

## CHAPTER III

### RESEARCH METHODOLOGY

Research method is a way employed by the researcher to collect and analyze the data in order to solve the problem. this research investigated the implementations of demonstration method to improve students competence in reading skill. The discussion of this chapter elaborate research design, population and sample, setting of the study, procedure, research variables, data sources, data collection technique, research instrument, data analysis technique.

#### **A. Research Design**

Based on the research problem, it reflects that this study as experimental research because this research aims to know demonstration method as the treatment to improve students' reading ability. This research was achieved if the experiment design was used because the purpose of the experimental research was investigated the possible cause-and-effect relationship by manipulating one independent variable to influence the other variable.

Experimental is a way to search for causality (causal relationship) between the two factors were intentionally inflicted by the researchers to eliminate or reduce or eliminate other factors that interfere.<sup>1</sup> Experimental research is to investigate the

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<sup>1</sup> Sugiyono, 2008, *metode penelitian experimental* , AFABETA:Bandung

influence treatment of behaviors that occur as a result of treatment.<sup>2</sup> Experimental research was conducted to study determine the impact of a given treatment deliberately by the researcher.<sup>3</sup> Experimental research is research conducted by manipulations aimed to determine the effect of the manipulation individual behavior observed.<sup>4</sup> Experimental studies also can defined as a systematic method to build relationships contains causal phenomena (causal-effect relationship).<sup>5</sup> Experimental method is a method of research used to search for a specific treatment effect against the other under conditions unmanageable.<sup>6</sup>

Based on the definition of some experts, it is understood that the experimental research was conducted to determine the effect of a treatment or treatment of research subjects. Thus experimental studies in education is research that aims to assess the effect of a treatment / action / treatment education on student behavior or testing hypotheses about the presence or absence of the influence of the action when compared with other measures.

The treatment gives after pretest (before applying demonstration method). Pre test is to know the students score before treatment. After give treatment the researcher also give post test to know the score after treatment (demonstration method be implemented), is it any significant differences between and after post test. The result

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<sup>2</sup> Anas Sudjono, 2000. *Metode penelitian experimental*, PT. GRAFINDO PERSADA:JAKARTA

<sup>3</sup> Suharsimi arikunto.2006 *prosedur penelitian suatu pendekata praktik*, PT. RINEKA CIPTA:JAKARTA

<sup>4</sup> anas sudjono, *Metode Penelitian Experimental*, PT. RINEKA CIPTA:JAKARTA

<sup>5</sup> Suharsimi Arikunto. 1998. *metode penelitian experimental*. PT. RINEKA CIPTA:Jakarta

<sup>6</sup> Sugiyono, 2000. *metode penelitian experimental*. PT. BPTF, p.57

of the test is in the numerical form. The researcher analyzes the data used numerical calculation especially use kind of statistic method T test. This method is to know the correlation between two variables. Besides test, the researcher uses observation to get information about demonstration method during the treatment this observation to support data gotten from the test.

The experiment design for this research:

Group	Pre test	Treatment	Posttest
Experiment (Demonstration method)	O1	O2	O1

### A. Hypotheses

Hypothesis arises from a set of hunches that are tested through a study and one can conduct a perfectly valid study without having these hunches and speculations.<sup>7</sup> The hypothesis of this research:

Ha: there is significant implementation of demonstration method to improve students competence in reading at MTs Negeri Mojokerto.

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<sup>7</sup> Kumar, Ranjit.(2005) *Research Methodology: A Step-by-Step Guide for Beginners*, New Delhi: Sage publication India, p 73.

Ho: there is no significant implementation of demonstration method to improve students competence in reading at MTs Negeri Mojokerto.

## **B. Research Variable**

This research consists of two variables; they are the independent variable and the dependent variable. The independent variable is the single variable that is not influenced by other variables, while the dependent variable is a kind of variable that is affected by other variables.<sup>8</sup>

### **1. Independent Variable**

The independent variable in this research is the demonstration method will be use to make students more interest in teaching and learning process in reading.

### **2. Dependent Variable**

The dependent variable is the English reading achievement of students' eight grade of MTs Negeri Mojokerto.

## **C. Population and Sample**

### **1. Population**

Population of this research is all of eight grade students of MTs Negeri Mojokerto

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<sup>8</sup> Cholid Narbuko - Abu Ahmad, *Metodologi Penelitian* (Jakarta: Bumi Aksara 1997) 119

## **2. Sample**

The sample of this research is eight grade students at MTs Negeri Mojokerto. The English teacher stated that the eight grade students have difficulty to understand text and generic structure of the text. the teacher choose VIII A as the sample because the students of VIII A have a high participation and its intensive class for eight grade.to make sure that VIII A is the intensive class students, the researcher did pretest. from the pretest was doing, only twelve students (31%) , out of fifty students, have score above the minimum passing criterion, thirty four students (68%) have score between 50-60, and four students (8%) have score under 50. (see appendix ).from the data above, the researcher can conclude that the students achievement in reading before demonstration be implemented was still under the minimum passing criterion (KKM).

