

CHAPTER III

RESEARCH AND PROCEDURE

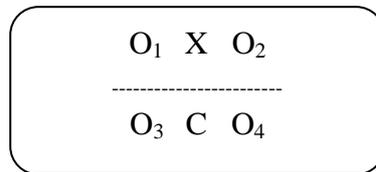
In this chapter, the writer describes: (a) method of the research, (b) research variables, (c) operational definitions, (d) population and sample of the study, (e) technique for collecting data, (f) research instrument analysis, (g) research treatments, and (h) technique for analyzing data.

A. Method of the Research

The method used in this research was experimental design. Experimental design is the blueprint of the procedures that enable the researcher to test the hypothesis by reaching valid conclusion about the relationships between independent and dependent variable (Best and Khan, 1995, p. 146). In this research, the writer applied one of quasi experimental research design, quasi experiment to provide control of when and to whom the measurement is applied, but random assignment to experimental and control treatments has not been applied. In this study, the pretest-posttest nonequivalent groups design is used which is suggested by Best and Khan (1995, p. 151).

In this study, the writer used the pretest posttest nonequivalent groups design. This design is often used in classroom experiments when experimental and control group are such naturally assembled groups as intact

classes, which may be similar (Best and Kahn, 1995, p. 151). Model of the pretest-posttest nonequivalent groups design:



Where:

- - - - : Dash line indicated that the experimental and control group have not been equated by randomization.

O_1 : The pretest of the experimental group

O_2 : The posttest of the experimental group

O_3 : The pretest of the control group

O_4 : The posttest of the control group

X : Treatment for experimental group taught using PQP (Praise-Question-Polish) strategy

C : Treatment for control group taught using teacher's strategy

B. Research Variables

According to Creswell (2012, p. 112), a variable is a characteristic or attribute of an individual or an organization that (a) researchers can measure or observe and (b) varies among individuals or organizations studied. In this study, there are two variables: independent and dependent variables. Fraenkel, Wallen, and Hyun (2012, p. 80) states that independent variables are those that

the researcher chooses to study in order to assess their possible effect(s) on one or more other variables. An independent variable is presumed to affect (at least partly cause) or somehow influence at least one other variable. The variable that the independent variable is presumed to affect is called a dependent variable.

In this study, the independent variable is the use of PQP (Praise-Question-Polish) strategy in teaching writing recount text, while the dependent variable in this study is students' achievement of the tenth grade of SMA Muhammadiyah 5 Palembang in writing recount text.

C. Operational Definitions

The title of this study is "Teaching Writing Recount Text by Using PQP (Praise-Question-Polish) Strategy to the Tenth Grade Students of SMA Muhammadiyah 5 Palembang". From the title, the writer described teaching recount text, PQP (Praise-Question-Polish) strategy, and students' writing achievement.

1. Teaching Writing Recount Text

Teaching writing is an instructional activity which is done by a teacher in the classroom by giving understanding to the students how to write a sentence or a text. Recount text is a kind of English which retells actions or experiences happened in the past. Teaching writing recount text is an instructional activity which is done by a teacher in the classroom by giving understanding to the students how to write a recount text based on the

correct generic structures, grammatical patterns, and language features of recount text.

2. PQP (Praise-Question-Polish) Strategy

PQP strategy is a revision strategy that helps students to edit and revise another's writing draft. It is suitable to improve writing skill which can bring students to get better ability in writing recount text.

3. Students' writing achievement

Students' writing achievement means result gained by the students from a test given after they received a treatment.

D. Population and Sample of the Study

1. Population

Population is the group of interest to the researcher, the group to whom the researcher would like to generalize the results of the study (Fraenkel and Wallen, 2009, p. 91). The population of this study was all of the tenth grade students of SMA Muhammadiyah 5 Palembang in the academic 2014/2015 with a total numbers of 146 students. The population of the research is presented in table 2.

