

CHAPTER III

RESEARCH METHOD

In this part, the writer describes about research methodology that was used in conducting the study. It is purposed to answer the problem of the study. This chapter consists of research type, research design, variables of the study, population and sample, research instrument, data collecting, data analysis, and data analysis procedure.

A. Research Type

The writer used quantitative approach in this study. It was because the writer investigated the effect of reading log on students' reading achievement and reading strategy use. The type of thi study is quasi-experimental design. Quasi-experimental designs are similar to randomized experimental designs in that they involve manipulation of an independent variable but differ in that subjects are not randomly assigned to treatment groups. Because the the researcher does not provide full control. It is extremely important that researchers be aware of the threats to both internal and external validity and consider these factors in their interpretation.⁵²

B. Research Design

The design of the study was quasi-experimental design. Experimental design is a plan for an experiment that specifies what independent variables will be applied, the number of levels of each, how subject are assigned to groups, and

⁵² Donald Ary, et al., *Introduction to Research...*, p.316.

the dependent variable. The write used quasi- experimental design since it was not possible to randomly assign subjects to treatment group.⁵³

There are two classes in this study. The first group is control class (CC) which was not taught reading log. The second is experimental class (EC) group which was taught the reading log. The groups are given pre-test and post-test to measure the result of the students' reading achievement.

Table 3.1
The Schema of Experimental Research Class

Group		Pretest	Independent variable	Posttest
Experimental	Students' Reading Achievement	Ey1	X	Ey1
	Reading Strategy Use	Ey2		Ey2
Control	Students' Reading Achievement	Cy1	-	Cy1
	Reading Strategy Use	Cy2		Cy2

C. Variables of the Study

There were two main variables of the study, namely independent and dependent variables. The independent variable is the one that we believe may "cause" the results; the dependent variable is the one we measure to see the effects the independent variable has on it.⁵⁴ The present study includes the following variables:

⁵³ *Ibid.* p. 316.

⁵⁴ Alison Mackey, and Susan M. Gass, *Second Language Research Methodology and Design*, London: Lawrence Erlbaum Associates, Inc., 2005, p. 120.

1. The independent variable (X) of this study was reading log.
2. The dependent variables (Y) of this study were the result of students' reading achievement (Y1) and students' reading strategy (Y2).

D. Population and Sample

1. Population

The larger group about which the generalization is made is called population. A population is defined as all members of any well-defined class of people, events, or objects.⁵⁵ The population of this study was all students of the fourth semester students who took Reading III course at English Education Study Program of IAIN Palangka Raya. The numbers of population were 75 students. They were classified into four classes:

Table 3.2
The Number of the Fourth Semester Students
at English Education Study Program in IAIN Palangka Raya

No	Reading 3 Classes	The Number of Students
1.	Class A	19
2.	Class B	19
3.	Class C	17
4.	Class D	20
Total		75

2. Sample

A sample is a portion of a population.⁵⁶ Based on the population which is grouped into classes, the sample of this study is class or cluster. In this case, there

⁵⁵ Donald Ary, Lucy Cheser Jacobs, Chir Soronce and Asqar Razavieh, *Introduction to Research in Education*, Eight Edition, New York: Wadsworth/Thomson Learning, 2010, p. 148.

⁵⁶ *Ibid*, p. 148.

are two samples base on purposive technique. The samples are class A and C. Class C is as experimental class, Class A is as control class, and Class B is becomes try out class for instrument of the test.

Table 3.3
The Number of Samples

Class	Group	Number of Students
Class C	Experiment	17
Class A	Control	19
Total		36

E. Instruments of the Study

According to Ary, et al., instrument is a device for operationally defining a variable.⁵⁷ Selecting appropriate and useful measuring instruments in critical to the success of any research study. One must select or develop scales and instruments that can measure complex constructs such as intelligence, achievement, personality, motivation, attitudes, aptitudes, interests, and self-concept.⁵⁸

There were two instruments used in this study, namely, test and questionnaire:

⁵⁷ Donald Ary, Lucy Cheser Jacobs, Chir Soronce and Asqar Razavieh, *Introduction to Research in Education*, Eight Edition, New York: Wadsworth/Thomson Learning, 2010, p. 643

⁵⁸ *Ibid*, p.200.

