

## **CHAPTER III**

### **METHODOLOGY**

This chapter mainly contains the discussion on the research methodology. It includes research design, research variables, research site, research subject, research instruments, technique of data collection, and technique of data analysis.

#### **3.1 Research Design**

Educational researches are usually conducted in two forms of methodologies; quantitative and qualitative research methodologies. Each of those methodologies has certain strengths and weaknesses. Based on the field of the research, the study was conducted quantitatively in the form of quasi experimental design.

The reason of choosing the experimental research was that it is one of the most powerful research methodologies; experimental research is the best way to set up cause-and-effect relationship among variables (Fraenkel and Wallen, 2007: 267). Furthermore, Fraenkel and Wallen (2007: 7) state that experimental research is the most conclusive scientific method since it actually establishes different treatments and studies their effects. The results of the experimental research are able to lead the most clear-cut interpretations.

There are four big group designs in experimental research. They are weak experimental design, true experimental design, quasi-experimental design, and

factorial design. Weak experimental design consists of the one-shot case study, the one-group pretest-posttest design, the static-group comparison design and the static-group pretest-posttest design. True experimental design consists of the randomized posttest-only group design, the randomized pretest-posttest group design, the randomized Solomon four-group design, and random assignment with matching. While quasi-experimental design consists of the matching-only design, counterbalanced design, and time series design (Fraenkel and Wallen, 2007: 266-280). A research which is carried out in the form of quasi-experimental design does not need to include of random assignment; it only needs other technique to control threats to internal validity (Fraenkel and Wallen, 2007: 277).

Since the sample of the study were two classes (experimental and control groups) out of seven classes of eighth year students of MTs Negeri Kendal the research was conducted in Quasi-Experimental Designs with the formula as follows:

E T1 X T2

C T1 T2 (Hatch and Farhady, 1982)

E: experimental group

C: control group

T1: Pre test

T2: Post test

X: treatment (teaching writing recount paragraph trough webbing technique)

Some qualitative data were also employed in this study such as questionnaire. The questionnaire was needed to know the advantages or

disadvantages of the use of webbing technique. Other advantages of the questionnaire were to know whether the students like the technique and if webbing technique gave valuable support for the students in writing recount paragraphs. These research instruments were discussed further in 3.4.

### **3.2 Research Variables**

There were two kinds of variables in this research. They were independent variable and dependent one. Independent variable is variable which is chosen by the researcher in order to assess the possible effect(s) on one or more other variables (Hatch & Farhady, 1982: 15). The independent variable in this study was webbing technique as the teaching technique since it was the major variable that was investigated and was measured by the researcher.

The dependent variable is the variable that the independent variable is presumed to affect (Fraenkel and Wallen, 2007: 43). The dependent variable in this study was the students' writing score as it was the variable which was observed and was measured to determine the effect of the independent variable.

### **3.3 Research Site**

The study was conducted at Kendal State Islamic Junior High School (*Madrasah Tsanawiyah Negeri Kendal*) from May 7th, 2009 up to June 5th, 2009. The researcher chose the school as the setting of the study since he is one of the English teachers of the school. By doing so, the researcher got some advantages in

conducting his study such as easiness of the bureaucratic procedures and supports from the colleagues. Besides he understands well the environment and the students as well.

The researcher conducted his research in nine meetings for each group. The schedule of the research treatment could be figured out as in tables 3.1 and 3.2 as follows:

Table 3.1  
Treatment Schedule of the Experimental Group

DATE	TEACHING MATERIAL	TECHNIQUE OF TREATMENT	TIME ALLOCATION
May 7 <sup>th</sup> , 2009	Pretest		2 x 40'
May 20 <sup>th</sup> , 2009	Unforgettable Experience 1	Webbing Technique	2 x 40'
May, 22 <sup>nd</sup> , 2009	Unforgettable Experience 2	Webbing Technique	2 x 40'
May 25 <sup>th</sup> , 2009	Interesting Experience 1	Webbing Technique	2 x 40'
May 27 <sup>th</sup> , 2009	Interesting Experience 2	Webbing Technique	2 x 40'
May 29 <sup>th</sup> , 2009	Holiday Experience 1	Webbing Technique	2 x 40'
June, 1 <sup>st</sup> , 2009	Holiday Experience 2	Webbing Technique	2 x 40'
June 3 <sup>rd</sup> , 2009	Review of the whole meetings	Webbing Technique	2 x 40'
June 5 <sup>th</sup> , 2009	Posttest		2 x 40'