Table 2
Population of the Study

No	Class	Gender		Total
		Female	Male	
1	X.MIA 1	25	8	33
2	X.MIA 2	25	8	33

3	X.IIS 1	23	17	40
4	X.IIS 2	22	18	40
Total		95	51	146

(Source: Administration of SMA Muhammadiyah 5 Palembang in Academic year of 2014/2015)

2. Sample

According to Fraenkel and Wallen (2009, p. 90), a sample in a research study is the group on which information is obtained. In this research, the writer used convenience sampling. A convenience sample is a group of individuals who (conveniently) are available for study (Fraenkel et al. 2012, p. 99). Furthermore, Creswell (2012, p. 145) states that in this technique sampling, the researcher selects the participants because they are willing and available to be studied.

In this study, the writer took two classes from class X.IIS 1 and X.IIS 2 for sample, because the total of the students were same and were taught by the same teacher of English. In this research, the writer took 80 students. There were 40 students for experimental group and 40 students for control group. Students from class X.IIS 1 was belonged to the experimental group (teaching by using PQP Strategy) and the students from X.IIS 2 was belonged to the control group (teaching by using teacher's strategy). The sample of study can be seen in table 3.

Table 3
Sample of The Study

No.	Class	Group	Total
1	X.IIS 1	The Experimental Group	40
2	X.IIS 2	The Control Group	40
T o t a l			80

E. Technique for Collecting Data

In this study, the writer used test and questionnaire to collect the data. The test was conducted twice as pretest and posttest in control and experimental group. Then, questionnaire was conducted once in experimental group only.

1. Test

The writer used test to collect the data from this study. According to Arikunto (2013, p. 266), test is a tool or procedure which is used to know or measuring something in a situation with manner and the roles which used it. For collecting data, the writer used a written test which the students was assigned to write a text related to the topic which had been given by the teacher. In this study, the writer used pretest and posttest.

a. Pretest

The pretest was given before doing the treatment to the control and experimental group. Creswell (2012, p. 297) states that a pretest provides a measure on some attribute or characteristic that was assessed for participants in an experiment before the students received a

treatment. The purpose of giving pretest to the students was to know the students' ability in learning writing before implementing PQP (Praise-Question-Polish) strategy. And the result of students' work would be check and scored by two raters.

b. Posttest

The posttest was given at the end of treatment to the control and experimental group. It was given after the teacher gave the treatment of teaching writing through PQP (Praise-Question-Polish) Strategy. Creswell (2012, p. 297) states that a posttest is a measure on some attribute or characteristic that is assessed for participants in an experiment after a treatment. The purpose of this test was to measure students' ability in writing recount text. The same as pretest, two raters would check and give score to the students' works. The result of this test was compared with the result of pretest in order to know the effect of teaching witing recount paragraph through PQP (Praise-Question-Polish) Strategy. From the posttest, the writer was able to get the data that can be used to measure the students' progress taught by using PQP (Praise-Question-Polish) Strategy.

2. Questionnaire

In this study, the writer used questionnaire to know students' responses about the implementation of PQP (Praise-Question-Polish) strategy. A closed-statements questionnaire was given to the students in

experimental group after the posttest was done. They were asked to give responses toward sixteen statements on the questionnaire. To ask the students' responses on the questionnaire, the writer used Quipper School Indonesia as online learning media which is accessed from <http://www.quipperschool.com>. There were two choices in each item in which "1 for positive response" and "0 for negative response".

F. Research Instrument Analysis

1. Validity Test

According to Fraenkel and Wallen (2009, p. 147), validity is the most important idea to consider when preparing or selecting an instrument for use. Term "validity" refers to the appropriateness, meaningfulness, correctness and usefulness of the inferences of researcher makes (Fraenkel and Wallen, 2009, p. 147). It means validity test was used to measure whether the obtained data of an instrument was valid or not. This study used construct validity, validity of each question item and content validity.

a. Construct Validity

Hughes (1989, p. 26) states that the word "construct" refers to any underlying ability (or trait) which is hypothesized in a theory of language. In this part, the construct validity of the research instruments involved two types. There were instrument for pretest and posttest activities, and lesson plans for control and experimental groups.