### **D. Research Location and Subject**

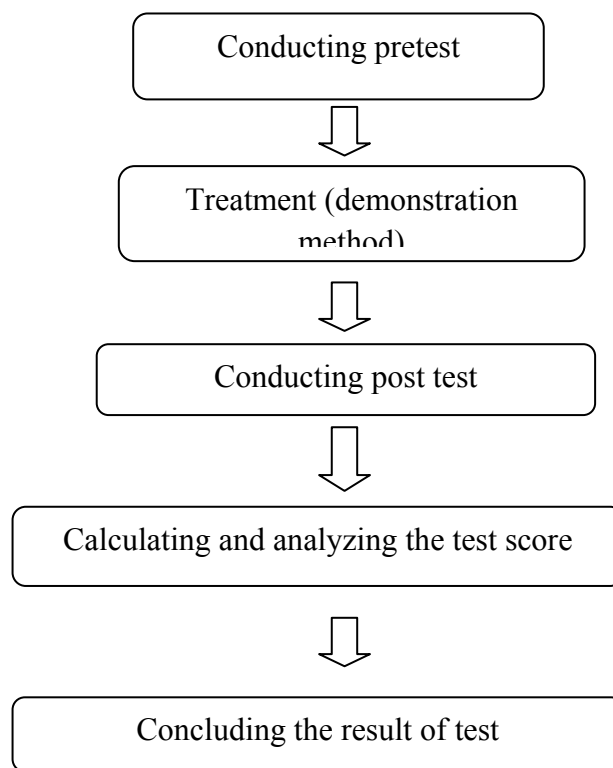
MTs Negeri Mojokerto is one of Islamic school that aims to cultivate potential learners, to be a man who is faithful and devoted to God Almighty. Besides that, it also aims to develop student's horizons as much as possible.

MTs Negeri Mojokerto is located at Jl. Raya Sambiroto 112, Sooko, Mojokerto. the researcher choose MTs Negeri Sambiroto Mojokerto as a setting of research because firstly its near with her home, and the researcher want to solve the problem in teaching reading at MTs Negeri Mojokerto. the subject of this research was the eight grade students at MTs Negeri Mojokerto. the researcher was conducted at 29<sup>th</sup> November 2012- 25<sup>th</sup> December. after getting an a greement of the school principal and then consult to an English teacher who teach at the eight grade of MTs Negeri Mojokerto.

#### **E. Procedure of the Study**

In this research, researcher takes herself as the teacher. In order to understand how usually teacher in this school teach reading in the class, the researchers did observation 2times. The researcher hopes that from her observation, when she did treatment in the class, what she did in the class did not different so far with teacher who usually teaches students. For implementing this research, the researcher has designed a procedure as a guide in implementing this study. Below is the procedure for this research.

## 1. Figure of Research Procedure



## 2. Organizing Research Procedure

This is the planning of the research, the researcher setting the experiment around two weeks. For more detail check the table below.

### **The Research Procedure**

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	Date	Theme/Material
1	03 <sup>th</sup> December 2012	Pretest
2	07 <sup>th</sup> December 2012	Treatment 1  Taught using demonstration method holiday.  (beautiful day at yogya)
3	10 <sup>th</sup> December 2012	Treatment 2  Taught using demonstration method with the theme my holiday was fantastic
4	14 <sup>th</sup> December	Posttest



	2012	
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On the first day, the researcher has conducted pre test in eight grade students at MTs Negeri Mojokerto. On the second and third day the researcher had given special treatment for students.

Pretest was given to eight grade students on the first meeting. The treatments were conducted on the second and third meeting. Posttest was given on the last meeting of this research.

In the pretest the students of eight grade ask to do the exercise, its about recount text. The evaluation that the researcher use to pretest and post test are same. It multiple choice. The posttest was done in the last meeting. Same like pretest students must do free.

The treatments were carried for 2 meeting for 80 minutes per lesson. During this period, students were taught using demonstration method. The first treatment and second treatment are distinguished based on the topic.

First treatment was held on 07<sup>th</sup>December 2012. In this time students taught using demonstration method with theme about holiday. The first treatment was started with the greeting and shared the purpose of the study. Before give the treatment, teacher show the picture to students and ask to answer what is the picture about, then teacher write down to the white board. This aims of these activities to elicit students to the topic. Then teacher

classified word based on the picture. This activity makes students remind about kinds of words and enrich their vocabulary so that it makes students easier when they read in the next activities. The next, teacher give students reading text related holiday, it is recount text, teacher also explain about the generic structure of recount text, to make easy understand, the researcher use media (picture) to help students understand and learn the generic structure of reading text (recount text), the teacher demonstrate picture also related with the topic of the text in front of the class, so the students just not hearing the explanation from the teacher, but also active and match with the teacher explanation. After that teacher give an example of recount text paragraph and ask to identify the generic structure of reading text, teacher also ask students to demonstrate the generic structure of recount text in front of the class in more detail look for appendix. After that teacher identify the students work and closing the lesson.

