

## CHAPTER III

### RESEARCH METHODOLOGY

This chapter provides a detail explanation of the research methodology used in this present study. It covers hypothesis of the research, research design, data collection which provides the research procedures in collecting the data, and data analysis. In addition, teaching procedure, teaching materials, and scoring method of the task are presented.

#### 3.1 Hypothesis

Muijs (2004) defined hypothesis as a tentative explanation that accounts for a set of facts and can be tested by further investigation. The hypothesis of this research was a null hypothesis ( $H_0$ ) which states that there is no difference between the two groups' means (Coolidge, 2000). There are two possible results of the research, rejecting or accepting the null hypothesis. Rejecting the null hypothesis means that the experiment was successful. On the other hand, accepting the null hypothesis means that the experiment was not successful. This research expected to reject the null hypothesis (Kranzler & Moursund, 1999). The formula is shown below:

$$H_0: \mu_1 = \mu_2$$

$H_0$  : the null hypothesis

$\mu_1$  : the mean for the experimental group

$\mu_2$  : the mean for the control group

The notation showed that the treatment gave no improvement to the experimental group which researcher wanted to disprove. The statement of  $H_0$  is:

H<sub>0</sub> : Implementation of genre based approach in written cycle teaching cannot improve students' recount text writing ability.

### **3.2 Research Design**

This research was conducted by using a quasi-experimental research design. There were two groups of students involved in this research which were divided into an experimental group and a control group. Since this research was trying to figure out a new teaching method in the school where the research was taken place, so the intervention that was a genre based approach was only conducted in the experimental group; it is to measure the difference that the intervention makes (Cohen et.al., 2007). The control group was treated by the method that the teacher usually used in the classroom that was Grammar Translation Method (GTM). This method can be identified from the first two meetings where the students read and translated the text into Bahasa Indonesia and grammar was taught deductively (Richards & Rodgers, 2001).

Three instruments were used to answer two research questions, writing task which was conducted in pretest and posttest, a questionnaire, and an interview. A pretest was conducted to both groups before giving the treatment to the experimental group. To measure the difference that this treatment made to the experimental group, a posttest was applied by the end of a complete treatment that was a written cycle teaching of genre based approach to both the experimental group and the control group.

The genre based approach was an independent variable that was used to give a treatment to the experimental group. A dependent variable in this research was the students' recount text writing ability as measured by the comparison of students' score of pretest and posttest result.

The notation of the research sequence used is described as:

<i>Experimental</i>	<i>O1</i>	<i>X</i>	<i>O2</i>
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<i>Control</i>	<i>O3</i>		<i>O4</i>

A quasi-experimental design: the pretest-post-test non-equivalent group design  
(Cohen etc. 2007: 283)

- O1* : experimental group pre-test
- O2* : experimental group post-test
- O3* : control group pre-test
- O4* : control group post-test
- X* : treatment

The students' pretest scores from the two groups were analyzed, comparing the experimental group's pretest scores and the control group's pretest scores (*O1* : *O3*). The t-test was used to analyze these scores which were expected to have no significant differences between the two groups' pretest scores to show normality of the data. The treatment *X* was given to the experimental group. The second analysis using t-test was on the result of the posttest in order to conduct a hypothesis testing, comparing the students' posttest score (*O2* : *O4*) ( Sugiyono, 2010:223), a high significant differences between these two groups' posttest scores were expected to show that the treatment gave improvement to the experimental group students' writing ability.

In addition, a questionnaire was given to the experimental group. The questionnaire consisted of eighteen questions which were asking the students' responses to the treatment that they had experienced. After that, an interview was conducted to nine students who were randomly picked from the experimental group to convince that the interview's result was in line with the questionnaire's result. Not all students of the experimental group were involved in this interview because many of them were doing their compulsory activity in the school and the researcher could not conduct second round interview because of the availability of time was limited.

### **3.3 Subject of the Research**

Subject of the research were students of 10<sup>th</sup> grade. The study was conducted to the 10<sup>th</sup> grade students of Senior High School in Subang. The samples of the research are two classes of 25 students. The first class will be treated as an experimental group and the other one will be treated as a control group. The reason of using this level of students is because the recount text becomes one of text types that the students at this level learn in an English class.

### **3.4 Data Collection**

In collecting the data, this research used three main instruments that were writing task, which was given in the pretest and posttest, and a questionnaire to figure out the students' response in the experimental group. In addition, an interview was conducted to collect deeper information.

