

CHAPTER III

RESEARCH METHOD

In this chapter, the writer described; research type, research design, place of the study, population and sample of the study, instrument of study, research instrument validity, research instrument reliability, techniques of data analysis, data collection procedures, and data analysis procedures.

A. Research Type

Considering the purposes of the research and the nature of the problems, the type of research was quantitative research. Quantitative research may be further classified as either experimental or nonexperimental. In this study the writer used non-experimental quantitative research, the writer identified variables and may look for relationships among them but does not manipulate the variables. Major forms of non-experimental research are relationship studies including ex post facto and correlational research and survey research.

It was the study which compare the writing ability between the students who graduated from Islamic School and those graduated from Public School The Department Of Education The Study Program of English Education of State Islamic College of Palangka Raya, in order to find the similarities and the differences. The writer found of casual-effect based of relationship or casual comparative research (Ex-post Facto research).

B. Research Design

The design of this study was Ex-post Facto Research. Ex-post facto research is similar to an experiment, except the writer did not manipulate the independent variable, which has already occurred in the natural course of events. The writer simply compared groups differing on the pre-existing independent variable to determine any relationship to the dependent variable. Because there is no manipulation or control of the independent variable, one must be very careful regarding the conclusions that are drawn about any observed relationship.³²

The study used quantitative comparative approach. Related to this, Aliaga and Gunderson in Daniel stated that “quantitative research is explaining phenomena by collecting numerical data that are analysed using mathematically based methods”.³³ Ex post facto research is conducted after variation in the variable of interest has already been determined in the natural course of events. This method is sometimes called *causal comparative* because its purpose is to investigate cause and effect relationships between independent and dependent variables. Writer used it in situations that do not permit the randomization and manipulation of variables characteristic of experimental research. Thus, much of the basic rationale for experimental and ex post facto is the same. They both investigate relationships among variables and test hypotheses.

The study compared about writing ability in making recount text between students graduated from Public School and Islamic School at the Department of

³²Donald Ary, Lucy Cheser Jacobs, Chris Sorensen, Asghar Razavieh, *Introduction to Research in Education* (eight edition), Wadsworth: USA, 2010, p. 26

³³Daniel Muihs, *Doing Quantitative Research in Education*, London: Sage Publications, 2004, p.1

Education of the Study Program of English Education, in order to find the similarities and the differences. In this study the writer took the third semester students of at the Department of Education of the Study Program of English Education of State Islamic College of Palangka Raya as subject of the study. The subjects divided it into two groups based on the students' graduation. They are Public School and Islamic School. Then the two groups were tested to know the differences on their writing ability.

C. Variable of the Study

A variable was a construct or a characteristic that took on different values or scores³⁴. Based on the title of this research, it divided into two variables:

- 1. The first variable : Independent variable (X),**
 - a. X_1 : Variable refers to students graduated from Islamic School
 - b. X_2 : Variable refers to students graduated from Public School
- 2. The second variable : Dependent variable (Y),** variable refers to the difference of writing ability

³⁴*Ibid*, p. 37

D. Population and Sample

1. Population

According to Ary, population is defined as all members of any well-defined class of people, events, or object.³⁵ For this research, the writer used population study or census study, because the number of student's are few. In this case, writer choosed students graduated from Islamic School and those graduated from Public School.

The writer need to know the students' writing ability between students graduated from Islamic School and those graduated from Public School of at the Department of Education of the Study Program of English Education of State Islamimc College of Palangka Raya. The population of the study was all of the third semester students of at the Department of Education of the Study Program of English Education of State Islamic College of Palangka Raya, it contained seventy one (72) students. Based on their school background, they can be classified into two groups; they were Public School and Islamic school.

Table 3.1

The Number of Students Based on Their School Background

No	Students' Graduate	Total
1	Senior High School	28 Students
2	Vocational School	25 Students
3	Islamic School	19 Students
	Total	72 Students

³⁵*Ibid*, p. 138

2. Sample

The small group that was observed is called a sample.³⁶ It is called sample research if someone aims to generalize result of subject research. In this case, the writer choose students of Department of Study Program of English Education of State Islamic College of Palangka Raya. Based on their school-background they can be classified into two groups as a sample, they are Public School (SMA), and Islamic School (MA/MAN/PONPES). The sample took in purposive sampling, because the sample of this study took on the certain purpose.

