

### **CHAPTER III**

#### **RESEARCH METHOD**

This part deals with the description or method, subject, variables, and their operational definition, instrument and procedure of collecting data as well as technique of data analysis of the research.

#### **A. Type of Research**

This study uses experimental research. Experimental research methods can be defined as a method of research used to locate a particular influence to one another in conditions completely (Sugiyono, 2015: 107). This experimental method as part of quantitative methods that have characteristics, especially with the presence of the control group.

The study uses quantitative methodology in order to find out the answer of the research. This research uses quasi experimental method. According to Sugiyono (2015: 114) "Quasi-experimental is a design that had a control group, but may not work fully to control the outer variables that affect the execution of experimental".

This research used non-equivalent control class design. The researcher chooses and places the experimental and control classes randomly, but not random assignment of individuals. The experiment class is taught reading subject by using computer while the control class is taught by using teaching without CALL. The design of this research can be illustrated as follows:

E :  $O_1 X_1 O_2$

C :  $O_1 X_2 O_2$

Where:

E = Experimental Class

C = Control Class

$O_1$  = Pre test

$O_2$  = Post test

$X_1$  = Treatment for the experimental class

$X_2$  = Treatment for the control class

(Adapted from Gay, 2006)

## B. The Variabels of Research

According to Hatch and Farhady (1981: 60) variables are attributes of a person or object that has a variation from one person or object to other person or object. Kerlinger (1973:60) states that the variable is a construct or properties that will be studied.

Based on the definition above, it can be formulated that the variables of study are an attribute or the nature or value of a person, object or activity which may have certain variations defined by the researchers to learn and then drawn conclusions.

Based on kinds of variables, the researcher uses two variables, independent and dependent variables. The independent variable is using CALL in teaching reading comprehension. The mean of learning using CALL here is giving treatment with using computer (Mc. Power Point, Mc. Words, and Hot potatoes). And dependent variable is students' achievement and students' interest on reading narrative text. The students' achievement gets from the students' score after using CALL, and the students' interest is the student interested toward English learning by using CALL.



Figure 3.1  
The correlation of independent-dependent variables

X = the use of CALL in teaching reading comprehension of the eight grade of MTs N Bekonang

Y1 = the students' achievement of the eight grade of MTs N Bekonang after being taught using CALL

Y2 = the students' interest of the eight grade of MTs N Bekonang after being taught using CALL.

### **C. Population and Sample**

#### **a. Population**

Population is the number of people who will be observed. According to Fraenckle and wallen (1993: 80) say that "Population is the group the interest to the reserach, the group whom the researcher would like to generalize the result of the study".

According to Riduwan (2008: 8) population is object or subject in region and meet certain conditions related to the research issues.

The population of this is the students of the second year students of MTS N Bekonang. There are 9 classes with the total number of 306 students from 9 classes, the researcher chooses 2 classes with total number of population is 68 students. Reasons of selecting MTs N Bekonang are as follows:

- a. The school was designated as the implementing K-13 by the government since 2014.
- b. This school was a great school-level model MTs surroundings Department of religious.
- c. The number of classes a lot making it easier for the selection of the sample research.

#### **2. Sample**

Samples is part of the number and characteristics of which are owned by the population. According to Suharsimin Arikunto (2002: 109) samples are partially or representative of the population studied.

According to Sugiyono (2008: 116) “Sample is a portion of the amount and the characteristics possessed by the population”. And according Sugiyono (2003: 74-78) “sampling is a sample technique”.

The sample takes cluster random sampling. The researcher uses cluster random sampling because it refers to as the area sampling where the sample is used to determine when the object to be examined or the data source is very large. And in his research, sampling based on area population that has been established, are from grade 8 population of 9 classes with the number of 306 students. Techniques use through 2 stages based on the characteristics of the sampling strata according to population, including on the basis of the same number of students, and the achievement level of children. Stage 1 determines the sample areas based on the number of students. The next stage 2 determines the ones that exist in that area in accordance with the result value of the pre-test students.

