

CHAPTER III

RESEARCH METHOD

In this chapter, the researcher presents (a) research design, (b) population and sample of the research, (c) research instrument, (d) validity and reliability testing, (e) normality testing, (f) data collecting method, and (g) data analysis.

A. Research Design

According to Creswell (2014), research approaches are plans and the procedures for research that span the steps from broad assumptions to detail methods of data collection, analysis, and interpretation. In the other hand, research approach are plan and procedures to conduct a research with detailed methods of data collection, analysis, and interpretation. In addition, Philips and Burbules (2000) state that research is the process of making claims and then refining or abandoning some of them for other claims more strongly warranted. Most quantitative research, for example starts with the test of a theory.

To conduct this study the reseacher used pre-experimental research with quantitative research approach. A quantitative research is a methodology for testing objective theories by collecting numeric data that comes from examining the relationship among variables, then analyzed it by using statistic procedures. According to Creswell (2014:33), quantitative research is an approach for testing objective theories by examining the relationship among variables. These variables can be measured, typically on instruments and the numbered data analyzed using

statistical procedures. The final written report has a set structure consisting of introduction, literature and theory, methods, results, and discussion.

To investigate the effectiveness of using Click and Clunk strategy in the students' reading comprehension with recount text as the material. This research was used pre-experimental design. According to Perry (2005) pre-experimental design is the overall structural designs used include the variables, techniques, treatments, and others. This research is classified into pre-experimental research that uses one group pre-test and post-test. In the one group pre-test and post-test design, a single group is measured or observed not only after being treatment, but also before the treatment. In this research, the treatment is conducted by using Click and Clunk strategy in the students' reading comprehension with recount text as the material.

Furthermore, conforming to why using pre-experimental research because the researcher is not visible to have random assignment to determine the sample of the research and it is used limited of the time and cost. The requirement of this design is stated by Creswell (2014), with pre-experimental design the researcher study a single group and provides an intervention during the experiment. This design does not have a control group to compare with the experimental group.

This research was focused on the effectiveness of using Click and Clunk strategy towards second grade students' reading comprehension. The independent variable is Click and Clunk strategy and the dependent variable is students' reading comprehension. In this case, the independent variable influences the dependent variable, to know the result whether the dependent is influenced well positively, the

researcher used pre-test and post-test to measure that. The design of the research can be summarized as follows:

Table 3.1 The Illustration of Research Design

Pre-test	Treatment	Post-test
Y1 (DV)	X (IV)	Y2 (DV)

X : Click and Clunk strategy (Independent Variable)

Y1 : Students' achievement on reading comprehension before treatment.

Y2 : Students' achievement on reading comprehension after treatment.

The procedures of experimental research that use one group pre-test and post-test design in this study are described as follows:

1. Administering pre-test (Y1) with a purpose of measuring students' reading comprehension ability before giving treatment.
2. Applying experimental treatment teaching reading comprehension by using Click and Clunk Strategy (X).
3. Administering pre-test (Y2) with a purpose of measuring students' reading comprehension ability after giving treatment.

As stated earlier on the design, this study was an experimental study about the effectiveness of using Click and Clunk strategy toward student's reading comprehension in the second grade of MTs Ma'arif Bakung Udanawu Blitar. The researcher wanted to know the effectiveness of using Click and Clunk strategy toward students' reading comprehension. The effectiveness was known after

finding out the significant difference between the students reading comprehension before being taught by using Click and Clunk strategy and those are taught after using Click and Clunk strategy by comparing pre-test and post-test score.