In this study, to evaluate whether the components of the instrument and lesson plans are valid or not to be applied in research activities, the writer used expert judgments from three validators. Sugiyono (2011, p. 125) states that expert judgment is required to estimate the construct validity.

There were three validators to validate the research instrument and lesson plan. The first validator was M. Holandyah, M.Pd. the result analysis of research instrument was instrument could be used without revision and the result analysis of lesson plan could be used with a little revision. The second validator was Amalia Hasanah, M.Pd. The result analysis of research instrument could be used with a little revision, and the result analysis of lesson plan could be used without revision. The third validator was Manalulaili, M. Ed. The result analysis of research instrument could be used with a little revision, and the result analysis of lesson plan could be used with a little revision

From the three validators, it could be concluded that the instrument and lesson plan were appropriate to be applied for the research activities. The validator sheets could be seen in *appendix A*.

b. Validity of Each Question Item

Validity test of each question item is used to indicate whether the test item of the instrument in each question is valid or not. To know whether it is valid or not, the score of significance (r -output) should be

compared with the score of “r-table” product moment. A question item is considered valid if “r-output” is higher than “r-table” (Basrowi and Soenyono, 2007, p. 24).

In this study, the writer used questionnaire to know students’ responses on the implementation of PQP (Praise-Question-Polish) strategy. To measure the questionnaire was valid or not, the writer used Pearson Correlation Coefficient in SPSS version 20 software. From the result analysis in validity test of each question item, there were 16 statements considered valid from 24 statements given. Those statements were considered valid because the score was higher than r-table (0.361).

From the explanation above, it could be concluded that the questionnaire could be applied in research activities to know students’ responses on the implementation of PQP (Praise-Question-Polish) strategy. The result of Pearson Correlation Coefficient in SPSS version 20 software could be seen in *appendix B*.

c. Content Validity

Hughes (1989, p. 22) states that a test is said to have content validity if its content constitutes a representative sample of the language skill, structures, etc. with which it is meant to be concerned. A content validity is very important since it is an accurate measure of what it is supposed to measure. The specification for the test was formulated based on the curriculum or syllabus of English for tenth graders of Senior High

School in order to know if the contents of the test item given were appropriate to the students. Test of specification table is showed in table 4.

Table 4
Test of Specification Table

Objective	Topic	Indicator	Type of Test	Number of Item	Total Number
The students will able to: 1. Identify the information of recount text 2. Writing a topic and some supporting details of recount text through PQP (Praise-Question-Polish) strategy 3. Write a good recount text	1. The Flood	1. Identifying the information of recount text	Writing test	1	1
	2. My First Time in Senior High School	2. Writing a good recount text			
	3. The Sweetest Birthday Party				
	4. My First Experience to Ride Motorcycle				
	5. My Unfortunate				

2. Reliability Test

Fraenkel and Wallen (2009, p. 47) state that reliability refers to the consistency of scores or answer from one administration of an instrument to another and from one set of items to another. Firstly, in this study, the writer used inter-rater reliability to know whether the test was reliable or not. Inter-

rater reliability occurs when two or more scorers yield inconsistent scores of the same test, possibly for lack of attention for scoring criteria, inexperience, inattention, or even preconceived biases (Brown, 2004, p. 21). Inter-rater reliability was the degree of agreement among raters. Then, the writer used test-retest method to measure the questionnaire which had been considered valid was reliable or not. The test-retest method involves administering the same test twice to the same group after a certain time interval has elapsed. A reliability coefficient is then calculated to indicate a relationship between the two sets of scores obtained. (Fraenkel and Wallen, 2009, p. 155).

The writer did the tryout of writing test instrument and questionnaire at M.A Al-Fatah Palembang to the tenth grade students with total 30 students as the sample for finding reliability of the test. Meanwhile, the research study was done at SMA Muhammadiyah 5 Palembang.

The score of students' recount text test was calculated by two raters. The first rater was Wissudarti, M.Pd. She is a teacher of English at SMP Kartika II-1 Palembang. The second rater was Arief Pamuji, M.Pd. He is a lecturer at Bina Husada Palembang (*see appendix K*).