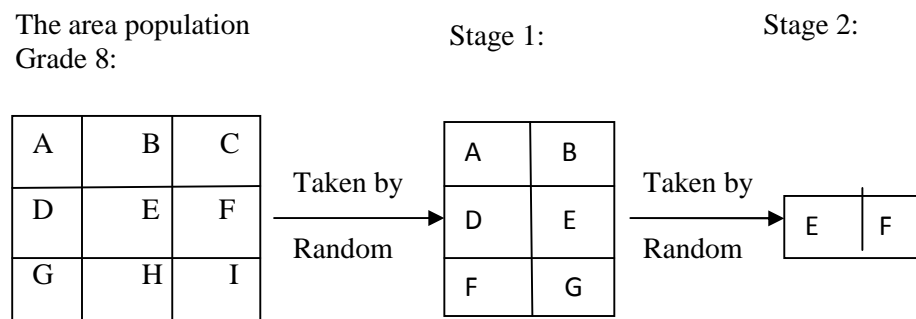


Figure 3.2  
Diagram of Cluster Random Sampling

Based on the above diagram, the researcher chooses two classes of the second year of MTs N Bekonang randomly. The classes are 8E and 8F classes. The 8F class, as the experimental class consists of 34 students and the 8E class, as the control class, consists of 34 students.

#### D. Research Instruments

To measure the students' reading comprehension and interest, the researcher applies two kinds of instruments, such as:

### 1. Written Test

The written test in pre-test and post-test was distributed to experimental and control class. Before pre-test, the questions are analyzed by using correlation biserial and KR-20 which aims to test the validity and reliability of the instrument. There are the results of try out data (reading test):

The try out of reading test can be seen in the table 3.1. there are 25 items valid and 25 items invalid/drop.

Table 3.1  
The Results of Try out Reading Test

No. Points	$r_{dwip(1)}$	$r_{kriteria}$	Criteria
1	0.60	0.31	Valid
2	0.34	0.31	Valid
3	0.39	0.31	Valid
4	0.46	0.31	Valid
5	0.56	0.31	Valid
6	0.50	0.31	Valid
7	0.45	0.31	Valid
8	0.24	0.31	Drop
9	0.30	0.31	Drop
10	0.30	0.31	Drop
11	0,62	0.31	Valid
12	0.44	0.31	Valid
13	0.45	0.31	Valid
14	0.46	0.31	Valid
15	0.51	0.31	Valid
16	0.29	0.31	Valid
17	0.51	0.31	Valid
18	0.56	0.31	Valid
19	0.56	0.31	Valid
20	0.16	0.31	Drop
21	0.25	0.31	Drop
22	0.14	0.31	Drop
23	0.58	0.31	Valid
24	0.49	0.31	Valid
25	0.41	0.31	Valid
26	0.51	0.31	Valid
27	0.35	0.31	Valid
28	0.48	0.31	Valid
29	0.43	0.31	Valid
30	0.43	0.31	Valid
31	0.38	0.31	Valid
32	0.30	0.31	Drop
33	0.30	0.31	Drop
34	0.30	0.31	Drop

35	0.24	0.31	Drop
36	0.24	0.31	Drop
37	0.30	0.31	Drop
38	0.24	0.31	Drop
39	0.30	0.31	Drop
40	0.30	0.31	Drop
41	0.30	0.31	Drop
42	0.24	0.31	Drop
43	0.30	0.31	Drop
44	0.30	0.31	Drop
45	0.30	0.31	Drop
46	0.30	0.31	Drop
47	0.30	0.31	Drop
48	0.24	0.31	Drop
49	0.30	0.31	Drop
50	0.24	0.31	Drop

To determine the correlation of each item with its total use:

$$\text{Correlation Biserial Point: } r_{\text{dwip}(i)} = \frac{X_i - X_t}{s_t} \left[ \sqrt{\frac{p_i}{q_i}} \right]$$