All of the treatments given to the experimental group as scheduled at table 3.1 above were conducted through the Genre-based Approach, especially the use of webbing technique which was always employed in the third stage, Joint Construction of Text (JCoT) in which the students worked to make recount paragraphs in groups and the last stage, Independent Construction of Text (ICoT) when they had to make recount paragraphs individually.

Table 3.2  
Research Schedule of the Control Group

DATE	TEACHING MATERIAL	TEACHING METHOD	TIME ALLOCATION
May 7 <sup>th</sup> , 2009	Pretest		2 x 40'
May 8 <sup>th</sup> , 2009	Unforgettable Experience 1	Guided Writing	2 x 40'
May, 20 <sup>th</sup> , 2009	Unforgettable Experience 2	Guided Writing	2 x 40'
May 22 <sup>nd</sup> , 2009	Interesting Experience 1	Guided Writing	2 x 40'
May 27 <sup>th</sup> , 2009	Interesting Experience 2	Guided Writing	2 x 40'
May 28 <sup>th</sup> , 2009	Holiday Experience 1	Guided Writing	2 x 40'
May 29 <sup>th</sup> , 2009	Holiday Experience 2	Guided Writing	2 x 40'
June 3 <sup>rd</sup> , 2009	Review of the whole meetings	Guided Writing	2 x 40'
June 5 <sup>th</sup> , 2009	Posttest		2 x 40'

As what has been done in the experimental group, the researcher also applied Genre-based Approach in giving treatments to the control group. The use of guided writing was in the third stage, JCoT in which the students worked to write recount paragraphs in groups and in the last stage, ICoT when they had to compose their own recount paragraphs.

### **3.4 Population and Sample**

Population can be defined as a group to whom the researcher would like to generalize the results of the study (Fraenkel and Wallen, 2007: 93). The population of the research were the eight year students of *MTs Negeri Kendal* which consisting of seven classes. Each class consists of forty four students.

A sample is a group in research study on which information is obtained (Fraenkel and Wallen, 2007: 92). Since the population of the study was very big, the researcher chose the cluster random sampling in determining the sample of the study. This technique is similar with simple random sampling except that groups rather than individuals which are randomly selected. This is the effective way of determining the sample from huge population (Fraenkel and Wallen, 2007: 972). The researcher took two classes as the samples of the study. Class VIII B was taken as the experimental group while class VIII C was taken as the control group. Based on the result of the summative test of the first semester these two classes gained similar achievements.

### 3.5 Research Instruments

Fraenkel and Wallen, (2007: 113) define instrumentation as the whole process of preparing to collect data in a research. There were two kinds of instruments which were employed in this research. They were writing tests and questionnaire. The score of the students' tests was used to know the effectiveness of webbing technique in attaining language support to the students to improve their ability in writing recount paragraphs. They were collected through writing tests, pretest and posttest which were conducted to both experimental and control group.

The instrument of the study was a short writing test instruction. To help the students in composing recount paragraphs more easily, the researcher gave additional questions to lead them finding out ideas before writing. The instrument was as stated in figure 3.1 as follows.

Figure 3.1  
Research Instrument

Write a short recount paragraph based on your experience on your last "Lebaran" Day! You may write your paragraph by answering these questions:

1. What did you do on the last "Lebaran" Day?
2. Where did you go on the last "Lebaran" Day?
3. With whom did you go/do your activities on the last "Lebaran" day?
4. What special food did your family have on the last "Lebaran" Day?
5. Whom did you visit on the last "Lebaran" Day?

To assess the students' writing the researcher used the concept of story assessment criteria proposed by Rose (2008: 10) which was discussed further in 3.7, Data Collection Technique.

