

## **CHAPTER III**

### **RESEARCH METHOD**

This study aims to measure the effectiveness of basic questioning with picture to improve students' writing skills by comparing two groups, one group was taught by using basic questioning with picture while the other was taught by using traditional technique. This chapter discusses the methodology is used by the researcher. It discusses the research design, population and sample, variables and indicators, technique of data collection and instruments, and technique of data analysis.

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

Before doing the research, the researcher arranged a research design. The purpose of the research design is to specify procedure to collect data in a research<sup>1</sup>. In this research, the researcher used quasi-experimental design. Quasi experiment is the design of the research which does not have full control. This design was used to investigate whether the teaching of writing using basic questioning which picture is more effective than teaching writing using traditional technique.

In this study the researcher selected two classes from the eighth grades of SMPN 2 Paciran. The students of the two classes as the sample were

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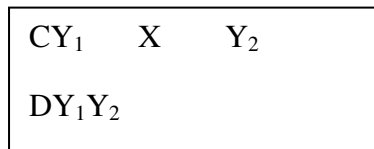
<sup>1</sup> Donald Ary, introduction to research in education, p, 346

divided into two groups of the experimental and the control groups. Then, they were given pretest. After the experimental group was given treatment, the two groups were given posttest. The differences between the pretest and posttest scores of the two groups were tested statistically.

The design of this research is summarized in the following figure 3.1.

**Figure 3.1**

**Figure of experimental research design.**



Explanation:

C & D : Experiment and control groups that are chosen randomly

Y<sub>1</sub> : Pre-test of experiment and control groups

Y<sub>2</sub> : Post-test of experiment and control groups

X :Treatment (Teaching writing by using basic questioning with picture)

In the model,the experimental research has two groups, first is experimental group and the second is control group. The writer decided to choose the first class as experimental class and the second as the control class. The two classes were given pretest to know the ability of the both of classes

before giving new treatment. After that, the experimental class received a new treatment and the control class was not receiving new treatment; it used conventional learning. The class was taught by basic questioning with picture, while the control class taught by using traditional technique or lecturing.

## **B. Research Hypothesis**

This study has one hypothesis, which is:

Ho = there is no significant difference between the mean of the improvement teaching writing by using basic questioning with picture and traditional technique at the eight grade of SMPN 2 Paciran.

Ha =there is a significant difference between the mean of the improvement teaching writing by using basic questioning with picture and traditional technique at the eight grade of SMPN 2 Paciran.

Where the criterions were:

Ho rejected if  $t\text{-value} > t\text{-table}$

Ha accepted if  $t\text{-value} > t\text{-table}$

## **C. Variables and Indicators**

Variable refers to the object of the research that becomes the research focus<sup>2</sup>. There are two types of variables: Independent variable (X) and dependent variable (Y). So, the variables in this study are:

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<sup>2</sup>SuharsimiArikunto, *ProsedurPenelitian :SuatuPendekatanPraktik*, p. 118.

### 1. The independent variable

Independent variable is variable that gives the effect or changing the result of the dependent variable<sup>3</sup>. The independent variable in this research is using basic questioning with picture in the teaching writing.

### 2. The dependent variable

Dependent variable is the variable that is affected by independent variable<sup>4</sup>. The dependent variable in this study is the students' achievement in writing descriptive text.

## **D. Subject of the Research**

### a. Population

Population is the whole subject of the research<sup>5</sup>. In this study, the population or the subjects of research are the eighth grade students at SMPN 2 Paciran. The eighth grade of SMPN 2 Paciran is grouped into seven classes. The choice of the subjects of the study was based on the following considerations:

1. The students needed an interesting and enjoyable technique in learning English in general and specifically in writing.
2. Basic questioning with picture technique was never applied to the students when learning English.

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<sup>3</sup>Sugiyono, *Metode Penelitian Kuantitatif Kualitatif dan R & D*, (Bandung: Alfabeta, 2009), p. 39.

<sup>4</sup>Sugiyono, *Metode Penelitian Kuantitatif Kualitatif dan R & D*, p. 39.