$X_i$  = average total score of respondents who answered correctly  
item-i

$X_t$  = the average total score of all respondents

$s_t$  = standar deviation skor total

$p_i$  = proporsi answer correctly

$q_i$  = proporsi answer wrongly

To find out the correlation of each items with its total, first searched the average value and its total deviation standard, namely:

$$X_t = \frac{1094}{32} = 27,35 \text{ dan } s_t = 11,99$$

e.g: Using Biserial Point to determine correlation each item with its total, likes no.1:

$$X_1 = \frac{969}{31} = 31,26 \text{ and } s_t = 11,99$$

$p = 0,78$        $q = 0,23$  substituted into the formula above, so obtained:

$$r_{\text{dwip}(i)} = \frac{X_i - X_t}{s_t} \left[ \sqrt{\frac{p_i}{q_i}} \right] = \frac{31,26 - 27,35}{11,99} \left( \sqrt{\frac{0,78}{0,23}} \right) = \mathbf{0,60}$$

To determine reliability test instrument, used Kuder Richardson (KR 20) (Sugiyono, 2002:122) is:

$$r_i = \frac{k}{k-1} \left\{ 1 - \frac{\sum p_i q_i}{s_t^2} \right\}$$

k = many items in instrument

p<sub>i</sub> = propotion subjects who answered correctly in item-i

q<sub>i</sub> = 1 - p<sub>i</sub>

s<sub>t</sub><sup>2</sup> = varians total

The first calculated the unknown elements, such as:

$$\sum pq = 8,95 \quad \sum X_t = 815 \quad \overline{X_t} = 20,375 \quad s_t = 9,994 \quad s_t^2 = 99,880$$

$$\begin{aligned} r_i &= \frac{k}{k-1} \left\{ 1 - \frac{\sum p_i q_i}{s_t^2} \right\} = \left( \frac{37}{32} \right) \left( 1 - \frac{8,95}{99,88} \right) \\ &= (1,028) (0,910) \\ &= 0,94 \end{aligned}$$

So reliability reading test instrument find out of: **r = 0,94**

More details, it can be seen in appendices 12, 13 and 14.

After find out the validity and reliability questions of reading test. Then, it becomes the written test in pre-test and post-test. The students answered the question based on the reading text (Narrative text). The form of the texts was multiple choices. The total number of questions was 25 items, namely:

- a) Fable: story of Rabbit and Bear. It was for questions number 1 to 7.

For example:

The poor rabbit didn't get any of the meat because

- a. They are already given to the butcher.
- b. They are eaten by the youngest bear
- c. The bear carried all the meat home.
- d. The bear is already dried up

Which statement is NOT TRUE according to the text

- a. The papa bear was not very kind to the rabbit.
- b. The rabbit got nothing from his shooting
- c. The mother bear always gave her youngest extra meat
- d. The papa bear knew that his youngest child gave the rabbit some meat

- b) Fable: story of Monkey and Crocodile. It was for questions number 8 to 10. For example:

The crocodile stopped in the middle of the river because...

- a. His father wanted to eat a heart of a monkey
- b. The monkey forgot to bring his heart
- c. He had to eat a heart of a monkey
- d. He was hungry

The monkey wanted to return the river bank...

- a. In order to get his heart
- b. As he talked to the crocodile
- c. So he could get some coconuts
- d. To run away from the crocodile

- c) Myth and Legend: the legend of Surabaya. It was for questions number 11 to 14. For example:

What is the type of the text above?

- a. Recount



- b. Narrative
  - c. Procedure
  - d. report
- d) Fable: the story of mouse deer and elephant. It was for questions number 15 to 16. For example:
- Who was expected to come by the mouse deer to help?
- a. Hunters
  - b. Mouse deer
  - c. Elephant
  - d. No one
- e) Myth and legend: the story of Ali Baba It was for questions number 17 to 25. For example:
- The topic of the text is about
- a. Ali Baba and his greedy brother
  - b. The thieves and the house maid
  - c. Ali Baba and the house maid
  - d. Ali Baba and forty thieves
- Which statement *is* true based on the text?
- a. Ali Baba *is* a greedy and stupid person
  - b. The house maid killed all the thieves.
  - c. Ali Baba's brother is a smart person
  - d. The thieves are kind and gentle

For more details, questions and texts can be found in the appendix 6.

