 1977).

Aspect 2: The second aspect is based on general ideas on the students' skill in writing recount text after the treatment was done. The ideas stated on the 4th *(Apakah kamu mengerti tentang cara membuat Web dalam teks Recount?)*, 5th*(Setelah mempelajari teks Recount dengan tehnik Webbing, apakah kamu lebih memahami tentang teks Recount?)* and 6th (*Apakah penggunaan tehnik webbing bermanfaat dalam menulis teks Recount*?) questions in the questionnaire. It was aimed at finding out the students' ideas in writing recount text, after conducting the treatment on the use of webbing technique (Cherry, 201; Romanov, 2011; Lindsay and Norman: 1977).

Aspect 3: The third aspect is based on general ideas on their perception towards the use of webbing technique in writing recount text. The ideas stated on the 7th *(Apakah pemahamanmu terhadap teks Recount menjadi lebih baik dengan menggunakan tehnik Webbing?)*, 8th *(Apakah dengan menggunakan tehnik Webbing menulis teks Recount jadi lebih mudah dan kemampuanmu meningkat?),* 9th *(Apakah kamu menemukan kesulitan dalam membuat teks Recount dengan tehnik Webbing?)* and 10th *(Menurut pendapatmu, apakah tehnik Webbing ini harus dipertahankan dalam pembelajaran menulis teks?)* questions in the questionnaire. It was aimed at finding out the students' perception (ideas, thoughts and feelings) towards the use of webbing technique in writing recount text (Cherry, 2011; Romanov, 2011; Lindsay and Norman: 1977).

### 3.4 Procedure of the Study

There were some procedures in conducting the study, as follows:

### 3.4.1 Administering the teaching schedule

The study was conducted on 31st October 2011 until 24th November 2011. The teaching learning activity was twice a week for both experimental and control group. It depended on the regular schedule of the school. The more explanations about the teaching schedules of the study and the materials given were set as on the table in appendix page and some lesson plans (see appendix 1).

### 3.4.2 Administering the pilot test

As the next stage of the study, pilot test has been conducted and 20 students were involved in. It was conducted in another sample of students with the

same grade and characteristics. The pilot test was used to check the students'

ability in finishing the task given and the appropriateness of the test. It also was

conducted to test the validity of the instrument which used in testing the

experimental group and control group.

### 3.4.3   Conducting the pre-test

After checking the validity of the instruments, the pre test was conducted

as the next step on the procedure of the study. The pre test was administered as the

basic important information about the students' skill before the treatment was

given.

### 3.4.4   Giving the treatment

Treatment was the next step of the study. In this stage, the researcher acted

as the teacher of both control and experimental group. Then, in the experimental

group, as the focus of the study, there was the use of webbing technique in

teaching writing recount text. In contrast, the researcher did not give a special

treatment for the control group. The teacher only followed the guided writing

technique in teaching writing recount text that has been explained in the previous

chapter.

### 3.4.5   Conducting the post test

The next stage of the study was conducting the post test. It was the final

test of the study which was conducted after the treatment. The post test was given

in both of control and experimental groups which has the same question and topic with the pre test in order to find out whether or not the use of webbing technique improves students' skill in writing recount text.

### 3.4.6 Distributing the questionnaire

In order to find and answer the second problems of the study, the questionnaire has been distributed. Firstly, the researcher was administering the try out test. It was conducted to test the validity of the instrument which will be used in testing the experimental group. It was conducted in another population of students with the same grade.

Then, after measuring the face validity of the questionnaire, the questionnaire was given to the students in experimental group. So, the second problem about students' perception on the use of webbing technique in writing recount text was answered.

### 3.5 Data Analysis

The following explanations were the procedures in analyzing the data of the study where the purpose of analyzing data is to find meaning in the data by systematically arranging and presenting the information (Burns, 1995: 287).