E. Research Instrument

In this study, the data collection were conducted while the students in the third semester. The data is need to prove and support this study. By this collecting data, the writer compared the writing ability between students that graduated from Public School and Islamic School at Department of Study Program of English Education of State Islamic College of Palangka Raya. There are two instruments used by the writer such as test and documentation.

a. Test

The type of the test used was writing test to collect the data, the type of the writing test used is paragraph writing test. It consisted of the instruction and statement the subjects addressed in their writing

³⁶*Ibid*, p. 148

and alternative topics to be chosen. In this case, the students were assigned to choose one of topics that interest. The test was conducted three times, based on the schedule of the writing class. The first time was on Tuesday, September 9th, 2014 at D2-4 in State Islamic College of Palangka Raya. The second was on Friday, September 12th, 2014 at A2-1 in State Islamic College of Palangka Raya. The last time was on Tuesday, September 17th, 2014 at A2.2 in State Islamic College of Palangka Raya. The writer asked the students to make a recount text based on their interesting topic for them that was determined by the writer (see in appendix 2) and they must recognize the text with the generic structure and language features in the recount text.

To gain the appropriate writing test for the aim of this study, the writer done some steps such as planning the writing test, preparing the writing test, trying out the test and analyzing the result, and carrying out the test. Since, the writer measured the students' writing ability the test is individual test. Using individual test, the writer can gain the information completely and accurately on the scoring system such as content, organization, vocabulary language use and mechanics.

In this study, the main data that used to measure the students' English writing ability between students graduated from Public School and Islamic School of the Department of Education of the Study Program of English Education at State Islamic College of Palangka,

which took through written test, it was about paragraph writing in personal recount text. The scoring rubric that used by the writer as follows, which contained five components that measured the students' writing ability such as content, organization, vocabulary, language use and mechanism which had some points that should measure.

Table 3.2 Scoring Rubrics in Making Recount Paragraph

Components	Score	Level	Criteria
Content	30-27	Excellent to very good	Knowledgeable, substantive and relevant to assigned topic such as: a. Orientation: introducing the participant (when, where, who) b. Event: explaining about the problem/event c. Re-orientation: closure the event
	26-22	Good to average	Adequate range, mostly relevant to topic, but lack detail in: a. Orientation: introducing the participant (when, where, who) b. Event: explaining about the problem/event c. Re-orientation: closure the event
	21-17	Fair to poor	Little substance, inadequate development of topic of recount text
	16-13	Very poor	Not-substantive, not pertinent or not Enough to evaluate
Organization	20-18	Excellent to very good	Fluent expression, ideas clearly stated or supported, succinct, well organization, logical

	17-14	Good average	to	<p>sequencing and cohesive in:</p> <p>a. Orientation</p> <p>b. Event</p> <p>c. Re-orientation</p> <p>Loosely organized but main ideas stand out, limited support and logical but incomplete sequencing about:</p> <p>a. Orientation</p> <p>b. Event</p> <p>c. Re-orientation</p>
	13-10	Fair to poor		<p>Non-fluent, ideas confused or disconnected and lacks logical sequencing and development about:</p> <p>a. Orientation</p> <p>b. Event</p> <p>c. Re-orientation</p>
	9-7	Very poor		<p>Does not communicate, no organization or not enough to evaluate based on the paragraph recount</p>
Vocabulary	20-18	Excellent	to	<p>Effective word or choice and usage, word form mastery and appropriate register in:</p> <p>a. utilizing a word in paragraph recount</p> <p>b. using various diction</p>
	17-14	Good average	to	<p>Adequate range, occasional errors of word form, choice, usage but meaning not obscured in</p> <p>a. utilizing a word in paragraph recount</p> <p>b. using various diction</p>
	13-10	Fair to poor		<p>Frequency errors of word form, choice, usage and meaning confused or obscured in</p> <p>a. utilizing a word in paragraph recount</p>