After being given a test, the teacher checks the test result of students how the score obtained using the formula by Puskur (2006; 32), namely:

$$\text{Score} = \frac{\text{students' correct answer}}{\text{Number of items}} \times 100$$

## 2. Questionnaire

The questionnaire gives to the students before and after treatment in grade VIIIIF. This instrument was given to find out the students' interest in learning reading by using CALL. Based on types of interest by Hansen et al (1972: 185) and Raob (2005: 186) it could be concluded that interest could be divided into several indicators, these could be drawn in the table below:

Table 3.2  
Blueprint of Questionnaires

Criteria	Numbers in Questionnaire
Expressed interest	1,2,19 and 20
Inventoried interest	3 and 4
Tested interest	5, 6, 17 and 18
Manifest interest	7 and 8
Personal interest	9, 10, 15 and 16
Situational interest	11, 12, 13 and 14

For more details, questionnaire can be found in the appendix 1. Interest because in the Likert Scale which to measure a variable is depicted being indicators of the variable. Then, indicators used to arrange instrument items which are statement or question forms.

In Likert Scale, the using answer of instrument items has gradation from strongly positive until strongly negative and across words, namely: strongly disagree, disagree, neutral, agree and strongly agree. For the purpose of quantitative analysis, then an answer can be given a score. The Linkert Scale is used in the following table.

Table 3.3  
Likert Scale

Positive Statement		Negative Statement	
Category	Score	Category	Score
Strongly agree	5	Strongly agree	5
Agree	4	Agree	4
Undecided	3	Undecided	3
Disagree	2	Disagree	2
Strongly Disagree	1	Strongly Disagree	1

(Sources: Sugiyono, 2008: 185)

The research instrument is used by researcher to use the Likert Scale in the checklist form before learning the results of the instrument and learning interest uses, both its test to students that are not included in sample of the research.

The result of test analyzes by using correlation of biserial point and KR-20 which aims to test the validity and reliability of the instrument.

Analysis for questionnaire instruments learning interest uses the correlation product moment and alpha Cronbach which aims to test the validity and reliability of the instrument. There are the results of try out data (questionnaires):

The try out of questionnaire can be seen in the table 3.3. there are 20 items valid and 10 items invalid/drop.

Table 3.4

The Results of Try out Questionnaire

No. Items	$r_{it}$	$r_t$	Varians	Criteria
1	0,01	0,31	-	Drop
2	0,12	0,31	-	Drop
3	0,32	0,31	0,78	Valid

No. Items	$r_{it}$	$r_t$	Varians	Criteria
4	-0,78	0,31	-	Drop
5	0,61	0,31	0,45	Valid
6	0,69	0,31	0,66	Valid
7	0,15	0,31	-	Drop
8	0,00	0,31	-	Drop
9	0,15	0,31	-	Drop
10	0,84	0,31	0,49	Valid
11	0,66	0,31	1,04	Valid
12	0,41	0,31	0,83	Valid
13	0,04	0,31	-	Drop
14	0,48	0,31	0,44	Valid
15	0,49	0,31	0,49	Valid
16	0,18	0,31	-	Drop
17	0,78	0,31	0,49	Valid
18	0,47	0,31	0,87	Valid
19	0,58	0,31	0,51	Valid
20	0,22	0,31	-	Drop
21	0,50	0,31	0,90	Valid
22	0,61	0,31	1,42	Valid
23	0,36	0,31	1,05	Valid
24	0,55	0,31	0,76	Valid
25	0,63	0,31	1,19	Valid
26	0,44	0,31	0,66	Valid
27	0,55	0,31	1,12	Valid
28	0,52	0,31	1,27	Valid
29	0,61	0,31	0,86	Valid
30	0,39	0,31	-	Drop