### 3.5.4 Scoring technique

To obtain a valid score that represents the students' skill in writing a recount text. There was a scoring technique conducted by the researcher which

were consists of three main aspects in scoring and analyzing the recount text created by the students. They were the content of the text, the schematic structure of the text and the language use (Emilia, 2011). The more explanation about the criteria's on the scoring technique can bee seen on the table of scoring technique that has been presented on the appendix page (table 3.5).

### 3.5.5 Data analysis of pilot test

The first stage on data analysis procedure was validity and reliability test. The validity test was used to test a given test whether it is valid or not (Hatch & Farhady, 1982: 252). It is the most important consideration in test evaluation (ibid). The concept of validity refers to the appropriateness, meaningfulness, and usefulness of the specific inferences from the test scores (Standards for Educational and Psychological Testing, 1985:9 in Burns, 1996). Meanwhile, this study was conducted the content validity test which concerned with how well the test scores represents the subject matter content or behaviours to be tested (Hatch & Farhady, 1982: 252).

Furthermore, the students were asked to make a recount text in a given topic. There was one topic, the researcher have chosen the topic based on one of the type and purposes of recount which has been explained in the second chapter of the study and syllabus for second grade of junior high school. The topic was personal recount: "Holiday". The students were asked to tell about what happened in the past focusing on their activities in their holiday (Derewianka, 1990: 15).

Moreover, the syllabus of English language subject (of the second semester in the KTSP curriculum has been analyzed by the researcher to measure the content validity (Depdiknas, 2006). In that syllabus, the students are ordered to make one personal recount based own their own experience, thus the second grade students on the second semester was appropriate for the students as the participants of the study. Because, the study ordered the students to make one personal recount based on their own experience and they could understand the instruction on a given topic "Holiday". Even though, there were some students who had difficulties in writing, it was due to the limitation of their vocabularies not due to unclear instruction. It can be concluded that the test is valid due to the content validity test. The topic and instruction on the test can be used to answer the problem of the study as stated on the first chapter. Hence, the topic was chosen as the topic or the test item in the pre-test and post test.

### 3.5.6 Data analysis of pre-test

### 3.5.6.1 Normality distribution test and Variance homogeneity test

The pre-test was conducted in both control and experimental groups on 31st October 2011. It was conducted in order to identify the students' skill in writing recount text before the treatment. The pre-test scores of control and experimental group are presented in the table on the appendix page (see appendix 3; table 4.3). After the pre-test scores were gained, the next stage was testing the normality distribution by using Kolmogorov-Smirnov in SPSS 17.0 for Windows with the level of significance at 0.05 (Hatch & Farhady, 1982). It is used to

compare the sample score which the scores are normally distributed with the same means of standard deviation. The first step of test was stating the null hypothesis. The null hypothesis (Ho) was 'the scores of both experimental and control group are normally distributed'. Furthermore, the computation of normality distribution test from SPSS 17.0 for Windows is presented in the following table:

**Table 3.2**

**The Result of Normality Distribution Test on Pre-test Score**

| | GROUP | Kolmogorov-Smirnov[a] | | |
|---|---|---|---|---|
| | | Statistic | df | Sig. |
| SCORE | CONTROL | .154 | 30 | .067 |
| | EXPERIMENTAL | .157 | 30 | .059 |

Next, the result of the test consulted with the criteria of the significance value (Asymp. Sig.) which has been mentioned before. From the table above, the significance value (Asymp. Sig.) of control group is .067 and .059 for experimental group. The results are higher than the level significance 0.05 ($p > 0.05$). This results shows that the null hypothesis ($H_o$) is accepted. Thus, it can be assumed that the scores of control and experimental group are normally distributed.

After analyzing the normality distribution, the variance homogeneity test was done to examine whether or not the scores of experimental and control groups were homogenous. In this case, the variance homogeneity was analyzed by using Levene's statistic in SPSS 17.0 for Windows and the level significance at 0.05.