	9-7	Very poor	b. using various diction Little knowledge of English vocabulary, word form or not enough to evaluate based on the paragraph recount
Language Use	25-22	Excellent to very good	Effective complex constructions, few errors of agreement, tense, word order or function, pronouns such as: a. Using simple past tense b. Using action verb c. Using temporal sequence d. Using specific participant
	21-18	Good to average	Effective but simple constructions, minor problems in complex constructions, several errors agreement, tense, word order or function, pronouns, but meaning seldom obscured in language features of paragraph recount such as: a. Using simple past tense b. Using action verb c. Using temporal sequence d. Using specific participant
	17-11	Fair to poor	Major problems in simple or complex constructions, frequent errors of negation, agreement, tense, word order or function, pronouns and meaning confused or obscured in language features of paragraph recount such as: a. Using simple past tense b. Using action verb c. Using temporal sequence d. Using specific participant
	10-5	Very poor	Virtually no mastery of sentence constructions rules, dominated by errors, does not

			communicate or not enough to evaluate based on the paragraph recount
Mechanics	5	Excellent to very Good	Demonstrates mastery of convention, for instance: a. Few Errors of Spelling b. Few Errors of Punctuation c. Few Errors of Capitalization d. Few Errors of Paragraphing
	4	Good to Average	Occasional errors in some points, for instance: a. Spelling b. Punctuation c. Capitalization d. Paragraphing e. Meaning Confused Or Obscured
	3	Fair to Poor	Frequent errors in some points, for instance: a. Spelling b. Punctuation c. Capitalization d. Paragraphing e. Poor Handwriting f. Meaning Confused or Obscured
	2	Very Poor	No mastery of conventions, dominated by errors of; a. Spelling b. Punctuation c. Capitalization d. Paragraphing e. Handwriting f. Illegible or not enough to evaluate

b. Documentation

The writer used documentation as the second instrument of the study. Based on Arikunto's opinion states "there are three kinds of source namely paper, place, and people. This technique used to collect the data in the form of document on the study place. The data that the writer need such as:

- 1) The amount, the name, and the student's registration number of the students who takes writing subject
- 2) The number of the third semester students of English education study program of STAIN Palangka Raya
- 3) The specification of students graduated
- 4) The student's score of writing

After the writer got all the data above, then it classified the students who should be the subject of the test and the students tried out. In addition, the writer took some photos when try out and the test will be conduct.

1. Research Instrument Reliability

Reliability is a necessary characteristic of any good test for it to be valid at all. A test must first be reliable as a measuring instrument. It is the degree of consistency with which it measures whatever it is measuring.³⁷ In addition, reliability is the accuracy of the measurement and the consistency of results.³⁸ It is the degree of consistency with which it measures whatever it is measuring. In this case, to score composition as fairly and consistently as possible, the writer uses inter-rater method (test of reliability). Inter-rater reliability is the consistency of the judgment of several raters on how they see a phenomenon or interpret the responses of the subjects.

In this case, the two raters were employed to score the students' writing. The two raters are the writer and a person which mastered the wrting lesson based on writer's perception. One important thing in using the inter rater method in rating process is focused with the training of the raters. It can maximize the accuracy of the writing assessment. It makes the raters be consistent in scoring and avoid subjectivity of the raters in scoring. For this purpose, the training will done to get inter rater agreement in order to give reliable scores to students' writing product. The first thing that need in this case, the two raters must competence toward the test and

³⁷Donald Ary, Lucy Cheser Jacobs, Chir Sorensen, Asghar Razavieh, *Introduction to Research in Education*, Wadsworth: USA, 2010, p. 236

³⁸Hellriegel, John W.S and Richard W. W., *Organizational Behavior*, Ohio, South Western College Publishing, 1998, p. 631

had good qualification. The second was both of the rater should scored it by using scoring guide based on the ability or the criterion of the test. The third one it was scored the test based on the scoring two raters and Which used pearson product-moment correlation to measure the test whether it was reliable or not.³⁹

$$r_{xy} = \frac{N\Sigma XY - (\Sigma X)(\Sigma Y)}{\sqrt{\{N\Sigma X^2 - (\Sigma X)^2\}\{N\Sigma Y^2 - (\Sigma Y)^2\}}}$$