Correlation Product Moment (Sugiyono, 2002 : 182) is :

$$r_{it} = \frac{\sum x_i x_t}{\sqrt{\sum x_i^2 \sum x_t^2}}$$

The first, look for:  $(\sum X_t)^2 = 10102$      $\sum X_t^2 = 2580756$ ,

$$\sum X_t^2 = \sum X_t^2 - \frac{(X_t)^2}{n}$$

$$= 2580756 - \frac{(10102)^2}{32}$$

$$= 29495,90$$

E.g:

Using Correlation Product Moment for point 1:

$$\Sigma X_1 = 178$$

$$\Sigma X_1 X_t = 44964$$

$$\Sigma X_1^2 = 808$$

$$\Sigma X_1 X_t = 44964 - \frac{(178)(10102)^2}{32}$$

$$\Sigma X_1^2 = 808 - \frac{(178)^2}{32}$$

$$= 10,10$$

$$= 15,90$$

$$\text{Jadi } r_{1t} = \sqrt{\frac{10,10}{(15,90)(29495,90)}}$$

$$= \frac{10,10}{684,82}$$

$$= 0,01$$

Reliability:

$$r_i = \frac{k}{k-1} \left[ 1 - \frac{\sum s_i^2}{s_t^2} \right]$$

$$= \left( \frac{53}{52} \right) \left( 1 - \frac{51,768}{737,397} \right)$$

$$= (1,019)(0,929)$$

$$= 0,946$$

So, reliability of interest (questionnaire) in English learning is  $r = 0,95$

For more details, it can be seen in appendices 3, 4, 5, 6 and 7.

## E. Technique of Collecting Data

The data were collected through some steps as follow:

### 1. Giving the Students Pre-test

The researcher given pre-test before they get treatment. The pre-test given to both classes, experimental and control classes. It intended to find out the students comprehension on narrative text before be taught using CALL. The procedure of pre-test are:

- a. The researcher introduced the purpose of the research
- b. The research given pre-test to the students in forms multiple choices that consist of 25 items.

Pre-test (Reading) for Control Class and Experimental Class

Time: 1 x 40 minutes

**Read the following texts carefully, then answer the following questions based on the text by crossing a, b, c or d.**

Once upon a time, there lived as neighbors, a bear and a rabbit. The rabbit was a good shot. In contrary, the bear was always clumsy and could not use the arrow to good advantage.

One day, the bear called over the rabbit and asked the rabbit to take his bow and arrows and came with bear to the other side of the hill. The rabbit was preventing to arouse the bear's anger so he could not refuse it. He consented and went with the bear and shot enough buffalo to satisfy the hungry family. Indeed he shot and killed so many that there was lots of meat left after the bear and his family had loaded themselves and packed all they could carry home.

The bear was very gluttonous and did not want the rabbit to get any of the meat. The rabbit could not even taste the blood from the butchering as the bear would throw earth on the blood and dry it up. The poor rabbit would have to go home hungry after his hard day's work.

The bear was the father of five children. The youngest child was very kind to the rabbit. He was very hearty eater. The mother bear always gave him an extra large piece of meat but the youngest child did not eat it. He would take it outside with him and pretended to play ball with the meat. He kicked toward the rabbit's house and when he got close to the door he would give the meat with such a great kick. The meat would fly into the rabbit's house. In this way, the poor rabbit would get his meal unknown to the papa bear.

1. The poor rabbit didn't get any of the meat because ...
  - a. They are already given to the butcher.
  - b. They are eaten by the youngest bear.
  - c. They bear carried all the meat home.
  - d. The bear is already dried up.
  
2. Which statement is **NOT TRUE** according to the text ...
  - a. The papa bear was not very kind to the rabbit.
  - b. The rabbit got nothing from his shooting.
  - c. The mother bear always gave her youngest extra meat.
  - d. The papa bear knew that his youngest child gave the rabbit some meat.
  