<sup>5</sup>Suharsimi Arikunto, *Prosedur Penelitian: Suatu Pendekatan Praktik*, p. 130

#### b. Sample

Sample is part of population<sup>6</sup>. In this study, there are two classes as sample, VIII-C class as the experimental class and the VIII-E as the control class. The students of VIII-C 30 students as the experimental class and the students of VIII-E 30 students as the control class. The choice of the sample of the study was based on similar score from the pre-test.

#### E. The Instruments of the Research

The instrument of the research should be made as appropriate as possible to get correct data. The question in this research is whether basic questioning with picture as a technique is more effective than the traditional technique. To answer this question the data needed were in form of students' scores in writing. These data were collected by using test of writing.

Test is used to measure the skill or knowledge by using question or another tools that did by individual or group<sup>7</sup>. This method is used to get data about score of the pre-test and post-test given to both of groups. The test in this study is an essay test or subjective test. In essay test of writing, the students were given 30 minutes to write description about their idol.

The pre- test was given to two both of classes before the teacher taught new material using basic questioning with picture or before the experiment

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<sup>6</sup>SuharsimiArikunto, *ProsedurPenelitian: SuatuPendekatanPraktik*, p. 39

<sup>7</sup>SuharsimiArikunto, *ProsedurPenelitian: SuatuPendekatanPraktik*, p. 150.

was run. The post- test was given to the experiment class and control class after receiving treatment. The experimental group was taught writing descriptive text through basic questioning with picture while the control groups were taught writingdescriptive text without basic questioning with picture or by using traditional technique only.

### 1. Scoring technique

Analytical scoring was used to score the student's writing, because the teacher can determined the ability of the student in writing based on the criteria in the rubric of analytical scoring. The scoring technique is modified based on the scoring profile by Jacobs at all's <sup>8</sup>.

Score	Level	Criteria
Content	- 30 - 20	-Excellent to very good: knowledgeable, substantive, thorough development of thesis, relevant to assigned topic.
	- 26 – 22	- Good to average: some knowledge of subject , adequate arrange, limited development of thesis, mostly relevant to topic, but lack detail.
	- 21 – 17	- Fair to poor: limited knowledge of subject, little substance, inadequate development of topic.
	- 16 – 13	- Very poor: does not show knowledge of subject, non – substantive, not pertinent, OR not enough to evaluate.
Organization	- 20 – 18	-Excellent to very good: fluent expression, idea clearly stated/ supported, well organized, logical sequencing, cohesive.
	17 – 14	- Good to average: somewhat, choppy loosely organized but main idea stand out, limited support, logical bit limited sequencing.

<sup>8</sup> Arthur Hughes, *Testing for Language Teachers Second Edition*,( New York; Cambridge University prees, 1989). p. 104

	- 13 – 10	- Fair to poor: non – fluent; ideas confuse or disconnected; lack logical sequencing and development.
	- 9 – 7	-Very poor: does not communicate, no organization, OR not enough to evaluate.
Vocabulary	- 20 – 18	-Excellent to very good: sophisticated range, effective word/ idiom choice and usage, word form mastery, appropriate register
	- 17 – 14	-Good to average: adequate range, occasional error of word/ idiom form, choice, usage, <i>but meaning not obscured.</i>
	- 13 – 10	-Fair to poor: limited range; frequent errors of word/ idiom form, choice usage; <i>meaning confused or obscured</i>
	- 9 – 7	-Very poor: essential translation; little knowledge of English vocabulary, idioms, word form, OR not enough to evaluate.
Language Use/ Grammar	- 25 – 22	-Excellent to very good: effective complex constructions; view errors of agreement, tense, number, word order function, articles, pronouns, preposition.
	- 21 – 18	-Good to average: effective but simple construction; minor problem in complex construction; several errors agreement, tense, number, word order function, articles, pronouns, preposition <i>but meaning seldom obscured.</i>
	- 17 – 11	-Fair to poor: major problem in simple/ complex construction; frequent errors of negation, agreement, tense, number, word order/ function, articles, pronouns, preposition and/ or fragments, run-ons, deletion, <i>meaning confused or obscured.</i>
	- 10 – 5	-Very poor: virtually no mastery of sentence construction rules; dominated by errors; does not communicate; OR not enough to evaluate.
Mechanic	- 5	-Excellent to very good: demonstrates mastery of convention; few errors of spelling, punctuation, capitalization, paragraphing.
	- 4	-Good average: occasional errors of spelling, punctuation, capitalization, paragraphing,