B. Population and Sample

1. Population

Population is whole subjects where data were collected. Ary et al (2010:148) stated population were all members of well-defined class of people, events, or objects. In other words, population is all subjects where the data were gathered. In this study, the population of the data is all of second grade students of MTs Ma'arif Bakung Udanawu Blitar in period 2018/2019 which consisted of 365 students. Those are divided into ten classroom. Class A, B, C, D, E, F, G, H, I, and J. It can be seen in the table 3.2 below:

Table 3.2 Population of Research

No.	Class	Gender	
		Male	Female
1.	VIII A	22 students	13 students
2.	VIII B	21 students	12 students
3.	VIII C	21 students	16 students
4.	VIII D	19 students	16 students
5.	VIII E	22 students	14 students
6.	VIII F	23 students	14 students
7.	VIII G	21 students	12 students
8.	VIII H	24 students	14 students
9.	VIII I	10 students	30 students
10.	VIII J	10 students	30 students
Total students		365 students	

2. Sample and Sampling

Sample is the representative of population. Setiyadi (2006:38) states sample is the member who give the data and representative of population in the research. By considering huge numbers of population, the limitation in term of time and capability to take all members of population, the reseacher focuses on one class as the sample. The technique in taking sample is called sampling (Sugiyono, 2006:90). In this study, the researcher use purposive sampling as the process of sampling. According to Perry (2005:57) purposeful sampling strategy is used to indicate that the sample is chosen to answer the research question as relevant as possible. By using purposive sampling, the researcher finally decided to choose VIII G class that consists of 34 students recommended by the English teacher. The English teacher recommended that class because the students are active and coorporative but they were lack interest in reading texts.

Table 3.3 Sample of Research

Sample of VIII G		Total Paricipants
Male	Female	
21 students	13 students	34 participants

C. Research Instrument

Research instrument is measurement tools used by researcher while collecting data. Arikunto (2010:262) stated research instrument referred to any equipment used to collect the data. As an experimental research, the reseacher uses test in collecting required data. According to Ary et al (2010:201) test was a set of stimuli presented to individual in order to elicit response on the basis of which a numerical score can be assigned. Instrument which used by the researcher was

multiple choices test. There were two kinds of tests for this study, those were pre-test and post-test. Pre-test was intended to measure students' reading comprehension before the treatment given, while post-test was to measure students' reading comprehension after the treatment given. The total items of the test were 25 in the form of multiple choice tests. The first test was pre-test which distributed on April 5th 2019 and second test was post-test which distributed on April 8th 2019. Both of the tests were personal recount text as the level of students in their grade or level and by considering with core competence and also basic competence. The texts given in every tests were different to avoid bias as they can remember on the previous text given. In pre-test and post-test were given six different texts of personal recount text.

Furthermore, to know the result of the tests, the researcher used scoring rubric. The scoring for test is there was only one correct answer for each items. According to Afandi (2013:69) the scoring guide is as the formula below:

$$\text{Score} = \frac{\text{number of correct items}}{25} \times 100$$

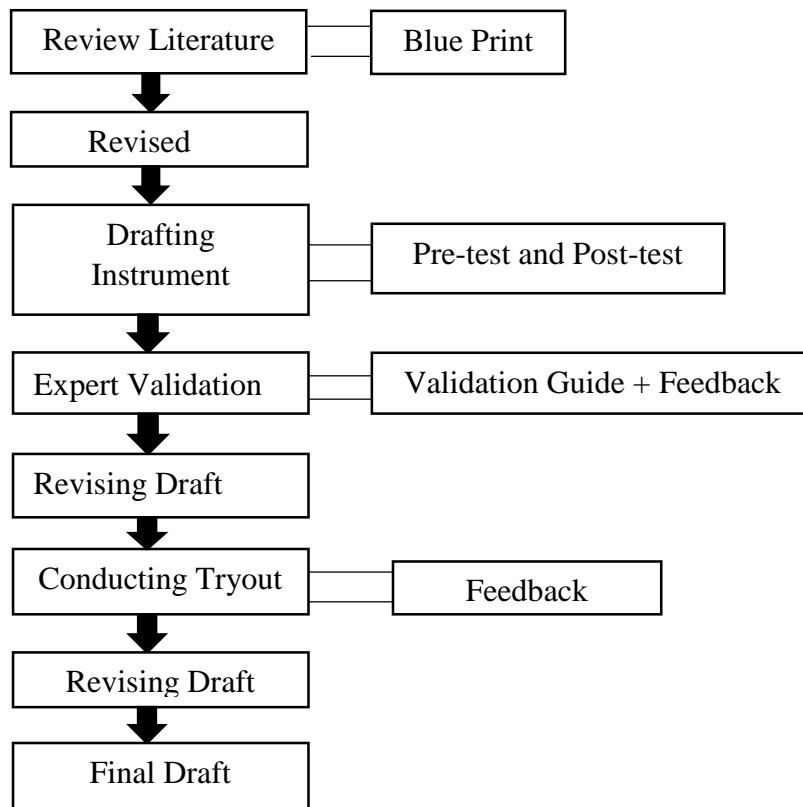
(number of questions)