1. Test

According to Heaton "Test may be constructed primarily as devices to reinforce learning and to motivate student, or primarily as a means of as seeing the student's performance the language."⁵⁹

The major data in this study was the data of the students' reading achievement score took from pre-test and post-test. Pre-test to was conducted to find out the students' reading achievement before the treatment given, while post-test was conducted to find out the students' reading achievement after the treatment given.

The test constructed in multiple choice form which consist of 50 items. The test items were adapted from Longman Complete Course for the TOEFL Test and internet sources. The test item can be seen in the following table 3.4:

Table 3.4 Level of Comprehension Test Items

No.	Level of Comprehension	Items	Percentage
1.	Literal	33 Items	66%
2.	Inferential	17 Items	34%
Total		50 Items	100%

The reason why the test item was constructed in multiple choice form was because multiple choice is objective test. Objective test are frequently criticised on the grounds that they are simpler to answer than subjective examinations. Item in an objective test, however, can be made just as easy or as difficult as the test constructor wishes. Beside of having the strength, a test in form of multiple choice aslo has a weakness. Multiple choice test type encourages guessing. It can be

⁵⁹ J.B.Heaton, *Language Testing*, 1987, p. 1.

solved by doing try out of the test items to find out the test validity and reliability.⁶⁰

Because this test used 50 items test in the form of multiple choice, the writer gave score to the students' result test by using the formula:

$$\text{Score} = \frac{B}{N} \times 100\%$$

Where:

B : Frequency of the correct answers

N : Number of test items

In connection with the score of students' test, the writer used scoring rubric as seen in table 3.5 as follows:

Table 3.5
Scoring Rubric for Students' Reading Comprehension⁶¹

Rubric Score	Grade	Category
80-100	A+	Excellent
65-70	A	Excellent
55-60	B+	Good
45-50	B	Good
35-40	C+	Fair
25-30	C	Fair
15-20	U	Unsatisfactory
5-10	U	Unsatisfactory
0	U	Unsatisfactory

The performance of the test items was obvious importance as compiling future tests. Since a great deal of time and effort are usually spent on the construction of good objective items, in this case is multiple choice items, most

⁶⁰ *Ibid*, p.12

⁶¹ Craig A. Mertler, *Designing Scoring Rubrics for Your Classroom*, Practical Assessment, research & evaluation, 7(25).2005 Retrieved July 8, 2005, p.4-5.

teachers and test constructors will be desirous of either using them again without further changes or else adapting them future use. It is thus useful to identify these items which were answered correctly by the more able students taking the test and badly by the less able students. The identification of certain difficult items in the test, together with a knowledge of the performance of the individual distractors in multiple choice items, can prove just as valuable in its implications for teaching for testing.⁶²

2. Questionnaire

According to Arikunto, questionnaire is some written questions used to get the information from respondent about their personality or anything that she or he knows.⁶³ In this study, the writer was used Metacognitive Strategy Questionnaire (MSQ) to measure students' reading strategy use. The MSQ will be composed of three main sections asking about the metacognitive strategies that the students actually used to plan, monitor, and evaluate their reading processes. The categories with detail description were adapted from Chamot and O'Malley's in Zhang journal classification which is widely accepted that it is comprehensive, detailed, and systematic in linking individual strategies as well as strategy groups with each of the four language skills (listening, reading, speaking, and writing).⁶⁴ It is also in accordance with the information processing model as appeared in the main categories, i.e., metacognitive, cognitive and social mediation. However, this

⁶² J. B. Heaton, *Language Testing...*, p. 172

⁶³ Suharsimi Arikunto, *Prosedur Penelitian: Suatu Pendekatan Praktek.*, Jakarta: Rineka Cipta, 1996, p.128.