### **3.6 Research Procedures**

The researcher arranged some procedures to make the study ran in a well-organized way. The steps of conducting the research were as follows. *First*, the researcher tried out the instruments to test its validity and its reliability. *Second*, the researcher gave pretest to both experimental group and control group. The result of the test was collected and was analyzed to get preliminary data about the students' ability in writing recount paragraph. *Third*, the researcher gave the sample treatment, teaching them writing recount paragraphs through webbing technique for the experimental group and guided writing for the control one. *Fourth*, the researcher gave them posttest to find out whether both groups got different result or not. *The last*, the researcher distributed questionnaire to the experimental group. Each of those steps could be explained as follows.

#### **3.6.1 Administering Try out Test**

Try out test was intended to measure the validity and the reliability of the instrument before they were used in the study. Before administering try out test to the students, the instruments were consulted to the supervisors and the English teachers of *MTs Negeri Kendal* where the study would be conducted to know the



appropriateness of the instruments with the students' background of knowledge. Try out test was conducted to the VIII D students consisting of 44 students. It was administered on May 5<sup>th</sup> 2009.

### 3.6.2 Administering Pretest

After calculating the result of the try out test and finding the validity and the reliability of the instrument, the researcher conducted pretest to the experimental and the control groups. The test was carried out on May 7<sup>th</sup>, 2009. As many as 44 students for each group were present. The pretest was intended to know whether the ability of the two groups were equal or not in writing recount paragraphs.

### 3.6.3 Conducting Treatments

Shortly after the researcher got the result of the pretest and found out that there was no significant different score mean between the two groups, he gave treatment to the samples of the study. The treatment was conducted seven meetings for each group in which each meeting lasted for 2 X 40 minutes.

The first meeting was conducted on May 8<sup>th</sup> 2009 for the control group and on May 20<sup>th</sup> 2009 for the experimental group. This different time of the first treatment was caused by the examination for the third grade students so the first and the second grade students did not get teaching learning process at school. The first theme given was unforgettable experience 1. The students were very enthusiastic to take part in the learning process. The main activity was focused on

discussing what *recount* was. The teacher explained recount as a text type and its characteristics. The other activities were giving examples of recount texts and discussing them with the students. Some students raised several questions dealing with the recount and its differences between recount and narrative text.

The second meeting was carried out on May 20<sup>th</sup> 2009 for the control group and on May 22<sup>nd</sup> 2009 for the experimental group. The second theme given was unforgettable experience 2. All students were present on the second meeting. Many students proposed questions dealing on the way of constructing good sentences into good and correct paragraphs. Some of them admitted that they often got difficulties in making English sentences. Other important activity on this meeting was discussing certain *chronological order* words such as *first*, *second*, *third*, *next*, and *finally* which often use in recount text.

The third meeting presented interesting experience 1 as the theme which was conducted on May 22<sup>nd</sup> 2009 for the control group and on May 25<sup>th</sup> 2009 for the experimental group. There were five students (two students in the control group and three students in the experimental group) were absent on the third meeting. The activity of the third meeting was focused on discussing past tense formation “with be” and “without be”. Many students made mistakes in using adjective words in the sentences. For instances, “I very happy that day” instead of “I was very happy ....”, “It fun” instead of “It was fun” etcetera.

The fourth meeting was conducted on May 27<sup>th</sup> 2009 for both groups. The fourth theme was interesting experience 2. The activity of this meeting was

focused on the way how to organize sentences into good recount paragraphs. The researcher also explained the plural nouns as the main discussion of the meeting. There were many students who did not know the plural forms of certain nouns, especially irregular plural nouns which do not use common rule of adding “s” or “es” in certain nouns such as *mice*, *children*, *sheep*, and *oxen*.