		<i>but meaning not obscured.</i>
	- 3	- Fair to poor: frequent errors of spelling, punctuation, capitalization, paragraphing, poor handwriting, <i>meaning confuse or obscured.</i>
	- 2	- Very poor: no mastery of conventions, dominated by errors of spelling, punctuation, capitalization, paragraphing, poor handwriting, illegible, OR not enough to evaluate

### F. Data Collection Technique

In this study test is the most important instrument to collect the data. Test is used to know the person ability and knowledge<sup>9</sup>. To collect the data in this study test was used to know the effectiveness of basic questioning with picture in teaching writing descriptive text. These were steps to get the data in this study.

1. The first step is preparing the instrument of the study. The instrument is the writing test which was administered as pretest and posttest. Before the instrument was administered the researcher took the material from the book used in that school which is related to the curriculum. Then the researcher developed the instrument in form of instructions for the students to write a descriptive text. After that, the researcher consulted the English teacher to know if the instrument is suitable for the students test or not. To know the accurate and the validity, the instrument was validated by the lecture of English department Prof. Areif Furqon (see appendix). The pretest was

<sup>9</sup>Louis Cohen, “*Research Method in Education*” (London and New York: Routledge, 2007),p. 414



administered the researcher took the sample from the student of the eighth grade of SMPN 2 Paciran by using try-out test. It was done on July 16<sup>th</sup>, 2013

2. The second step is conducting pretest in both classes in order to measure the students' writing ability before the treatment. The pretest was done on July 19<sup>th</sup>, 2013
3. After conducting the pretest to the two classes, treatment was given to the the experimental group by using basic questioning with picture.
4. The last step is posttest. The posttest was given to now the effectiveness of basic questioning with picture in students writing descriptive text. And to know the improvement of student's ability in writing descriptive text, the result of the test was scored and calculated.

The treatment for the experimental group and the teaching in the control group were conducted for two meeting. Each of the meetings is described as follows.

***a. The experimental group***

The treatment was given to the experimental group twice. The school English teacher gave the treatment while the researcher co-prepared the instructional material and did classroom observation during the treatment. The group was taught by using basic questioning with picture.

***First treatment***

The first treatment was held on 22<sup>th</sup> July, 2013. In this time the students were taught by using basic questioning with picture. The theme of the first meeting was about “Garden Park”.

The first treatment was started with the greeting and sharing about the purpose of the study. The teacher divided the students into two groups. Then the teacher showed some pictures of tourism place. After that the teacher asked the students to stand in make lines and write the vocabularies related to the picture in the blackboard one by one. These words that students wrote above to help the students in writing descriptive text.

After these activities were done, the teacher asked the students by using basic questioning related with the picture to lead the creativity and the imagination of the students. The following are the questions:

- Let see this picture, what do you think about this picture?
- What kind of this picture?
- Is the garden is large?
- Are the garden lookssso cool?
- What the color of the flower?
- What are the people do in this picture?

After asking some questions, the students were asked to describe the garden park. Next, paper was given to them and they were asked to write the descriptive text based on the picture. The teacher gave for about 30 minutes

to the students to the text. After finishing the activities, the students submitted their work.

### ***Second treatment***

The second treatment was held on 28<sup>th</sup> July 2013. In the second meeting, the students were taught by using basic questioning technique with theme different from the first meeting. For this second treatment, the theme was my idol.

Similar to the first meeting, the treatment was started with greeting and sharing the purpose of the study. Then, the teacher reviewed the material in the previous week, to check the students understanding. After that the teacher shared about the theme of the day. Next, the teacher showed some pictures of actress and he asked to the student to observe to the picture and ask to the students about the vocabulary related to the pictures. The teacher gave explanation about descriptive text, after these activities were done he asked to the students by using basic questioning to leads the creativity and imagination of the students. The students answered the question orally based on their understanding about the pictures. The following are the questions:

- Who is she?
- Where you see this person?
- What is the job?
- Is she has long hair?
- What the physical appearances his body?