⁶⁴ Lian Z. and Sirinthorn S. *Electronic Journal of Foreign Language Teaching 2013, Vol. 10, No.1*, Metacognitive Strategy Use and Academic Reading Achievement: Insights from a Chinese Context, p. 56 (<http://e-flt.nus.edu.sg/v10n12013/zhang.pdf>).

present study mainly focused on the metacognitive strategy in reading comprehension. Their classification is obviously far too general for its purpose. Thus modification was necessary.

In detail, the MSQ in this study will measure three main categories of metacognitive strategies, namely planning, monitoring and evaluating and nine sub-categories that the students employed in carrying out four reading tasks. Table 3.6 below illustrates the modified classification and the details are as follows⁶⁵:

- a) The 6 items from the original version were modified into 4 for the Planning Strategy;
- b) The Monitoring (while reading), Comprehension Monitoring and Production Monitoring were newly developed to replace the Self-monitoring strategy in the original classification; and
- c) The Evaluating (post reading), Self-assessment, Self-evaluation and Self-reflection were developed, probing the depth of the metacognitive reading process.

⁶⁵ *Ibid*, p. 56-57.

Table 3.6
Description of metacognitive strategies in reading comprehension process
and number of items used in the MSQ

Metacognitive process & its sub-categories	Metacognitive strategies in the academic reading comprehension process	Number of items in the MSQ
Planning (Pre-reading)	<p align="center"><i>Advance Organizer</i></p> Determine the nature of the reading task Set one's reading goals Plan the objectives of reading sub-tasks	Items 1–4
	<p align="center"><i>Organizational Planning</i></p> Plan the content of each task, the parts of specific reading tasks Plan the strategies for completing the tasks Elaborate the prior knowledge connected with the reading tasks	Items 5–8
	<p align="center"><i>Selective Attention</i></p> Focus on a specific task by sequencing the strategies to complete the tasks Select the appropriate reading strategies for the specific tasks	Items 9–10
	<p align="center"><i>Self-Management</i></p> Apply one or more specific reading strategies relevant to the specific task Adjust reading strategies for achieving goals	Items 11–12
Monitoring (While reading)	<p align="center"><i>Comprehension Monitoring</i></p> Check one's understanding, accuracy and appropriateness of the over-all reading task/process Check one's own abilities and difficulties in each reading task	Items 13–24
	<p align="center"><i>Production Monitoring</i></p> Check whether the reading strategies learned from class can solve the comprehension problems Trace the selected reading strategies and adopt alternatives when it is not working	Items 25–30
Evaluating (Post-reading)	<p align="center"><i>Self-Assessment</i></p> Make an assessment of whether one succeeds in the reading goal	Items 31–34
	<p align="center"><i>Self-Evaluation</i></p> Evaluate how well one learned to read Evaluate the reading strategy use	Items 35–37
	<p align="center"><i>Self-Reflection</i></p> Reflect one's own problems whether he/she needs to go back through the reading process for a better understanding	Items 38–40

The averages for metacognitive strategy use based on the SILL scale value by Oxford in Zhang journal applied to indicate the level of usage. The frequency scales of strategy use based on SILL (Oxford, 1990) and its interpretation were shown in Table 3.7 below:

Table 3.7
Frequency Scales of Strategy Use

Mean Score	Frequency	Evaluation
4.5-5.0	High	Always or almost always used
3.5-4.49		Usually used
2.5-3.49	Medium	Sometimes used
1.5-2.49		Generally not used
1.0-1.49	Low	Never or almost never used

F. Instrument Try Out

The try out of instrument was conducted in class B with the number of student was 17 students on Tuesday, 12th April. The writer conducted a try out test before it applied to the real sample of this study. Try out of the instrument was necessary to know how valid, reliable and difficult the instrument before it apply to the real sample. The writer obtained the instrument quality consists of instrument validity, reliability, index of difficulty and discrimination power. The try out was conducted in the students' who took Reading III subject Class B which consists of 19 students. The procedures of the try out as follows:

- a. The writer gave try out to the respondents.
- b. The writer collected the answers and gave score to the respondents' answer.
- c. The writer analyzed the obtain data to know the instrument validity, reliability, index of difficulty and discrimination power.

- d. After the writer knew the instrument validity, reliability, index of difficulty and discrimination power, the writer tested the test for the real sample.