The fifth meeting was conducted on May 28<sup>th</sup> 2009 for control group and on May 29<sup>th</sup> 2009 for the experimental group. The theme on this meeting was holiday experience 1. The main activity on this meeting was discussing possessive adjectives and possessive pronoun. The teacher explained the possessive adjectives from the beginning since there were many students who did not clear yet with the use of *possessive adjectives* and *possessive pronouns*. Many sentences were made to make the students clearer about the use of possessive adjectives for examples. These are some of their incorrect sentences; “*They played in the beach with they friends*” instead of “*They played on the beach with their friends*”, “*We had to keep some goods of our*” instead of “*We had to keep some goods of ours*” etcetera.

The six meeting was conducted on May 29<sup>th</sup> 2009 for control group and on June 1<sup>st</sup> 2009 for the experimental group. The theme discussed was holiday experience 2. The main activity in this meeting was discussing pronoun, discussing incorrect sentences the students made, and correcting students’ mistakes in making sentences. The other important activity on this meeting was discussing *pronoun* which is very important in constructing English sentences. This activity was meant to lead the students to use the correct pronouns in

producing sentences since many students still used certain subjects (e.g person names) more than once in short paragraphs or even in the same sentences for instance “*My friends and I visited some tourist resort in Yogyakarta. First, My friends and I visited Borobudur in Magelang regent*” instead of “*My friends and I visited some tourist resorts in Yogyakarta. First, we visited Borobudur temple in Magelang regency*”.

The seventh meeting was carried out on June 3<sup>rd</sup> 2009 for both groups. This was the last meeting (before the posttest was given) in which the teacher reviewed the whole six meetings before. The activity on this meeting was dominated by the teacher to ask the students everything they had not clear yet about recount text, past verbs, and the difficulties the students faced after they were treated six meetings. The teacher also gave more recount texts as examples to be discussed again to lead them to reach the conclusion of the recount text.

The only difference between the two groups was the technique given to the students. Particular treatment was given to the experimental group, the students were taught by webbing technique. On other hand, the control group was taught by guided writing; that is a teaching strategy that can be used to extend and develop text written during writing.

To employ webbing technique teacher led the students to make web in prewriting to find out main ideas and also supporting ideas before writing. The first thing the teacher did was writing down main idea right in the middle on the board. The next steps were lead the students to find out supporting ideas by giving

some “wh questions” such as what, who, where, when, which and also how. These questions were very important for the students especially when they got writing block and they could not find out the ideas. Sometimes the students got the ideas but they could not express them in English.

To give similar treatments to the control group, the researcher employed guided writing that is a strategy used to scaffold the students by giving some stimuli questions to lead the students to develop their writing. Brown (2004: 234) calls these questions guided writing stimuli. The purpose of using guided writing was to provide instruction and assistance to children while they are writing (Tompkins, 2008: 28). Though the teacher is allowed to help the students by giving some stimuli questions or structured lessons, it is the students themselves who have to write the writing. The difference between webbing technique and guided writing is on the time they are employed. In webbing technique teacher gives questions in prewriting to find out ideas as many as possible before writing while in guided writing stimuli questions are given along the writing process when the students need help.

The researcher employed four stages in teaching as proposed in GBA the researcher discussed before. The steps were building knowledge of the field (BKoF), modelling of text (MoT), joint construction of text (JCoT) and independent construction of text (ICoT).

The teaching activities on the first stage, BKoF, were dominated by proposing several questions based on the topic, answering students’ questions and

giving some examples. The purpose of employing this stage was to develop students' background knowledge of the recount text.

On the second stage, MoT, the teacher gave example text as a model of recount text. Other activities on this stage were asking the students to read and explore the text, discussing and identifying the topic sentence, discussing and identifying the purpose of the text, and discussing and identifying the language features of the text given. Teacher could give more example texts if the students asked him to. The purpose of this stage was to develop students' understanding of recount text, its purposes and its characteristics as well.

The first activity on the third stage, JCoT was grouping students (of four). Other activities conducted in this stage were asking them to work in groups to make web to find out core idea and supporting ideas before writing, asking students to make sentences based on the webs they have mad and arranged them into good paragraphs. The purpose of the activities in this stage was developing students' writing skill that was to construct recount paragraphs within groups.