In scoring writing skill, the writer used analytic scoring rubric for personal writing or recount text. According to Glencoe and McGraw-Hill (2000, p. 8), analytic scoring is based on an in-depth analysis of aspects of writing such as focus/organization, elaboration/support/style, and grammar, usage, and mechanics. Analytic scoring is usually based on a scale of 0–100 with each aspect receiving a portion of the total points. Various

characteristics are listed under each aspect, forming categories, and each category is assigned a weighted score. Regardless of the number of characteristics in any particular category, the weight of the category stays the same. For example, analytic scoring based on a possible total of 100 points might be weighted in this way: Focus/Organization 35 points; Elaboration/Support/Style 35 points Grammar, Usage, and Mechanics 30 points (Glencoe and McGraw-Hill, 2000, p. 8).

Then the two sets of score was calculated by Spearman rank order method formula suggested by Hatch and Lazaraton (1991, p. 453) to find out whether or not the the instruments were reliable. The formula as follows:

$$R = 1 - \frac{6 (\sum d^2)}{n (n^2 - 1)}$$

Where:

R : Rank order correlation

d^2 : Different rank score

n : The number of the students

The test was reliable if the result of the data measurement was higher than 0.70. According to Frankel et al (2012, p. 157), for the purpose of a rule thumb is that reliability should be at least 0.70 and preferable higher.

The rank order correlation was calculated to find the differences between the two sets of rankings using the formula as follows:

$$R=1-\frac{6(\sum d^2)}{n(n^2-1)}$$

$$R=1-\frac{1692}{30(30^2-1)}$$

$$R=1-\frac{1692}{30(899)}$$

$$R=1-\frac{1692}{26970}$$

$$R=1-0,062736$$

$$R=0,937264$$

$$R=0.94$$

From the result of rank order correlation was found that the coefficient reliability of the writing test was 0.94 (*see appendix C*) and higher than 0.70. Therefore, it can be stated that the assessment result was reliable.

The students' scores of questionnaire were taken from percentage of students' responses which had been calculated by Quipper School Indonesia (online learning media). To measure the test-retest method, Pearson Correlation Coefficient in SPSS was used. The result analysis of reliable test showed that the score of pearson correlation was 0.722. From the p-output, it could be stated that the questionnaire was considered reliable since it was higher than 0.70. For the complete data, it could be seen in *appendix C*.

G. Research Treatments

Treatment refers to action or process designed to find out that something is effective, workable, and valid. The treatments was given in experimental group by applying PQP (Praise-Question-Polish) strategy to the tenth grade students of SMA Muhammadiyah 5 Palembang in academic year 2014/2015.

1. Teaching Schedule for Research Treatment

In this study, the writer conducted 13 meetings. There were two meetings for pretest and posttest, ten meetings for treatments and one meeting for questionnaire (experimental group only). Each meeting was 2x45 minutes. Every meeting for treatments, the students were given a recount text. The materials used were the same for experimental and control group. Teaching materials for research treatments are showed in table 5.

Table 5
Teaching Materials for Research Treatments

No	Teaching Schedule		Teaching Material	Time Allocation
	Experiment Group	Control Group		
1	Monday, Feb 9 th , 2015	Monday, Feb 9 th , 2015	Pretest	1x45'
2	Saturday, Feb 14 th , 2015	Wednesday, Feb 11 th , 2015	My Horrible Experience	2x45'
3	Monday, Feb 16 th , 2015	Monday, Feb 16 th , 2015	My Horrible Experience	2x45'
4	Saturday, Feb	Wednesday,	Tour to Belitung	2x45'