D. Validity and Reliability Testing

A research instrument must be valid and reliable before it used to collect the data. In this study the reseacher ensured that the instrument (test) was valid and reliable by doing validity and reliability testing. The way to make valid and reliable instrument can be figured as the table 3.1 below:

Figure 3.1 Process in making valid and reliable instrument

The researcher was Adapted theory from Wilkinson and Birmingham (2003) to make the steps easy to understand, the process in making valid and reliable can be seen below:



Based on figure 3.1 above, the first step to get validity and reliability of the instrument is the researcher review the book and syllabus to draft the test. After that, the researcher drafted blue print which was including the reviews of book and syllabus. Next, the researcher drafted instrument (pre-test and post-test) after the blue print revised by the preceptor. Then, the researcher gave the test to expert validator to get feedback by considering with the validation guide. Next, researcher revised the draft of the test by following the feedback of expert validator. After that,

the researcher continued in conducting Tryout which was validated by the English teacher. Then, the researcher revised the Tryout agree to feedback of the English teacher. Next, the researcher conduct the Tryout to the test to students in different class as the sample to get feedback from students. The class is conducted in VIII I. The last, the researcher revised the test again after getting feedback from the Tryout and based on that term the researcher get final draft to test to VIII G as sample of population of this research.

1. Validity

Validity basically means “measure what is intended to be measured” (Field, 2005). It means, Validity defined as the extent to which an instrument measures what it purports to measure. To measure whether the test has good validity, the researcher analyzed the test from content validity, face validity and construct validity.

a. Content Validity

To measure students’ reading comprehension, so the test used was a reading test. It means that the test is said to have content validity if it is represented the content of universe. Straub et al,(2004) stated content validity is the degree to which items in an instrument reflect the content universe to which the instrument could be generalized. It means that the items of the test should really test the domain reading skill. In this research, the test which is pre-test and post-test are multiple choiches. The students must answer the test related to recount text.

In this study, the reseacher made three indicators of the pre test and post test. They are: (a) Students are able to determine the context of text that include topic, organization and purpose of the text, (b) Students are able to infer meaning from the text, (c) Students are able to finding spesific information of the text.

Table 3.4 Content validity of pre-test

No	KD	Indicators	Test items	Total
1.	4.11.1 <i>Menangkap makna secara kontekstual terkait fungsi sosial, struktur teks, dan unsur kebahasaan teks recount lisan dan tulis, sangat pendek dan sederhana, terkait pengalaman pribadi di waktu lampau (personal recount)</i>	Students are able to determine the context of text that include topic, organization of the text and purpose.	1,2,3,4,9,10,11, 12,18,19,20,21	12
		Students are able to infer meaning from the text.	5,13,22	3
		Students are able to finding spesific information of the text.	6,7,8,14,15,16, 17,23,24 25	10
2.	Total			25

Table 3.5 Content validity post-test

No	KD	Indicators	Test items	Total
1.	4.11.1 <i>Menangkap makna secara kontekstual terkait fungsi</i>	Students are able to determine the context of text that include topic, organization of the text and purpose.	1,2,3,4,10,11,12 ,13,20, 21	10

	<i>sosial, struktur teks, dan unsur kebahasaan</i>			
	<i>teks recount lisan dan tulis, sangat pendek dan sederhana, terkait pengalaman pribadi di waktu lampau (personal recount)</i>	Students are able to infer meaning from the text.	5,14,22,23	4
		Students are able to finding spesific information of the text.	6,7,8,9,15,16,17,18,19,24,25	11
2.	Total			25