In the last stage, ICoT, the students were asked to make web and construct their own recount paragraphs based the web they have made individually. The purpose of the activities of this stage was to develop students' writing skill, to produce recount paragraphs individually.

#### 3.6.4 Administering Posttest

Posttest was conducted after the whole treatments had been given to both groups. It was carried out on June 5th, 2009. Posttest was conducted to measure the influence of the treatment, whether it gave significance improvement or not. The test was the same with the pretest. As many as 88 students or all samples could take part in the posttest.

#### 3.6.5 Distributing Questionnaire

As previously mentioned that questionnaire was administered to see the students' responses toward the use of webbing technique in teaching writing recount paragraphs. The questionnaire was distributed to the experimental group only after they did the posttest. The researcher gave the students other additional time to distribute the questionnaire in order to give the same length time with the control group.

### 3.7 Data Collection Techniques

The term "data" refers to the types of information researcher obtains on the subjects of his/her research (Fraenkel and Wallen, 2007: 112). The primary data of this research were the students' writing scores. They were assessed and were scored based on the story assessment criteria proposed by Rose (2008: 10) as shown in figure 3.2 below, while the form of the assessment was shown in figure 3.3.

Figure 3.2

Story assessment criteria (taken from Rose 2008: 10)

Purpose	Is the story genre appropriate for the writer's purpose?
Staging	Does it go through appropriate stages?
Field	Is the story plot imaginative, interesting and coherent?
Tenor	Is the reader engaged with characters' reactions and reflections?
Mode	Is the creative use of literate descriptive language and metaphors appropriate for the level?
Phases	Are story phases used creatively to build problems and reactions, and to describe, comment, reflect?
Lexis	Are people, things and places followed through coherently to build up context?
Conjunctions	Are logical relations between each step clear, e. g. shifts back and forward in time, comparisons, cause?
Reference	Is it clear who or what is referred to, e. g. in dialogue?
Appraisal	Conscious control of appraisal, such as feelings, judgments of people and appreciation of things and places
Grammar	Are grammatical conventions used appropriately?
Spelling	Is spelling accurate?
Punctuation	Is punctuation used appropriately?
Presentation	Is the layout clear and attractive? Is it well organized/presented?

The collected data were calculated and were analyzed by using certain form of tabulation to make the assessment much more easily. The scoring form of the assessment is as shown in figure 3.3 below.



Figure 3.3

Scoring form of the students' writing

No	Student	Scoring Indicator														Sum	Score	
		Purpose	Staging	Field	Tenor	Mode	Phases	Lexis	Conjunction	reference	appraisal	Grammar	Spelling	Punctuation	Presentation			
1.	S#1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2.	S#2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3.	S#3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Σ	Σ	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
SUM		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Average		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

The numerical score of each aspect ranges from 0 to 3. 0 means there is no evidence of the criterion, 3 means it is the top standard, and in between as 1 and 2 (Rose 2008:14). Since the assessment consisted of fourteen aspects, the highest total score was 42 (14x3). The final score was gained by dividing the obtained score by the maximum score (42) and the result was multiplied by 100.

The complete students' writing scores could be found in appendices 7 and 8 (try out), appendices 12 and 13 for pretest and posttest of the experimental group, appendices 15 and 16 for pretest and posttest of the control group.

The secondary data were questionnaire which was also administered in this research. Questionnaire could be categorized as subject-completed

instruments. In a questionnaire, the subjects respond the questions by writing or marking answer sheet (Fraenkel and Wallen, 2007: 126). The questionnaire was employed to know the advantages of using webbing technique for the experimental group.

The questionnaire consists of 10 items of open and closed questionnaire (the complete questions of the questionnaire could be looked at appendix 6 of this study). The reason of using this kind of questionnaire was to gain more complete data about the students' responses toward the use of webbing technique in writing recount paragraphs.