G. Research Instrument Reliability

The good instrument in a study is not only the instrument valid but also reliable to measure what suppose to be measured. Reliability is a necessary characteristic of any good test for be valid at all, a test must first be reliable as a measuring instrument.⁶⁶ Reliability is of primary importance in the use of both public achievement and proficiency test and classroom test.

The writer examined the reliability of the item by using formula of instrument reliability is,⁶⁷

$$r_{11} = \left(\frac{k}{k-1} \right) \times \left(1 - \frac{M(k-M)}{k.Vt} \right)$$

Note :

r_{11} = reliability instrument

k = total numbers of items

M = the mean score on the test for all the testers

Vt = the standard deviation of all the testers' score

The steps in determining the reliability of the test were:

- a. Made tabulated of tests scores.

- b. Measured the mean of the testees's scores with the formula : $M = \frac{\sum Y}{N}$

⁶⁶ J.B. Heaton. *Language Testing*. 1987. p. 155

⁶⁷ Suharsimi Arikunto, *Prosedur Penelitian*, p. 108.

c. Measured the total variants with the formula:

$$V_t = \frac{\sum Y^2 - \frac{(\sum Y)^2}{N}}{N}$$

Where:

V_t = the total variants

$\sum Y$ = the total of score

$\sum Y^2$ = the square of score total

N = the number of testes

d. Calculated the instrument reliability using KR-21.

e. The last decision was compared the value of Γ_{11} and Γ_r ,

$\Gamma_{11} > r_{table} = \text{Reliable}$
$\Gamma_{11} < \Gamma_{table} = \text{Not Reliable}$

f. To know the level of reliability of instrument, the value of Γ_{11} was

interpreted based on the qualification of reliability as follows:

0.800- 1.000: Very High Reliability

0.600-0.799: High Reliability

0.400-0.599: Fair Reliability

0.200-0.399: Poor Reliability

0.000-0.199: Very Poor Reliability

From the measurement of instrument try out reliability know that the numbers of test items were reliable or not.

H. Research Instrument Validity

The validity of a test is the extent to which it measures what is supposed to measure and nothing else.⁶⁸ The test can be said valid if it is able to measure what it is suppose to be measure.

a. Content Validity

Content validity is concerned with what goes into the test. A test will have high content validity if the items are representative of the population of possible task. The content of a test should be decide by considering the purpose of the assessment and then drawn up as a list known as a content spesification.⁶⁹

The instrument must be valid in content. It means that the items in the instrument are equal and proportional in their distribution as the indicators of the test.

b. Construct Validity

According to Heaton construct validity assumes the existence of certain learning theories and constructs underlying yhe acquisition of abilities and skills. If a test has construct, it is capabel of measuring certain specific characteristics in accordance with a theory of language.⁷⁰

The validities done in order to know the degree of the validity of the test items based on the coefficient correlation. To measure The validity of the

⁶⁸ J.B. Heaton. *Language Testing...*, p. 153

⁶⁹ Wimar Tinambunan, *Education of Students's Achievement*, Jakarta: Depdikbud, 1998. p. 12.

⁷⁰ J.B. Heaton. *Language Testing...*p. 154.

instrument, the writer used the formulation of Product Moment by Pearson as follows⁷¹:

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

Where:

r_{xy} : The coefficient of correlation

$\sum X$: Total Value of Score X

$\sum Y$: Total Value of Score Y

$\sum XY$: Multiplication Result between Score X and Score Y

N : Number of students

Furthermore, it was calculated using Test-t calculation below:

$$t_{observed} = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

Where:

t = The value of $t_{observed}$

r = The coefficient of correlation of the result of $r_{observed}$

n = Number of students

The distribution of t_{table} at alpha 5% and the degree of freedom (n-2) with the measurement of validity using these criteria:

$t_{observed} > t_{table} = \text{Valid}$
$t_{observed} < t_{table} = \text{Invalid}$

⁷¹ Riduwan, *Metode dan Teknik Menyusun Thesis*, Bandung: Alfabeta, 2007, p. 110.