3. The story teaches us that ...
  - a. Poverty makes people suffer.
  - b. We must keep out promise.
  - c. People should love each other.
  - d. We must keep our relationship with other.
  
4. What destroyed the homes of all rats?
  - a. Group of mice did.
  - b. The hunters did.
  - c. Elephant hunters did.
  - d. A group of elephant did.
  
5. What helped the elephant's herd free?
  - a. Entire group of rats did.
  - b. The hunter did.
  - c. A trapped elephant did.
  - d. The elephant's herd did.

For more detail, pre-test instrument can be seen in appendix 15.

- c. The research handed the students' worksheets after finishing the test.

## 2. Giving the Students Post-test

After implementing CALL, the research given post-test for both experiment and control classes by using the same items as pre-test, and collect the data for computing as the output of the research. The aim of post-test was to find out the students' comprehension after students give treatment.

Post\_test for Control Class (8E)

Time: 1 x 40 minutes

**Read the following texts carefully, then answer the following questions based on the text by crossing a, b, c or d.**

Once upon a time, there lived as neighbors, a bear and a rabbit. The rabbit was a good shot. In contrary, the bear was always clumsy and could not use the arrow to good advantage.

One day, the bear called over the rabbit and asked the rabbit to take his bow and arrows and came with bear to the other side of the hill. The rabbit was preventing to arouse the bear's anger so he could not refuse it. He consented and went with the bear and shot enough buffalo to satisfy the hungry family. Indeed he shot and killed so many that there was lots of meat left after the bear and his family had loaded themselves and packed all they could carry home.

The bear was very gluttonous and did not want the rabbit to get any of the meat. The rabbit could not even taste the blood from the butchering as the bear would throw earth on the blood and dry it up. The poor rabbit would have to go home hungry after his hard day's work.

The bear was the father of five children. The youngest child was very kind to the rabbit. He was very hearty eater. The mother bear always gave him an extra large piece of meat but the youngest child did not eat it. He would take it outside with him and pretended to play ball with the meat. He kicked toward the rabbit's house and when he got close to the door he would give the meat with such a great kick. The meat would fly into the rabbit's house. In this way, the poor rabbit would get his meal unknown to the papa bear.

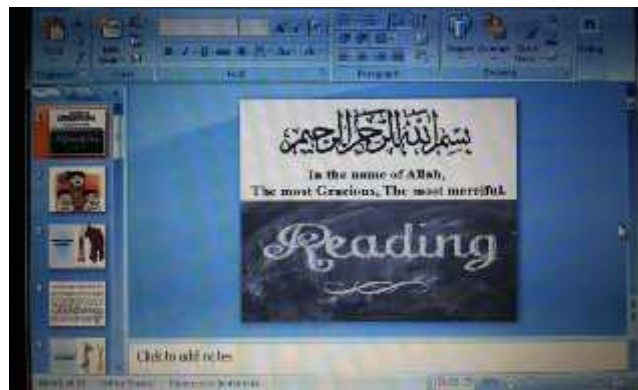
1. The poor rabbit didn't get any of the meat because ...
  - a. They are already given to the butcher.
  - b. They are eaten by the youngest bear.
  - c. They bear carried all the meat home.
  - d. The bear is already dried up.
2. Which statement is **NOT TRUE** according to the text ...

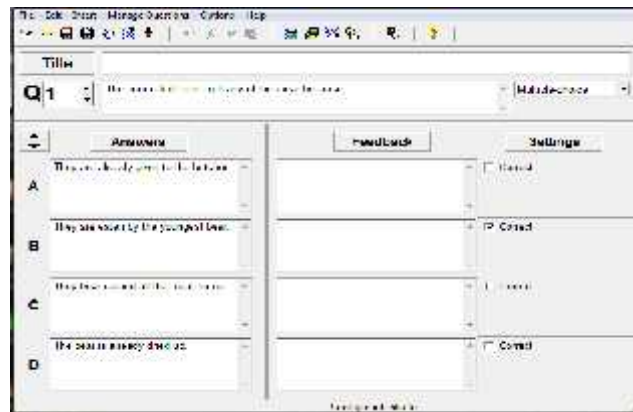


- a. The papa bear was not very kind to the rabbit.
- b. The rabbit got nothing from his shooting.
- c. The mother bear always gave her youngest extra meat.
- d. The papa bear knew that his youngest child gave the rabbit some meat.