- Beautiful, ugly, fat, thin, ect?
- About His eyes, hair, skin, etc?
- What she said when she was interviewed?
- What the characteristic of this actress?
- What the color of his gown?

After this activity, the students were asked to describe the actress. Next, paper was given to them and they were asked to write the descriptive text based on the picture. After finishing the work the students submit the paper to the teacher.

#### ***b. Control group***

The control group was taught without the strategies or using traditional technique, similar to the experimental group, the control group had the treatment twice.

#### ***First treatment***

The first treatment was held on 22<sup>th</sup> July, 2013. In the control class the students were taught by using traditional technique. In the first meeting, the teacher gave same theme, tourism place. The teacher asked the students to describe Garden Park without any treatment. She just explains about the nature of descriptive text.

The first treatment was started with the greeting and sharing the purpose of the study. Then, the teacher ordered the students to open the book

and she gave explanation about the descriptive text based on the subject. The teacher gave the students time to ask when they did not understand the subject. And then, the teacher asked the students to make descriptive text based on the theme and submit the work.

### ***Second treatment***

The second treatment was held on 29<sup>th</sup> July, 2013. The theme of this meeting was about 'my idol'. The teacher asked the students to describe their idol.

Similar to the first meeting, the teacher started the teaching learning with the greeting and sharing the purpose of the study. The teacher asked the students to open the book and read it in few minute to understand the subject. Then the teacher gave some explanation about descriptive text based on the subject. After that she asked the students to make a descriptive text based on these, and submit the work. In the last of the teaching learning process the teacher gave question to the student about the material to check the students understanding.

### **G. Data Analysis Technique**

In this study, the researcher measures the score differences from pretest and post test of experimental group and control group by using comparative technique. The comparative technique is the analysis technique to evaluate hypothesis about the differences between two variables are

examined statistically. The two variables are compared to know whether or not the different are significant. To find out whether the mean difference between variables was significant or not the researcher was used t- test formula. T- Test used to measure and compared the differenced of means score between experimental group and control group<sup>10</sup>.The students' scores analyze statistically by using a procedure of t – test, with the steps below:

1. To calculate the mean from scores of pre test and post test of both groups. The calculation of the mean used the following formula:

$$MEAN: \sum \frac{fx}{N}$$

Where:

M = mean

$\sum fx$  = total of the test

N = total of students

2. The standard deviation formula was used for the scores of pre test group and post test groups. The standard was calculated using the formula below:

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<sup>10</sup>A.E.Bartz, *Basic Statistical Concepts in Education and the Behavior Sciences* (Minneapolis:Burgess Pub.Co,1976). p.293

$$SD_{Di} = \sqrt{\frac{\sum D^2}{N} - \frac{(\sum D)^2}{N^2}}$$

Where:  $SD_{Di}$  = mean

$\sum D^2$  = the sum of the d score.

$N$  = total of students taking the test.

3. And then, t- test formula was used to find out whether the difference of the scores between pretest and posttest both of group was significant or not. The calculating of t- test using the following formula:

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{S_1^2}{N_1} + \frac{S_2^2}{N_2}}}$$

Where:

$\bar{x}^1$  = The average score of experiment class

$\bar{x}^2$  = The average score of control class

$S_1$  = the deviation of experiment class

$S_2$  = the deviation of control class

$X_1^2$  = the variant of experiment group

$X_2^2$  = the variant of control group

4. After calculating all the data, to calculate the number of degree of freedom the researcher following this formula:

$$df = N1 + N2 - 2$$

*Where:*

df = degree of freedom

N1 = number of subject in experimental class

N2 = number of subject in control class

Finally, after all steps was done it was found the  $t_{\text{value}}$  from both of groups than the  $t_{\text{value}}$  checked with critical value of  $t_{\text{table}}$  at standard of significance<sup>11</sup> = 0,05 level of significant of t-test.

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<sup>11</sup>Suharsimi Arikunto, *prosedur penelitian*, p 310