### **3.8 Data Analysis**

#### **3.8.1 Analyzing Try Out Data**

It is important to apply qualified instruments since the conclusions a researcher drew are based on the information he/she obtained using these instruments. The quality of the instruments should be valid and reliable (Fraenkel and Wallen, 2007: 150). The first step to know the qualification of the instrument is by conducting validity test. Validity can be defined as the appropriateness, meaningfulness, correctness, and usefulness of the specific inferences researchers make based on the data they collect (Fraenkel and Wallen, 2007: 151). In order to find out the validity, the researcher applied the *Pearson product moment* correlation available in Microsoft excel or in SPSS for windows. The formula of the *Pearson product moment* correlation is as follows (Hatch and Farhady 1982):

$$r_{xy} = \frac{N \cdot \sum XY - (\sum X)(\sum Y)}{\sqrt{[N \cdot \sum X^2 - (\sum X)^2][N \cdot \sum Y^2 - (\sum Y)^2]}}$$

$r_{xy}$  = correlation coefficient between  $X$  and  $Y$  variable

$\sum$  = sum of each variable

$X$  = the average score of  $X$

$Y$  = the average score of  $Y$

$N$  = total number of subjects

The criteria of the validity test as stated by Arikunto (2002: 147) are 0.800 – 1.00 (very high), 0.600 – 0.800 (high), 0.400 – 0.600 (moderate), 0.200 – 0.400 (low), and 0.00 – 0.200 (very low).

The second step the researcher conducted was to test the reliability of the instrument. Reliability refers to the consistency of scores or answers from one administration of an instrument to another, and from one set of items to another (Fraenkel and Wallen, 2007: 150). While Hatch and Farhady (1982: 244) define reliability as the extent to which a test produces consistent results when administered under similar condition. To test the reliability of an instrument, Cornbach Alpha formula or the Kuder-Richardson formula can be employed.

The criteria of the reliability test are above 0.90 (very high), 0.70 – 0.90 (high), 0.50 – 0.70 (moderate), and 0.30 – 0.50 (low) (Arikunto, 2002: 110).

### 3.8.2 Analyzing Data of Pretest and Posttest

The quantitative data of the research consisted of pretest and posttest results. The final score of the tests were gained by dividing the obtained score with maximum score (42) and then multiply it with 100. To find out the effectiveness of webbing technique toward students' writing achievement, the collected data could be calculated by using SPSS or the following match t-test formula:

$$t = \frac{\bar{X}_e - \bar{X}_c}{S(\bar{X}_e - \bar{X}_c)}$$

$\bar{X}_e$  = Means of experimental group

$\bar{X}_c$  = means of control group

S = standard error of mean

The result of the analysis was used to test the stated hypothesis proposed by Brown (1988: 121) as follows:

1. Look at the  $H_0$  (null-hypothesis)
2. Look at the  $\alpha$  level
3. Comparing the  $r_{\text{observed}}$  and  $r_{\text{table}}$
4. a. if the  $r_{\text{observed}}$  is less than  $r_{\text{table}}$ , it accepts the null-hypothesis ( $H_0$ ) and stop.  
b. if the  $r_{\text{observed}}$  is greater than  $r_{\text{table}}$ , it rejects the null-hypothesis ( $H_0$ ) and continue.
5. Decide which alternative hypothesis is more logical

## 6. Making interpretation and conclusion.

To find out the way the teacher taught writing and students' response toward the implementation of webbing technique through questionnaire, the researcher employed the following formula:

$$P = \frac{F}{N} \times 100$$

P = Number of percentage

F = Total number of scores

N = Number of questions

### 3.9 Conclusion of Chapter III

The study was carried out at MTs Negeri Kendal in the quasi experimental design. It was meant to find out the different result of the use of webbing technique employed in the experimental group compared with guided writing in employed in control group. The researcher also distributed questionnaire to the experimental group to support the result of the main statistical data obtained from pretest and posttest. The second purpose of giving questionnaire was to find out the advantages of the webbing technique.

This study was conducted for about one month consisted of eight meetings. Six meetings were used for giving treatments and two other meetings were for administering pretest posttest. The researcher used story assessment criteria proposed by Rose to give score to the students' writings. The procedures of the

study was trying out the instruments, administering pretest, conducting treatments, administering posttest, and distributing questionnaire.