#### **3.4.1 Writing Task**

Since the focus of the research was on a recount text in the form of a biography, the writing task in the pretest and posttest was composing a biography from someone's curriculum vitae. There were two famous figures identities that students could choose. The identities presented personal information and a timeline of the figures' life, which was randomly assigned.

This writing task was given to both experimental and control groups in the pretest and posttest. The writing task in the pretest was the same task as what was used in the posttest. It was conducted to measure the effect of the treatment in the experimental group. In addition, the results of the tests were used to compare the experimental and control groups' writing ability.

#### **3.4.2 Questionnaire**

The use of questionnaire in this research was as a survey to find out the students' responses towards the implementation of genre based approach. The questionnaire was only given to the experimental group who received the treatment and it was distributed after the posttest. There were eighteen questions

in the form of statements related to the research variables that were writing and the teaching and learning process during the treatment that were equipped with four ranking scale response options, strongly agree, agree, disagree and strongly disagree. According to the Likert scale, the options are from positive responses to negative responses (Sugiyono, 2010: 135). These four response options were used in order to avoid the students' neutral response or the students who tend to sit the fence, not choose either side (Brown, 2000). In addition, this research was trying to figure out the students' responses which expected to give a clear direction, whether it was positive or negative.

The questionnaire was in the form of a checklist. To answer the questions, the students put a checkmark in the given column. The questionnaire was presented in Bahasa Indonesia, as suggested by Mackey and Gass (2005) who stated that questionnaire should be administered in respondents' native language.

### **3.4.3 Interview**

To clarify the data gathered from the questionnaire, an interview was conducted which meant that this interview was not used as primary data (Harrel & Bradley, 2009). A semi-structured interview was conducted for the researcher used the questionnaire statements as a guide and still had chances to digress or probe information from interviewees (Mackey & Gass, 2005). It was arranged to strengthen the participants' point of view and to collect more data. Moreover, the interview was conducted to make sure the research come to reasonably clear conclusion (Muijs, 2004: 31). The interview transcription is available in the Appendix B.

### **3.5 Research procedures**

The research procedures were divided into three stages that were before, during and after the implementation of the treatment. Those stages were conducted as follow:

### **3.5.1 Before the Implementation of the Treatment**

This was the preparation stage of the research. The researcher designed 8 lesson plans, four lesson plans for each group (See Appendix C), and instruments of the research (see Appendix A). Before designing the lesson plans, appropriate teaching materials were prepared. The lesson plans were designed for five meetings during the teaching and learning process, excluding the pretest and the posttest. The instruments were in the form of a writing task and a questionnaire. To check the validity and the reliability of the instruments, a pilot test was administered. A content validity was used to measure the validity logically, whether it was relevant to the purpose of using the instruments to get the expected data (Hynes, 1995).

#### **3.5.1.1 Administering the Pilot Test**

Before the instruments were used in the research, a pilot test was administered to investigate the content validity and the reliability of the instruments. The pilot test was conducted before the pretest to a group of students from the same level as the control and the experimental group. The students were firstly asked to read the instructions given in the instruments to check whether those instruments were clear and understandable or not. After that, the students were asked to take the test. Then, the students' writings were examined to see whether it met the expectation of the research or not. The pilot test was conducted on May 3<sup>rd</sup>, 2012.

#### **3.5.1.2 Administering the Pretest**

A pretest was conducted after administering the pilot test. It was conducted in the control group and the experimental group. This pretest was used to investigate the students' initial ability.

### **3.5.2 During the Implementation of the Treatment**

The implementation of the treatment was conducted in five meetings in the control group and the experimental group.

### **3.5.2.1 Teaching Procedure**

The teaching procedure of this research contains two different procedures that applied in these two groups, an experimental group and a control group. An explanation of each teaching procedure is presented below:

#### **3.5.2.1.1 Teaching procedure in the experimental group**

There are four stages conducted in the experimental group, that are building knowledge of the field, modeling of the text, joint construction of the text, and independent construction of the text as suggested by English Teaching Curriculum in Indonesia (2004). The third stage, joint construction of the text, was conducted in two meetings. They were delivered in order to give more opportunity for the students to practice. To sum up, there are five meetings that were conducted in the experimental group.

##### **1. First Meeting (Building Knowledge of the Field - BKOF)**

In this first stage of the written cycle, the students were exposed to the expressions and linguistics features used in the targeted text (Emilia, 2011), the recount text in the form of biography. The students were asking each other questions about their personal information which led them to recognize the first step of making a biography. The activities were conducted to build the students knowledge about the topic (Emilia, 2011). This stage was conducted whenever it was needed. In this study, the BKOF stage was conducted in one meeting since the students seemed familiar with the topic.