To know the validity level of the instrument, the result of the test was interpreted to the criteria or the correlation index as follows:

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

0.000 – 0.199 = Very Poor Validity⁷²

In the measurement of validity, the criteria are:

- a. If the value of t_{observed} is greater than t_{table} , the instrument is valid.
- b. If the value of t_{observed} is lower than t_{table} , the instrument is invalid.
- c. The value of t_{table} can be seen at $\alpha = 5\%$

From the measurement of validity, it was known that there were 59 items (84,29%) invalid and 11 items (15,71%) valid (See Appendix 2).

I. Index of Difficulties and Discrimination Power

1. Index of Difficulties

The index of difficulty (or the facility value) of an item simply shows how easy or difficult the particular item proved in the test.⁷³ The index of difficulty (F.V.) is generally expressed as the fraction (or percentage) of the students who answered the item correctly. It is calculated by using the formula⁷⁴:

$$F.V = \frac{R}{N}$$

⁷² *Ibid*,

⁷³ J.B. Heaton. *Language Testing...* p. 172

⁷⁴ *Ibid*,

Notes:

F.V : Facility Value

R : Represent the number of correct answer

N : The total students

Then the result of the formula above is related to the value F.V as the following classification⁷⁵:

F.V 0.00-0.30 : difficult

F.V 0.30-0.70 : fair

F.V 0.70-1.00 : easy

From the measurement index of difficulties, it was known that there were 21 items (30%) easy, 41 items (58,58%) fair, and 8 items (11,42%) difficult. (See Appendix 2).

2. Discrimination Power

The method of extreme groups can be applied to compute a very simple measure of the discriminating power of a test item. If a test is given to a large group of people, the discriminating power of an item can be measured by comparing the number of people with high test scores who answered that item correctly with the number of people with low scores who answered the same item correctly. If a particular item is doing a good job of discriminating between those who score high and those who score low, more people in the top-scoring group will have answered the item correctly.

⁷⁵ Anas Sudjiono, *Pengantar Evaluasi Pendidikan*, Jakarta: PT. Rajagrafindo Persada, 2007, p. 372.

The item index of an item indicates the extent to which the item discriminates between the tests, separating the more able tests from the less able. The index discrimination tells us whether those students who performed well on the whole test tended to do well or badly on each item in the test.⁷⁶

There are various methods of obtaining the index of discrimination: all involve a comparison of those students who performed well on the whole test and who performed poorly on the whole test. It is calculated by using the formula

$$D = \frac{\text{Correct U} - \text{Correct L}}{n}$$

Were : D = Discrimination Index

U = Correct answer Upper half

L = Correct answer Lower half

n = The number of students

The writer most carefully distinguish between n and N.

N : The number in the whole group.

n : the number of candidates in either the U or L group.

⁷⁶J.B. Heaton, *Language Testing*, p173.

1. Distribution of try out Scores of the X class

The test scores were presented in the following table.

Table 3.8 Score Try Out X (B Class)

No	Students' Code	Score
1.	A1	61,49
2.	A2	70,07
3.	A3	51,48
4.	A4	51,48
5.	A5	34,32
6.	A6	55,77
7.	A7	57,2
8.	A8	48,62
9.	A9	62,92
10.	A10	60,09
11.	A11	52, 91
12.	A12	61,49
13.	A13	55,77
14.	A14	50,05
15.	A15	61,49
16.	A16	58,63
17.	A17	51,48

Based on the data in the table 3.6 above, it can be seen that the students' highest score was 70,07 and the student's lowest score was 34,32. To determine the discriminating power using formula as follows:

$$D = \frac{U-L}{n}$$

$$D = \frac{15-2}{17} = \frac{13}{17} = 0,76$$

Table 3.9 Index Difficulty and Discrimination Power

Index	Difficulty	Discrimination	Values item
0.86 Above	Very Easy	To Be Discarded	1
0.71-0.85	Easy	To Be Revised	12
0.30-0.70	Moderate	Very Good Items	31
0.15-0.29	Difficult	To Be Revised	16
0.14 Below	Very Difficult	To Be Discarded	10

Based on the data from the discrimination power (see Appendix 2), it can be seen that the students' get very good items was 31 and to be revised 28 then to be discarded is 11 items.