From the explanation above, it could be concluded that the test have a content validity.

b. Face validity

Face validity is the degree to which a measure appears to be related to a specific construct. Face validity is the extent that measurement instrument items linguistically and analytically look like what is supposed to be measured. Face validity refers to researchers' subjective assessments of the presentation and relevance of the measuring instrument as to whether the items in the instrument appear to be relevant, reasonable, unambiguous and clear (Oluwatayo, 2012). In this study, the item of the tests are in the form of objective tests consists of multiple choiches test. The reseacher ensurd face validity to English teacher of MTs Ma'arif Bakung Udanawu Blitar.

c. Construct Validity

Construct validity refers to how well the researcher transformed a concept, idea, or behaviour that is a construct into a functioning and operating reality, the operationalization (Taherdoost:2016). This type of validity is a judgment based on the accumulation of evidence from numerous studies using a specific measuring instrument. It means that construct validity is one kind of validity that is measures the ability which is supposed to measure.

Based on the explanation above, in the test, the researcher asked the students to answer the multiple choice based on recount text to measure the students' comprehension in reading and this fulfill the construct of reading test and therefore valid in term of construct validity.

2. Reability

Reliability concerns the extent to which a measurement of a phenomenon provides stable and consist result (Carmines and Zeller, 1979). It means, reability show whether an instrument is reliable and can be used as a device to collect the data with stable and cosistent result. A good test must be valid and reliable. In this study, the researcher used SPSS 24.0 for windows to know the reability. The researcher used Cronbach's Alpha formulation. Cronbach's alpha reliability (Cronbach, 1951) is one of the most widely used measures of reliability in the social and organizational sciences.

According to Riduwan (2004:118), the criteria of reability instrument can be divided into 5 classes as follows:

1. If the Cronbach's Alpha score 0.00 – 0.20: less reliable
2. If the Cronbach's Alpha score 0.21 – 0.40: rather reliable
3. If the Cronbach's Alpha score 0.41 – 0.60: enough reliable
4. If the Cronbach's Alpha score 0.61 – 0.80: reliable
5. If the Cronbach's Alpha score 0.81 – 1.00: very reliable

Table 3.6 Reability Pre-test

Reliability Statistics	
Cronbach's Alpha	N of Items
,826	25

Table 3.7 Reability Post-test

Reliability Statistics	
Cronbach's Alpha	N of Items
,727	25

The table 3.6 shows that the reliability of Conbrach's Alpha is 0.826. It means, that the reliability is very strong because the value is between 0,81– 1.00 and the table 3.7 shows that the reability of Cronbach's Alpha is 0,727. It means, the reability is reliable because the value is 0.61 – 0.80 which means reliable. From the evidence two tables above, it was found that the test is very reliable and reliable.

E. Normality

Normality Testing

Normality test is used to determine whether a data set is well-modeled by a normal distribution or not. It means, normality test commands performs hypothesis to examine whether or not the observations follow normal distribution. To know the normality, the researcher used One-Sample *Kolmogorov-Smirnov test* with SPSS 24. If the result are significant, then the null hypothesis of no difference between the observed data distribution. Testing of the normality is conducted by the rules below:

- If the significant value > 0.050 , it means that the data distribution is normal
- If the significant value < 0.050 , it means that the data distribution is not normal.

A normal distribution is rejected. Simply put a value less than 0.05 indicated that the data are non-normal.

F. Data Collecting Method

The data collecting method is the method to obtain the data in the research. To obtain the data, the research has to use instruments of collecting data. The instruments are pre-test and post-test. It can be seen clearly below:

1. Pre-Test

Pre-test is given to the students to know their achievement before giving treatment in experimental research. In this study, pre-test was given before being taught by using Click and Clunk strategy to get the reading

comprehension score of the student. The pre-test was conducted on April 5th, 2019. The test comprised 25 items, in the form of multiples choice items. The reseacher applied the test to students of eight G and asked the students to answer the question by choosing one of the a,b,c and d as the options. The pre-test question consists of three different personal recount text. The number of students who got pre-test was completely 34 students. After the test finished, the researcher calculted the score using scoring rubric by Afandi (2013:69) theory of learning evaluation in elementary school. The aim of calculating is to know the result of pre-test before being taught by using Click and clunk strategy or the treatment.