The second treatment was held on 10<sup>th</sup> December 2012. In this time the students would be taught to use demonstration method with different theme as the first meeting but the activities was similar. The theme of this meeting is the holiday was fantastic.

The second meeting did not so different with the first meeting. Teacher started the meeting with greeting and shared the purpose of the study. Then teacher explain about material related with the reading text (recount

text). Teacher give stimulus to students based on the lesson plan about recount text, and then continue giving review to students about the explanation of recount text using demonstration method. to know the achievement of students understanding in recount text, the teacher give an exercise of reading text to students then ask to identify the generic structure of the text and also match the picture related with the content of the text. then teacher ask students to demonstrate in front of the class the generic structure of recount text, in more detail look for appendix....after finished their work, students collect to the teacher, and teacher closed the lesson by greeting.

#### **F. Data Collection Technique**

To get the result of the research, this research needs to collect some data. To collect those data, the writer uses three techniques. Observation, test, and interview:

##### **1. Test**

The second technique is test. The test divides into pre test and post test. The pretest will give before apply demonstration method. After treatment, the post test will be done. To know whether or not demonstration method can improve students competence in reading, the researcher use data from evaluation test. The researcher would compare the result of student's scores in the first (pre-test) and second (post-test)

based on the criteria of success.. If at least 55% or more of students can reach 63 or more on reading test, it is considered successful. It is based on the students reading test score which are still under the minimum passing criterion or Kriteria Ketuntasan Minimal (KKM).<sup>9</sup> The material of test based on the topic of reading for the eight year students of SLTP/MTs.

## **2. Observation**

The aim of this technique is to know the process learning during the implementation of demonstration method. The researcher asked the English teacher to observe about what happen in the class during the treatment especially to know students attitudes during the learning process. This data is used to support data gotten from the test.

## **3. Questionnaire**

Questionnaire is a number of written questions used to get information from the respondents.<sup>10</sup>This technique was main technique to obtain the data needed for analyzing the data to the researcher. The researcher give some paper to eight grade students and ask to answer some questions about the students response to the implementation of demonstration method in reading, and after that the researcher collect the data.

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<sup>9</sup> Depdiknas, 2006. *Kurikulum Tingkat Satuan Pendidikan* (School Based Curriculum). Jakarta:Depdiknas

<sup>10</sup> Suharsimi Arikunto. *Prosedur Penelitian Suatu Pendekatan Praktik* : PT RINEKA CIPTA, JAKARTA :1998

## **G. Research Instruments**

### **1. reading worksheet**

Test is done before and after treatment. The pre test is given before the treatment to know the students' score before treatment. Post test is given after treatment to know the students' score after treatment and how far treatment can influence the reading ability of the students. Both of the tests in the form of reading worksheet test which ask students to do the evaluation test. The evaluation reading task will be made by the researcher. To make the reading task valid the researcher makes the task based on MTs Negeri Mojokerto curriculum. The tests before and after treatment have same type in order to make the data which is gotten valid.

### **2. Observation checklist**

The observation sheet is used in this research to observe during treatment process. The result will use in this research to describe the process during treatment and used to support the data from the test.

### **3. Questionnaire**

Questionnaires used to know the students response to the implementation of demonstration method. there are 10 item questions, and each students will get a paper one by one. to know the significance the researcher use the formula below:.

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

P= Percentage

F= frequency

N= the number of cases.<sup>11</sup>

The standard of percentage is:

76%-100% is good

55%-75% is good enough

40%-55% is not good.<sup>12</sup>

## H. Data Analysis Technique

To find out the implementation of demonstration method to improve students competence in reading, this research uses quantitative method for analyzing data.

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<sup>11</sup> Anas Sudjono. *Pengantar Statistik Pendidikan*. RAJA GRAFINDO PERSADA .JAKARTA :2000

<sup>12</sup> Suharsimi Arikunto. *Prosedur Penelitian*. PT RINEKA CIPTA.JAKARTA:1998

In this research, the researcher did observation to students in teaching learning process. So this research described the observation result and the improvement of demonstration method in teaching reading, and this research analyzed testing in pre test and post test. The aim of the T- test is to compare if the both of the variable is same or not. The function is to know the significant effect of the research. In using SPSS 16, the result would show in the table, especially in the paired sample test. In determining the significant of the research, it can be seen from the t coulomb. The calculation t value would be compare with t table. If the calculation t higher than t table, the conclusion is that Ha was approved and H0 was rejected. Otherwise if the calculation t lower than t table, it meant that Ha was rejected and H0 was approved.<sup>13</sup>

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<sup>13</sup> Sunarto. *STATISTIKA untuk penelitian pendidikan, social, ekonomi, komunikasi, dan bisnis* (Bandung : Alfabeta, 2009), 241.