##### **2. Second Meeting (Modeling of the Text – MOT)**

A model of biography was presented to give an explicit example of the text (Emilia, 2011; Derewianka, 1990). It helped the students to figure out the text organization of the recount text. In addition, they saw how the organization structure of the text and linguistic features that were used in the text. This stage was conducted in one meeting because the researcher thought the students had enough knowledge of the recount text itself and they seemed to be ready to continue to the next step.

### 3. Third Meeting (Joint Construction of the Text – JCOT)

The students got opportunities to share their knowledge and understanding of the biography to their classmates (Derewianka, 1990). First of all, the students were given a list of expression. Then they were involved to write a biography together with the teacher. After that, they jointly worked in group to produce a biography under the same topic. This stage was conducted in two meetings for the students could get more experiences in writing process.

### 4. Forth Meeting (Joint Construction of the Text – JCOT)

On the second meeting of the joint construction of the text stage, the teacher and the students discussed some of the students' work. After that, the students revised and then rewrote their text.

### 5. Fifth Meeting (Independent construction of the text – ICOT)

The students worked individually to compose a biography (Emilia, 2011; Derewianka, 1990). They wrote a biography of people that they chose themselves. This stage was the students' time to demonstrate their knowledge and understanding of the targeted text, the recount text in the form of a biography.

#### **3.5.2.1.2 Teaching procedures in the control group**

The teaching procedures in the control group were conducted in five meetings, the same as the experimental groups had. These procedures were designed after informal observation and interview were conducted with the English teacher. The teaching procedures that were usually conducted by the English teacher in the research site were mainly based on the Grammar Translation Method (GTM), which conducted as follows:

#### 1. First meeting

On the first meeting, the teacher explained what the recount text is and gave the example of the biography, a teaching material, to the students. The students got a lot of exposures to read and translate some

difficult vocabulary and the text into Bahasa Indonesia (Larsen-Freeman, 2000).

## 2. Second meeting

Grammar Translation Method (GTM) was used in the second meeting which focused on the form. The students were exposed into grammatical features of the recount text. However, these grammatical features were presented as separate parts of the recount text which was given in the first meeting (Richards & Rodgers, 2001). For example, when the teacher explained the students about the past tense, the students were asked to make five sentences according to the formula of the past tense. All students' sentences were not related to the recount text.

## 3. Third meeting

On the third meeting, the students were still exposed into linguistic features but this time they linked the features into the text. The teacher and the students discussed the students' work in the previous meeting. The students can ask questions and discuss with their friends and the teacher (Larsen-Freeman, 2000).

## 4. Forth meeting

On this forth meeting, the students worked with the same text as the previous meeting. This time, the text was used to measure the students' reading comprehension through questions and answers (Larsen-Freeman, 2000). After that, the students were asked to rearrange jumble paragraphs into a well-structured text.

## 5. Fifth meeting

The main activity in the last meeting was to ask the students to write a biography individually. Then, the teacher gave feedbacks to some the students' works.

### **3.5.3 After the Implementation of the Treatment**

After completing the implementation of the treatment, a posttest was conducted in both the control group and the experimental group. Then, a

questionnaire was distributed to the experimental group to find out the students responses toward the implementation of the genre based approach. After that, an interview was arranged. Finally, a data analysis was conducted.

### 3.6 Teaching materials

The teaching materials to both groups, the experimental and the control group, were the same. It covered the generic structure of the text and linguistic features. Linguistic features of recount text include past tense, action verb, proper noun, pronoun, preposition of place and time and conjunctions or connectors dealing with sequences. Those teaching materials were differently arranged for each group (see Lesson Plans in Appendix C).

### 3.7 Teaching Schedule

Since the treatment of the study used a genre based approach, a complete cycle of teaching that were building knowledge of the field, modeling of the text, joint construction of the text and independent construction of the text was conducted in five meetings. The teaching schedules were arranged as follow:

Table 3.1

Teaching schedules in the experimental group and the control group

No	Schedule/ Date		Activity	
	Exp. Group	Cont. Group	Experimental Group	Control Group
1.	Pretest/ May 7, 2012	Pretest/ May 5, 2012	<b>Writing task.</b> The students were asked to write a biography. They chose one of the two famous figures' personal information as the material of their writing.	<b>Writing task.</b> The students were asked to write a biography. They chose one of the two famous figures' personal information as the material of their writing.