2. Treatments

After administering the pre-test, the reseacher gives two treatment to the students. The first treatment had done April 5th 2019. In that day, the first treatment was given after finishing the pre-test. The reseacher shared the materials about recount text and example of personal recount text to the students. The second treatment had done on April 8th 2019. The teacher divided students into four groups and gave them 2 pieces of paper for each group. The teacher asked the students to write two coloumns and label one coloumn for Click and one coloumn for Clunk. The teacher also gave students 4 texts with the same topic to analyze. Then, the teacher gave students picture of emoticon sad and happy to represent the Click and the Clunk. All of the treatment, the students did individually even they were in

one group. The procedure of Click and Clunk strategy have been done succesfully.

Table 3.8 Procedure of treatment adapted from Sandler (2004) and modified by the researcher

No.	Steps	Teaching Activities	Students Activities
1.	Opening	Greeting	Answer greeting
2.	Main teaching	<ul style="list-style-type: none"> • Introducing the material about personal recount text. • Giving explanation about recount text. • Giving examples of personal recount text. 	Pay attention
		<ul style="list-style-type: none"> • Divided students into four groups • Give students papers for each groups • Give recount text to the students • Give students two sad emoticon and two happy emoticon to each groups. • Ask students to write two coloumns and label them “click and clunk”. • The students ask to read the text carefully. 	<ul style="list-style-type: none"> • Students move to their groups • Start to make coloumn and label each coloumns with click and clunk. • Read the text every sentences and paragraph. • Start write what they know in the coloumn click • Start write what they do not know in the coloumn clunk • Finding main idea and supporting details

		<ul style="list-style-type: none"> • Students list what they really understand about the text in column click and list what they do not understand in column clunk • Ask students to discuss and clarify the information • The teacher read the text and students who do not understand raise the sad emoticon • Ask students who understand the issue in the text to explain in the class • Ask students to see that they have understand some clunk • Read the questions and ask students to answer the questions 	<ul style="list-style-type: none"> • Students discuss the clunk and try to clarify the information • Students who understand explain the meaning with raisis the happy emoticon • Students check the list of clunk and see if all the clunk items can be move to click • Answer the questions
3.	Closing	<ul style="list-style-type: none"> • Give conclusion about the lesson 	

Furthermore, the complete steps of Click and Clunk strategy can be seen in lesson plan of research in appendix 6.

3. Post-Test

Post-test was given after doing the treatments. It was given to investigate students reading comprehension score after doing Click and Clunk strategy as the treatment. The post-test was conducted on April 8th, 2019. The post-test comprised 25 items, in the form of multiple choice items. The students was asked to answer the post-test question with different topic of texts. The questions of post-test are different from pre-test.

G. Data Analysis

Data analysis is used by researcher to analyze the collected data. The data is taken from students' score in pre-test and post-test. Then, to investigate the effectiveness of Click and Clunk strategy in students' reading comprehension, The collected data could be analyzed by using Paired Samples T Test in IBM SPSS Statistic 24.0. In this case, discussing the relationship between significant value and significant level. Significant values is the output of calculating hypothesis by Paired Samples T-Test. Meanwhile, significant level refers to standard level of hypothesis, it is 0.050. The criteria for accepting or rejecting the null hypothesis as follows;

- a. H_0 is rejected if significant value < 0.05 . It means there is significant difference score on the students' reading comprehension before and after being taught by using Click and Clunk strategy.
- b. H_0 is not rejected if significant value > 0.05 and the alternative (H_a) is rejected. It means there is no significant difference score on the students' reading comprehension before and after being taught by Click and Clunk strategy.