Notice :

r_{xy} : The Coefficient of Correlation

ΣX : Total Value of Score X

ΣY : Total Value of Score Y

ΣXY : Multiplication Result between Score X and Score Y

N : Number of Students

To know the validity level of the instrument, the result of the test would be interprets to the criteria as follows.⁴⁰

³⁹Hartono, *Statistik untuk Penelitian*, Yogyakarta: Pustaka Pelajar, 2011, p. 86

⁴⁰Soenardi Djiwandono, *Tes Bahasa Pegangan bagi Pengajar Bahasa*, Jakarta: PT Indeks Jakarta, 2011, p. 168- 188

Table 3.3 The Interpretation of Correlation Pearson Product Moment

Coefission	Criteria
0.800 – 1.000	Very High Validity
0.600 – 0.799	High Validity
0.400 – 0.599	Fair VaLidity
0.200 – 0.399	Poor Validity
0.001 – 0.199	Very Poor Validity

2. Research Instrument Validity

A validity test or measure is one which measures what is intended to measure. Validity must always be examined with respect to the use which is to be made of the values obtained from the measurement procedure.

a. Content Validity

According to Heaton, content validity is:

*Kinds of validity depends on a careful analysis of the being test and the particular course objective. The test should be as constructed as contain a representative sample of the course, the relationship between the test item and the course objectives always being apparent.*⁴¹

In this study, the writer used essay test for students. It is useful to measure their writing ability between students graduated from Islamic School and Public School. The material should be test is about recount

⁴¹J. B. Heaton, *Writing English Language Test*, England: Longman, 1974, p. 153

text, it contains generic structure and language features. The students in this research wrote about recount text from essay test instruction, so the test really measured the writing recount text ability of the students.

Table 3.4
The Signification of Content Validity

Indicator of the Study	Type of Test	Total Question
Students are able to write a text in form of recount text based on the components of the recount itself	Performance test	One question and Five Instructions

b. Face Validity

Face validity of test is when the test is indeed testing what it claims to the test; the samples of the test is the actual content of what the learner has achieved or expects to achieve. The types of face validity, if the test items look right to other testers, teacher, indicators and test. The types of test items, which would use in this research, can be suitable to the others at the same level in college students.

For face validity of the test items as follow:

- 1) The test used written test in essay test instruction.
- 2) The evaluation by essay test based on scoring system.
- 3) Kind of the essay test was writing recount text.
- 4) The Language of items used English
- 5) The essay test was suitable with syllabus of English writing for the third semester at Study Program of English Education of STAIN Palangka Raya

F. Techniques of Data Analysis

Data analysis were explained about the kind of statistics analysis which is used. In this research, writer used inferential statistic. The inferential statistics was directed to provide the answer if there is a significant difference in writing ability between the students graduated from Islamic School and those graduated from Public School. The inferential statistics includes the following points:

1. Normality Test

It is used to know the normality of the data that is going to be analyzed whether both groups have normal distribution or not. In this case, the SPSS program 16 will be applied. The data were normal if the value of the probability was higher than 0.05.

2. Homogeneity Test

Homogenous testing was intended to find out whether or not the scores of one group have homogenous variance with the scores of the other groups. The formula is:⁴²

$$F = \frac{\text{Bigger Variant}}{\text{Smaller Variant}}$$

Notice:

F : Frequence

The hypotheses in homogeneity:

$F_{\text{value}} \leq F_{\text{table}}$, means both of variants are homogeneity.

$F_{\text{value}} > F_{\text{table}}$, both of variants are not homogeneity.

⁴²*Ibid*, p.280

If calculation result of F value is lower than F table by 5% degree of significance so H_0 is accepted, it means both groups have same variants. The test can be said homogenous if the probability was higher than 0.05. In addition, the SPSS program will be applied.