2.	Meeting 1/ May 9, 2012	Meeting 1/ May 10, 2012	<b>Building knowledge of the field.</b> The students were introduced into the subject through asking each other questions about their personal information, since speaking can be used in this stage as assessment (Emilia, 2010). The teacher tried to build the students' knowledge about the recount text in the form of biography which tells someone's personal information.	<b>First meeting.</b> The teacher explains what recount text is, the purpose and the organization structure. Then the students read the given example of the recount text, J.K. Rowling's biography. After that, the students translate the text into Bahasa Indonesia. A typical GTM classroom, students are asked to read and translate some sentences in and out of target language (Larsen-Freeman, 2000; Richards & Rodgers, 2001)
3.	Meeting 2/ May 14, 2012	Meeting 2/ May 12, 2012	<b>Modeling of the text.</b> The teacher explained what the recount text is (Derewianka, 1990). The teacher gave the students a recount text in the form of biography, J.K. Rowling's. They read the text and then identify the organization structure of the recount text (Emilia, 2010).	<b>Second meeting.</b> The teacher explains the grammar rules of the recount text deductively in which emphasized in teaching about form of past tense, pronoun, conjunction, etc. The students were asked to make some sentences in past tense form. Unfortunately, those sentences are usually not connected to each other, independent sentences (Larsen-Freeman, 2000).
4.	Meeting 3/ May 16, 2012	Meeting 3/ May 17, 2012	<b>Joint construction of the text.</b> The teacher gave the students a list of expressions that can be used in the recount text writing activity (Emilia, 2011). The students worked in group of four to compose a biography (Derewianka, 1990).	<b>Third meeting.</b> The students and the teacher discussed the students' previous works, mostly by translating statements found in the students' work (Richards & Rodgers, 2001).
5.	Meeting 4/ May 21, 2012	Meeting 4/ May 19, 2012	<b>Joint construction of the text.</b> The students and the teacher discussed the students' works. After that, the students rewrite their works.	<b>Fourth meeting.</b> It was intended to measure students' reading comprehension. The teacher asked the students some questions based on the given text (Larsen-Freeman, 2000). Then, the teacher asked the students to rearrange jumble paragraphs from Justin Bieber's biography.

6.	Meeting 5/ May 23, 2012	Meeting 5/ May 24, 2012	<b>Independent construction of the text.</b> The students write a biography individually (Emilia, 2010; Derewianka, 1990)	<b>Fifth meeting.</b> The main activity is that the students write a biography individually. It is because one of aims of GTM is to make the students able to write (Larsen-Freeman, 2000)
7.	Posttest/ May 28, 2012	Posttest/ May 26, 2012	<b>Writing task.</b> The same task and materials as the pretest were used.	<b>Writing task.</b> The same task and materials as the pretest were used.

### 3.8 Data Analysis

The data analysis covers the scoring sheet of the writing task, questionnaire and the analysis of the research itself.

#### 3.8.1 Scoring Technique of the Writing Task

Students' works on the pretest and posttest were analyzed based on the five main aspects of writing (Emilia, 2011), which are genre, register, discourse, grammar and graphic features. A more detail evaluation of the students' texts was proposed by Rose who described those five aspects of writing into more specific aspects (2006, as cited in Emilia, 2011) and gave points for each aspect. The points were gained from the four ranges of criteria that were suggested by Coffin, et al. (2003 as cited in Emilia, 2011). A rubric is used in order to give a detail score for each aspect of writing (Emilia, 2011).

The rubric in Table 3.2 below was a modification of Rose's evaluation of text based on rubric and points with some adjustments. The modification was conducted to give clearer standard or criteria for each aspect of writing (Tchudi, 1997).

Table 3.2  
Evaluating students' text based on rubric and points  
Rose (2006: 16; 2007: 9-30 as cited in Emilia 2011: 151)