	21 st , 2015	Feb 18 th , 2015	Island	
5	Monday, Feb 23 rd , 2015	Monday, Feb 23 rd , 2015	Tour to Belitung Island	2x45'
6	Saturday, Feb 21 rd , 2015	Wednesday, Feb 25 th , 2015	Riding Bike to Smith Beach	2x45'
7	Saturday, Feb 28 rd , 2015	Monday, Feb 23 rd , 2015	Riding Bike to Smith Beach	2x45'
8	Monday, Mar 2 nd , 2015	Monday, Mar 2 nd , 2015	Children's Day	2x45'
9	Saturday, Mar 7 th , 2015	Wednesday, Mar 4 th , 2015	Children's Day	2x45'
10	Monday, Mar 9 th , 2015	Monday, Mar 9 th , 2015	My Rainforest Adventure	2x45'
11	Saturday, Mar 14 th , 2015	Wednesday, Mar 11 th , 2015	My Rainforest Adventure	2x45'
12	Saturday, Mar 28 th , 2015	Wednesday, Mar 25 th , 2015	Posttest	1x45'
13	Monday, Mar 30 th , 2015		Questionnaire for experimental group	2x45'

2. Teaching Procedures for Research Treatment

To make the writer easier in doing the treatments, the writer developed the procedures of both experimental and control group in teaching writing recount text. The procedures could be seen in table 6.

Table 6

Teaching Procedures for Research Treatment

NO	MEETING	TEACHING PROCEDURES			
		EXPERIMENT GROUP		CONTROL GROUP	
		LEARNING ACTIVITIES	TIME ALLOCATION	LERNING ACTIVITIES	TIME ALLOCATION

1	1 st meeting	Pretest	45'	Pretest	45'
2	2 nd meeting	<p>1. Pre-activities</p> <ul style="list-style-type: none"> • Teacher greets students <p>2. Whilst activities</p> <ul style="list-style-type: none"> • Prewriting (teacher explains about recount text and topic 1 about 'My Horrible Experience') • Drafting (the teacher gives exercise [Practice on the topic] to the students to compose recount based on the topic above) 	<p>10'</p> <p>40'</p> <p>40'</p>	<p>1. Pre-activities</p> <ul style="list-style-type: none"> • Teacher greets students <p>2. Whilst activities</p> <ul style="list-style-type: none"> • teacher explains about recount text and topic 1 about 'My Horrible Experience' 	<p>10'</p> <p>80'</p>
3	3 rd meeting	<ul style="list-style-type: none"> • Revision stage by using PQP (practice continued). - Teacher assigns students to group which consists of 3 students) - Teacher prepares and distributes PQP guide - Teacher has the students in each group designate one student the author, one the recorder, and one the reader. - Instruct the author to pass the PQP guide to the recorder and the draft to the reader - Instruct the reader to read the draft 	<p>10'</p> <p>10'</p> <p>5'</p> <p>5'</p> <p>35'</p>	<p>— Continue whilst activities</p> <ul style="list-style-type: none"> • Write down the general topic at the top of paper. • Then make a list of every idea that comes into students' mind about that topic. Keep the ideas flowing. Try to stay on the 'general topic; however, if students write down information that is completely off the topic. don't worry about it because the students can cross it out later • Use words. phrases. or 	<p>10'</p> <p>25'</p>

		<p>aloud while the others listen. Then instruct the recorder to fill in the PQP guide with suggestions for revision</p> <ul style="list-style-type: none"> - Instruct the group to repeat the process until all three drafts have been read and each PQP guide has been completed - Instruct the student to return the drafts and PQP guide to the authors, who will then use the guides for revision <ul style="list-style-type: none"> • Teacher asks the students to collect the draft of recount text which is written by the students <p>3. Post activities</p> <ul style="list-style-type: none"> • The teacher asks the students who want to make conclusion about the material today that learned and closes the class 	15'	<p>sentences, and don't worry about spelling or grammar</p> <ul style="list-style-type: none"> • Now rewrite the list and group similar ideas together. Cross out items that don't belong or that are duplications <p>3. Post activities</p> <ul style="list-style-type: none"> • The teacher asks the students who want to make conclusion about the material today that learned and closes the class 	50'
		<ul style="list-style-type: none"> • Teacher asks the students who want to make conclusion about the material today that learned and closes the class 	5'		5'
4	4 th – 11 th meeting	<p>1. Pre-activities</p> <ul style="list-style-type: none"> • Teacher greeting students <p>2. Whilst activities</p> <ul style="list-style-type: none"> • Prewriting (teacher explains the topic 2,3,4 and 5 about 'Tour to Belitung Island', 'Riding Bike to 	10'	<p>1. Pre-activities</p> <ul style="list-style-type: none"> • Teacher greets students <p>2. Whilst activities teacher explains about recount text and topic 2,3,4 and 5 about 'Tour to Belitung Island', 'Riding Bike to</p>	10'
			40'		80'