For more detail, post-test instrument to control class can be seen in appendix 17.

#### Post-test of Reading Test in Experimental Class (8F)





For more detail, post-test instrument can be seen in appendix 18.

### 3. Questionnaire

The teacher give the students questionnaire sheets then asks them to complete it base on the questions provided. The questionnaire gives to know the students interest in the reading teaching process by using CALL. The result of the questionnaire is analyzed by the teacher whether the students interest or no.

The research given questionnaire to the students in forms Scale Likert that consists of 20 items; 10 positive statements and 10 negative statements.

Before and After: Questionnaire in Experimental Class (8F)

#### *ANGKET*

*Angket ini bertujuan untuk memperoleh data tentang minat anda dalam belajar bahasa inggris dengan menggunakan CALL (Computer Assisted Language Learning). Angket ini tidak dimasukkan untuk menguji anda. Tidak ada jawaban benar dan salah. Angket ini hanya akan menetapkan kesan dan ketertarikan anda terhadap teknik pembelajaran yang telah anda alami.*

*Berilah tanda (x) pada jawaban yang paling sesuai dengan pengalaman anda selama ini mengikuti pelajaran.*

<i>Dimana</i>	SS	= sangat setuju (5)
	S	= setuju (4)
	SM	= sulit menentukan (3)
	TS	= tidak setuju (2)
	STS	= sangat tidak setuju (1)

No.	Pertanyaan	SS	S	SM	TS	STS
1.	<i>Saya sangat senang belajar reading menggunakan CALL yang digunakan guru.</i>					
2.	<i>Belajar reading dengan menggunakan CALL membosankan.</i>					
3.	<i>Belajar reading dengan menggunakan CALL dapat menambah semangat belajar saya.</i>					
4.	<i>Belajar reading dengan menggunakan CALL tidak meningkatkan motivasi saya dalam memahami bacaan.</i>					

For more detail, the questionnaire instrument can be seen in appendix 16.

## **F. Research Procedures**

After giving pre-test, the researcher conducts treatment for the experimental by using CALL and taught the control class by using teaching without CALL. Each group is taught separately. The procedure for both classes can be illustrated as follows:

### 1. Teaching Process of Control Class

The teaching process of control class carries out for six times of meetings. The activities in this treatment administrated by using verbal explanation which divided into several steps. The steps use for six meetings of the research. The steps are as follow

- a. Giving try out reading test and try out questionnaire on worksheet. (in appendices 1 and 8)
- b. Giving Pre-test to students on the worksheet. (in appendix 15)

- c. Giving materials (in appendix 30):
  - Asking the students about their understanding on reading narrative text in terms of purpose; main idea; generic structure; meaning of word, phrase, and sentence; an information of the text.
  - Explaining the concept of narrative text: main idea; generic structure meaning of word, phrase, and sentence; information of the text by using verbal explanation.
- d. Giving example of narrative text to the students. (appendix 30)
- e. Asking to the students to read the narrative test with correct pronunciation. (appendix 30)
- f. Asking student to answer the exercises. (appendix 30)
- g. Submitting students' exercises and scoring students' exercise.
- h. Giving post-test to students on worksheet. (appendix 17)

## 2. Treatment of Experimental Class

The treatment of experimental class also carries out during six times of meetings as well as the control class. The activities divide into the following general procedures:

- a. Giving pre-test and questionnaire to students on worksheet.
- b. Giving the materials (in appendix 31):
  - Asking the students about their understanding on reading narrative text in terms of purpose; main idea; generic structure; meaning of word, phrase and sentence; an information of the text.
  - Explaining of the narrative text by using CALL software.
- c. Giving example of narrative text to the students. (in appendix 30)
- d. Asking to the student to read the narrative text with correct pronunciation.
- e. Asking student to answer the exercise. (in appendix 30)
- f. Reviewing students' understanding on narrative text.
- g. Giving Post-test use Hot Potatoes and questionnaire. (in appendix 18)

The procedures are different in terms of narrative materials given to the students. CALL software used and the example of narrative text gives for each meeting.

Narrative materials consist of purpose; main idea; generic structure; meaning of the word, phrase, or sentence; information from the text CALL softwares used were Mc. Powerpoint, hot potatoes, and Mc. Word. The reading texts also varies for each meeting.

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### G. Technique of Analyzing Data

The data was analyzed quantitatively. The steps that the writer takes in the quantitative analysis were as follows:

1) Scoring students' pre-test and post-test by using formula:

$$\text{Score} = \frac{\text{students' correct answer}}{\text{number of items}} \times 100$$

(Puskur, 2006: 32)

Classifying the students' score in pre-test and post-test into the following scale:

90 – 100	: Classified as very good
70 – 89	: Classified as good
50 – 69	: Classified as fair
30 – 49	: Classified as poor
10 – 29	: Classified as very poor

(Sources: Puskur, 2006: 33)

Calculating the mean score, finding out the standard deviation of pre-test and post-test, computing the frequency and the rate percentage of the

students' scores and testing the hypothesis of the significant difference between the means of two groups on some independent variable by calculating the value of independent t-test uses SPSS version 15,0 for windows evaluation version.

t-test (test of significance) for independent sample test. This is a test to know the significant difference between the result of students' mean scores in pre- test and post-test in control class and experiment class.

- 2) Analyzing the data from the questionnaire used Likert Scale to see the students' interest toward the use of CALL in teaching reading. The Likert Scale was used in the following table.

Table 3.5

Likert Scale

<b>Positive Statement</b>		<b>Negative Statement</b>	
<b>Category</b>	<b>Score</b>	<b>Category</b>	<b>Score</b>
Strongly agree	5	Strongly agree	1
Agree	4	Agree	2
Undecided	3	Undecided	3
Disagree	2	Disagree	4
Strongly disagree	1	Strongly disagree	5

(Sources: Sugiyono, 2008: 185)

The researcher used 10 positive and negative statements in the questionnaire. Therefore the highest score was 100 and the lowest was 20. For each score classification, the interval score was based on the following table:

Table 3.6

The classification score for the questionnaire

<b>Score</b>	<b>Classification</b>
85 – 100	Strongly interested
69 – 84	Interested
52 – 68	Moderate
36 – 50	Uninterested
20 – 35	Strongly uninterested

(Sources: Sugiyono, 2008: 137)

Calculating the percentage and mean score of students' interest by using descriptive statistic through SPSS 15.0, if the student means score were 4, the use of CALL was effective to improve students' interest in learning English.

- 3) Finally, to analyze the students' reading comprehension and interest of experiment saperately, the researcher want to see the students' correlation between reading comprehension and their interest using CALL with using SPSS 15,0 (Pearson Correlation Test), variabel X and variabel Y.

Variabel X: get from the result of the students' interest in learning reading comprehension through CALL.

Variabel Y: get from the resut of the students' pre-test and post-test.

Table 3.7

The research interpretes the correlation coeffisient using this:

<b>Coeffisient</b>	<b>Relationship between Variables</b>
Higher than +65	High
Between +35 and +65	Moderate
Lower than +35	Low or none

Gay (2006: 194)

The formula use:

$$Y = a + bX$$

Sugiyono (2015, 262)

Y = the predicted value

X = the value of independent variable

a = the constant/ when the price of X = 0

b = the regression coeffisien