Genre	Purpose	Is the text genre appropriate for the writer's purpose?	3 – It is appropriate for the writer's purpose. 2 – it is almost appropriate for the writer's purpose 1 – it is less appropriate for the writer's purpose 0 – the text genre is not appropriate for the writer's purpose.
	Staging	Does it go through appropriate stages?	3 – the staging goes through appropriate stages. 2 – the staging goes through inappropriate stages 1 – the staging misses one stage 0 – the staging misses more than one stage
Register	Field	Does the writer understand and explain the topic?	3 – the writer understands and explains the topic 2 – the writer has limited knowledge about the topic 1 – the writer has lack knowledge about the topic 0 – the writer seems to not understand about the topic
	Tenor	Does the text show a clear relationship between the writer and the reader?	3 – it shows a clear relationship between the writer and the reader. 2 – it shows an adequate relationship between the writer and the reader 1 – it shows an inadequate relationship between the writer and the reader 0 – a relationship between a writer and a reader is unrecognized
	Mode	Is there an appropriate use of technical and abstract/written language?	3 – there is an appropriate use of technical and abstract language. 2 – adequate use of written language 1 – inconsistent use of written language 0 – spoken language is used
Discourse	Phases	Is it organized in appropriate phases to make a meaning of the whole text?	3 – it is organized in appropriate phases to make a meaning 2 – it is organized in adequate phases to make a meaning 1 – it is organized in limited phases to make a meaning 0 – it is organized in inappropriate phases
	Lexis	Is the field well constructed by sequences of lexical items?	3 – the field is well-constructed by sequence of lexical items. 2 – the field shows adequate knowledge of appropriate lexical items

			1 – the field shows limited knowledge of appropriate lexical items 0 – the field is not well-constructed by sequence of lexical items
	Conjunction	Are logical relations between each stage clear, e.g. time, comparison, and cause?	3 – logical relations between each step are clear. 2 – some parts do not show logical relations 1 – lack of conjunction which leads to unclear logical relations between each stage 0 – there are not any conjunctions used in the text
	Reference	Is it clear who or what is referred to?	3 – it is clear who or what is referred to. 2 – there are few errors in some references 1 – there are frequent errors of references 0 – it is not clear who or what is referred to
	Appraisal	Is appraisal used judiciously to evaluate things, processes and relations?	3 – appraisal is used to evaluate things, process and relations 0 – there is no appraisals used in the text
Grammar		Are grammatical conventions used appropriately?	3 – grammatical conventions are used appropriately. 2 – few errors of grammatical conventions 1 – several errors of grammatical conventions 0 – frequent errors of grammatical conventions
Graphic features	Spelling	Is spelling accurate?	3 – spelling is accurate 2 – few errors of spelling 1 – occasional errors of spelling 0 – frequent errors of spelling
	Punctuation	Is punctuation used appropriately?	3 – punctuation is used appropriately 2 – few errors of punctuation 1 – occasional errors of punctuation 0 – frequent errors of punctuation
	Presentation	Is it well organized/presented? (Paragraphs, tabs, spacing, etc.)	3 – it is well-organized 2 – it is adequate-organized 1 – it is less-organized 0 – it is not well-organized

The highest point of this evaluation is 42 and the highest score of the student's work is 100. The student's score is obtained from:

$$\text{Student's score} = \frac{\text{student's point}}{\text{highest point of evaluation}} \times 100$$

### **3.8.2 Scoring Technique of the Questionnaire**

Since the questionnaire response options were in the form of Likert scale, so the students' choice was calculating in the form of percentage. The number of the students who chose the same option in the questionnaire items was divided by the number of total students and then multiplied by one hundred. In the Likert scale, to get the direction that the responses took, the average of the students' responses was counted by the ideal responses score for each item (Sugiyono, 2010). This ideal score was set according to the researcher's expectation of the students' response. It meant that each option of the item had a certain score. The gradation score for each option (strongly agree – agree – disagree – strongly disagree) ranked from 4 to 1 for the positives statements and 1 to 4 for the negative statements. Through this calculation, the students' responses toward the implementation of genre based approach in the classroom could be obtained. See Appendix A: the research instrument.

The result of the questionnaire was presented in the form of percentage which was presented in the form of a table. It showed students' choice for each optional answer in the questionnaire.

### **3.8.3 Data Analysis on the Pilot Test**

The aim of administering the pilot test was to check the validity and reliability of the instrument. It was valid when the students were able to follow the given instructions in the test and they were able to take the test as the way it instructed. Moreover, the data gained from the test was what this research expected. Furthermore, it was reliable when the instrument was consistently giving the same variable result whenever it was conducted. Then, the test was assumed to be valid and reliable. It meant that the test can be used in the pretest and the posttest.