The first step in analyzing the variance homogeneity was stating the null hypothesis. The null hypothesis ($H_o$) was 'the variance of both experimental and

control group is homogenous'. Then, the next step was comparing the criteria of significance value (Asymp. Sig.) with the level of significance for testing the hypothesis. If the Asymp. Sig. is more than the level of significance (p > .05), it can be stated that the null hypothesis ($H_o$) is accepted and the score is homogenous. In contrast, if the Asymp. Sig. is lower than the level of significance (p < .05), it can be stated that the null hypothesis ($H_o$) is rejected.

Further, the result of variance homogeneity test on pre-test is presented in the following table.

**Table 3.3**

**The Result of Variance Homogeneity Test on Pre-test**

|  |  | Levene Statistic | df1 | df2 | Sig. |
|---|---|---|---|---|---|
| SCORE | Based on Mean | .025 | 1 | 58 | .874 |
|  | Based on Median | .026 | 1 | 58 | .873 |
|  | Based on Median and with adjusted df | .026 | 1 | 57.982 | .873 |
|  | Based on trimmed mean | .026 | 1 | 58 | .874 |

The table above shows that the significance value (Sig.) based on mean is 0.874. It is higher than the level of significance (0.874 > 0.05). This result shows that the null hypothesis ($H_O$) is accepted. So, it can be concluded that the variance of both experimental and control groups are homogenous.

**3.5.6.2 The calculation of t-test**

After conducting the pre-test, the data was analyzed by using independent t-test. In hypothesis testing, the t-test was used to test for differences between

means when small samples were involved (Coolidge, 2000). The t-test and its critical values are based upon the assumption that the sample dependent variable come from a population of values that is normally distributed (Coolidge, 2000). Further, the independent t-test was used to analyze whether there is significant different between experimental and control groups' means (Coolidge, 2000).

As the first stage on hypothesis testing, there was analysis of the mean scores of pre-test in both of control and experimental groups by using independent t-test formula in Statistical Product and Solution (SPSS) 17.0 for Windows. It was aimed to see whether there is a significant difference between mean of both control and experimental groups before the treatment.

There were some steps on analyzing the scores of pre-test by using independent t-test formula in SPSS 17.0 for Windows. As has been stated in the previous chapter, the first step was stating the null hypothesis ($H_o$). The null hypothesis of this independent t-test was 'there is no significant difference between pre-test means of the experimental and control groups. Secondly, the result of the t-test ($t_{obt}$) was compared with $t_{crit}$ at p= .05 to examine the hypothesis. If the $t_{obt}$ is higher than $t_{crit}$ ($t_{obt} > t_{crit}$), it can be concluded that there is significant difference between the means of pre test and in both experimental and control group. Then, the null hypothesis ($H_o$) is rejected. Meanwhile, if the $t_{obt}$ is lower than $t_{crit}$ ($t_{obt} < t_{crit}$), it means that ($H_o$) is accepted, because there is no significant difference between the means of pre-test in both experimental and control groups.

The result of the Independent- Samples t-test computation is presented in table bellow:

**Table 3.4**

**The Result of Independent Samples *t*-test Computation**

| | t-test for Equality of Means | | | | | |
|---|---|---|---|---|---|---|
| | N | $t_{obt}$ | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference |
| Experimental & Control Groups Pretest | 60 | .038 | 58 | .970 | .133 | 3.487 |

The table above shows that the Asymp. Sig. of the means between control and experimental groups for equal variances assumed is 0.970. It exceeds the level of significance (0.970 > 0.05). Then, $t_{obt}$ is lower than $t_{crit}$ (0.038 < 2.000). So, the result means that the null hypothesis is accepted. It can be concluded that there is no significant difference between pre-test mean of the control and experimental groups. Then, the conclusion is that the students' skill in both control and experimental groups are equal.

**3.5.7 Data analysis of questionnaire**

The frequency of students' answers is used to analyse data questionnaire. The formula of this analysis described as follows:

$$P = \frac{F_o}{N} \times 100 \%$$

Where:

P $=$ Number of Percentage

F $=$ Total number of each response for certain question

N        =        Total number of question

(Jumika, 2009:52)