		<p>three drafts have been read and each PQP guide has been completed</p> <ul style="list-style-type: none"> - Instruct the student to return the drafts and PQP guide to the authors, who will then use the guides for revision <ul style="list-style-type: none"> • Teacher asks the students to collect the draft of recount text which is written by the students <p>3. Post activities</p> <ul style="list-style-type: none"> • The teacher asks the students who want to make conclusion about the material today that learned and closes the class 	15'	<p>that are duplications</p> <p>3. Post activities</p> <ul style="list-style-type: none"> • The teacher asks the students who want to make conclusion about the material today that learned and closes the class 	5'
5	12th meeting	Posttest	45'	Posttest	45'
6	13 th meeting	Questionnaire for Experimental Group			90'

H. Technique for Analyzing Data

For analyzing the data, the writer used IBM SPSS (Statistic Package for the Social Science) Statistics version 20 for calculating students' scores in pretest and posttest between two groups, experimental and control groups. Then the writer presented the data by using some steps and techniques as follows:

1. Data descriptions

In data description, distribution of frequency data and descriptive statistics were illustrated from the obtained data of student's pretest and posttest scores in control and experimental groups.

a. Distribution of frequency data

In distribution of frequency data, the student's score, frequency, percentage are achieved. The distribution of frequency data were got from (1) pretest score in control group, (2) posttest score in control group, (3) pretest score in experimental group, (4) posttest score in experimental group. Then, the distribution of frequency data is displayed in a table analysis.

b. Descriptive statistics

In descriptive statistics, number of sample, the score of minimal, maximal, mean, standard deviation, and standard error of mean were obtained. Descriptive statistics was obtained from (1) pretest score in control group, (2) posttest score in control group, (3) pretest score in experimental group, (4) posttest score in experimental group.

2. Pre-requisite Analysis

Before analyzing the obtained data, pre-requisite analysis should be done to see whether or not the data was normal and homogen.

a. Normality Test

According to Basrowi and Soenyono (2007, p. 85) Normality test is used to measure whether the obtained data is normal or not. The data can be classified into normal whenever the p-output is higher than 0,025. In measuring normality test, *1-sample Kolmogorov-Smirnov* was used. The normality test was used to measure student's pretest and posttest scores in control and experimental groups.

b. Homogeneity Test

Homogeneity test was used to measure the obtained scores whether it was homogenous or not. Basrowi and Soenyono (2007, p. 106) states that the score is categorized homogenous when the p-output was higher than mean significant difference at 0,05 level. In measuring homogeneity test, Levene Statistic in SPSS was used. The homogeneity test was used to measure student's pretest and posttest scores in control and experimental groups.

3. Hypothesis Testing

a. Measuring a Significant Difference on Students' Achievement in Writing Recount Text Taught by Using PQP (Praise-Question-Polish) Strategy and Teacher's Method

In measuring a significant difference on students' achievement in writing recount text taught using PQP strategy and teacher's method,

independent sample t-test was used. A significant different was found whenever the p-output is lower than 0,05 level and the t-value was higher than t-table (Df.78:2000).

b. Measuring Students' Responses on the Implementation of PQP (Praise-Question-Polish) Strategy

In measuring students' responses on the implementation of PQP (Praise-Question-Polish) strategy, the writer used Quipper School Indonesia (online learning media). The implementation of PQP (Praise-Question-Polish) strategy was successful in improving students' achievement in writing recount text whenever the result of questionnaire was students' positive responses higher than students' negative responses.