G. Data Collection Procedures

In this study, the writer will use some procedures to collect the data. The procedures consisted of some steps as follows:

1. The writer observed the class

The writer asked permission to the writing II lecturer to observe the class for finding the data of students that graduated from.

2. The writer determined the groups

The writer determined students into some groups based on their graduated.

3. The writer gave the test to the students

The writer gave a paragraph writing test to the students in making personal recount text.

4. The writer (the rater one and the writer two) gave score

There are some criterias that has been measured by the rater one and rater two such as:

- a. Scoring based on the component of paragraph recount writing such as content, organization, vocabulary language use, and mechanics.

- b. Recapitalizing based on the students' score of writing product in writing personal recount paragraph.

H. Data Analysis Procedures

The collected data were analyzed by applying some procedures as follows:

1. The writer determined the range of the score

Before the writer arranges the distribution of frequency table, she determined the range of score, the class interval, and interval of temporary, using formula:

- a. The range of score ®

$$R = H - L + 1$$

Where:

R = Range

H = Highest score

L = Lowest score

- b. The class interval (K)

$$K = 1 + (3,3) \times \text{Log } n$$

- c. Interval of temporary (I)

$$I = \frac{R}{K}$$

Where:

R = Range

K = Class Interval

2. The writer arranged the collected score into the distribution of frequency of score table.
3. The writer calculated mean, median, and modus using formula:

- a. Mean

$$M_x = \frac{\sum fX}{N}$$

Where:

M_x = Mean Value

$\sum fx$ = Sum of each midpoint times by it frequency

N = Number of Case

- b. Median

$$M_{dn} = l + \frac{\frac{1}{2}N - f_{kb}}{f_i} X i$$

Where:

M_{dn} = Median

l = Lower limit (lower limit from score that contain median)

f_{kb} = Culmulative frequency that reside below the score that contain median

f_i = Genuine Frequency

N = Number of case

U = upper limit (upper limit from score that contain median)

fk_b = Culmulative frequency that reside above the score that contain median

c. Modus

$$Mo = l + \frac{fa}{fa+fb} \times i$$

Where:

Mo = Modus

ℓ = LOWER LIMIT (lower limit from interval that contain modus)

f_a = Frequency that reside above interval that contain modus

f_b = Frequency that reside below interval that contain modus

u = Upper Limit (upper limit from interval that contain median)

I = Interval Class

4. The writer calculated the standard deviation using the formula:

$$SD = \sqrt{\frac{\sum fx^2}{N}}$$

Where:

SD = Standard Deviation

$\sum fx$ = Sum of the multiplication result between each score frequency with the squared deviation score

N = Number of Case

5. The writer calculated the variance homogeneity.

$$F = \frac{\text{the biggest variance}}{\text{the smallest variance}}$$

6. The writer calculated the data by using t-test to the test the hypothesis of the study, using formula:

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2} \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

Where:

N : The Number of Sample

\bar{x}_1 : Average Value of the First Sample

\bar{x}_2 : Average Value of the Second Sample

S_1 : Deviation Standard of the First Sample

S_2 : Deviation Standard of the Second Sample

s_1^2 : Variance of the First Sample

s_2^2 : Variance of the Second Sample

7. The writer used the level of significance at 5%.

IF the result of test is higher than t table, it means H_a is accepted but if the result of test is lower than t table, it means H_o is accepted.

8. The writer used t-test to conclude the answer of the problem of the study.

- a. If the t_{observed} is equal or higher than t value in the table (with t table sign), so the null hypothesis stating that there is no mean difference from the both sample is rejected. It means the difference is significance.
- b. If the t_{observed} is lower than t table, it means the null hypothesis stating that there is no mean difference from the both sample is accepted. It means the difference is not significant.

9. The writer calculated the degree of freedom with the formula:

$$Df = (N_1 + N_2 - 2)$$

Where:

Df = Degree of Freedom

N = Number of Cases

11. The writer determined the significant level of t observed by comparing the t observed with t table.

12. The writer interpreted the analysis result.

13. The writer gave the conclusion.

The data analysis procedures above can be described by the writer as follows:

Figure 3.1 Writing Analysis Procedures