### 3.8.4 Data Analysis on the Pretest

The researcher used independent t-test formula to analyze the result of the pretest. This test was used to compute two independent groups' means on the same dependent variable in order to determine whether there were significant differences or not (Coolidge, 2000). The level of significance used in this research was the minimum conventional level of significance that is alpha 0.05. The pretest result was analyzed using SPSS version 17.0 for Windows. Hatch and Farhady (1982) stated three assumptions underlying the t-test, they are as follow:

1. The subject is allotted to one group in experiment
2. The variances' scores are equal and normally distributed
3. The scores on the independent variable are continues

In order to meet those assumptions, the normality distribution and variance homogeneity tests were done before the researcher calculated the t-test of the data. All computation was conducted by using SPSS version 17.0 for Windows.

#### 3.8.4.1 Normality Distribution Test

To analyze the normal distribution of the scores in the pretest, the Kolmogorov-Smirnov test in SPSS version 17.0 for Windows was used by following the steps of computing the normal distribution test below:

1. Stating the hypothesis and setting the alpha level at 0.05 (two tailed test)  
Ho = the scores of the experimental and control group were normally distributed.  
Hi = the scores of the experimental and the control group were not normally distributed.
2. Analyzing the normality distribution using Kolmogorov-Smirnov test
3. Comparing asymptotic significance (Asymp. Sig) with the level of significance for testing the hypothesis. If Asymp. Sig>0.05, the null hypothesis is accepted which means the scores are normally distributed.

### 3.8.4.2 Homogeneity of Variance Test

The homogeneity of variance test was conducted to find out whether the variances of scores in control and experimental groups were equal. In SPSS version 17.0, Levene's test was used to analyze this homogeneity of variance; the procedures were as follow:

1. Stating the hypothesis and setting the alpha level at 0.05 (two tailed test)  
 $H_0$  = the variance of the experimental and the control group are homogenous  
 $H_1$  = the variance of the experimental and the control group are not homogenous
2. Analyzing the homogeneity of variance using Levene's test
3. Comparing asymptotic significance (Asymp. Sig) with the level of significance for testing the hypothesis. If Asymp. Sig > 0.05, the null hypothesis is accepted which means the scores are homogenous.

### 3.8.4.3 t-test Computation

When the data were normally distributed and homogenous, the prerequisites to conduct a parametric test were fulfilled. The researcher used an independent t-test to find out whether there was significance difference between the means of experimental and control groups.

The steps of t-test calculation are as follows:

1. Stating the hypothesis and setting the alpha level at 0.05 (two tailed test)  
 $H_0$  = there is no significance difference between the means of the experimental and the control groups  
 $H_1$  = there is significance difference between the means of the experimental and the control groups
2. Finding the significance value using SPSS version 17.0 for Windows
3. Comparing significance value and level of significance. If significance value < level of significance at 0.05, then  $H_0$  is rejected which means there is significance difference between the means of the experimental and the control groups.

### 3.8.5 Data Analysis on the Posttest

The posttest scores were analyzed using the same steps of computations as those analysis conducted in the pretest scores. It was calculated by independent t-test in SPSS version 17.0 for Windows.

### 3.8.6 Effect Size

To see how the independent variable influenced the dependent variable, an effect size computation was calculated. It was conducted to determine how well the treatment worked (Coolidge, 2000). The correlation coefficient of the effect size is always positive. A correlation coefficient of effect size is calculated by using this formula:

$$r = \sqrt{\frac{t^2}{t^2 + df}}$$

The range of the effect size is from 0 to 1.00. This following scale is used to interpret the magnitude of the effect size:

Table 3.3

Effect Size Value (Coolidge, 2000)	
Effect size	r value
Small	.100
Medium	.243
Large	.371

### 3.8.7 Paired T-Test

In addition, a paired t-test was conducted to investigate the students' scores in pretest and posttest in the experimental and the control groups. It was to find out whether there was a significance difference between the pretest and posttest means of both groups (Coolidge, 2000). The steps of calculating this paired t-test were as same as the independent one. It was calculated using paired samples test in SPSS 17.0. If the significance value is higher than  $\alpha = 0.05$ , it

indicates that the null hypothesis is rejected. The null hypothesis is accepted if the significance value is lower than  $\alpha = 0.05$ . The hypothesis was stated as follow:

$H_0$  = there is no significance different between the means of the pretest and the posttest

### **3.9 Conclusion of Chapter III**

This chapter presents a detail explanation of the research methodology which covers hypothesis of the research, research design, subject of the research, data collection, and data analysis. From those explanations, it can be concluded that this research is conducted in a quasi-experimental research design, involved tenth grader students, used three instruments that are writing task, questionnaire and interview, and computed the collected data in SPSS 17 for Windows.