J. Data Collection

To collect the accurate data in this study, the writer used the instruments that appropriate to the problem statement:

1. Test

Test is a set of questions or exercises and other tools which are used to measure skill, intelligence, knowledge, and ability those are had by individual or group.⁷⁷ This method is used to get data about score of the pre-test and post-test that was given for both of groups. The test in this study is to measure students' reading achievement.

2. Questionnaire

For collecting the data, the writer used some steps in the procedure as follows:

1. The writer observed the class.
2. The writer did tryout in the tryout class.
3. The writer analyzed the result of tryout, so the data gain from the test are valid and reliable.
4. The writer determined the class into experimental group and control group.
5. The writer gave pre-test to experimental and control group.

⁷⁷M.Soenardi Djiwandono, *Tes Bahasa dalam Pengajaran*, Indeks, Jakarta. Cetakan pertama, 2008, p.150

6. The writer gave treatment to experimental group by using reading log.
7. The writer gave post-test to the experimental and control group.
8. The writer gave Metacognitive Strategy Questionnaire (MSQ) to experimental and control group before pre-test and after post test.
9. The writer gave score to both of data from experimental and control group.
10. The writer analyzed the data that have been obtained from pre-test, post-test and MSQ result.
11. The writer interpreted the analysis result.
12. The writer concluded the activity of the study whether the effect of reading log on students' reading achievement and reading strategy use, based on the obtained.

K. Data Analysis

In this study, the writer used ANOVA for analysis the data. Simple or one-way analysis of variance (ANOVA) is a statistical procedure used to analyze the data from a study with more than two groups. The data of this study is score of students pre-test and post-test and the result of Metacognitive Strategy Questionnaire (MSQ). Therefore, the data were in quantitative data. The data analyzed by means of inferential statistics. This statistical analysis is suitable to answer the research problem. In this case, the writer applied one way ANOVA to examine the students' reading achievement and students' reading strategy use which taught using reading log and the students' reading achievement and students' reading strategy use which did not teach using reading log.

1. Techniques of Data Analysis

Before analyzing data using ANOVA Test, the writer should fulfill the requirements of ANOVA Test. They are Normality test, Homogeneity test and Hypothesis test.

a. Normality Test

It is used to know the normality of the data that is going to be analyze whether both groups have normal distribution or not. In this study to test the normality, the writer will apply SPSS 18.0 program using Kolmogorov Smirnov with level of significance =5%. Calculation result of asymptotic significance is higher than α (5%) so the distribution data was normal. In the contrary, if the result of an asymptotic significance is lower than α (5%) , it meant the data was not normal distribution.

b. Homogeneity Test

Homogeneity is used to know whether experimental group and control group that are decided, come from population that has relatively same variant or not. To calculate homogeneity testing, the writer applied SPSS 18.0 program used Levene's testing with level of significance α (5%). If calculation result was higher than 5% degree of significance, so H_a was accepted, it means both groups had same variant and homogeneous.

c. Testing Hypothesis

The writer applied the one-way ANOVA statistical to test hypothesis with level of significance 5% one-way ANOVA could be applied to test a difference mean or more. The steps are as follows:

1). Find out the grand mean (\bar{X}) each group: $\sum X_t^2 = \sum X^2 - \left(\frac{\sum X^2}{N}\right)$

2). Find out the sum of square among group:

$$SS_t = \sum X^2 - \frac{(\sum X_t)^2}{N}$$

Where:

SS_t = sum of square total

$\sum X^2$ = each score squared, then summed

$(\sum X_t)^2$ = all the scores summed first, then this sum squared

N = number of score

3). The sum of squares between groups

$$SS_b = \frac{(\sum X_1)^2}{n_1} + \frac{(\sum X_2)^2}{n_2} - \frac{(\sum X_2)^2}{N}$$

4). The sum of squares within groups

$$SS_w = SS_t - SS_b$$

5). Find out degree of freedom between group:

$$Df_b = G - 1$$

6). Calculated the between-groups mean square (MS_b) :

$$MS_b = \frac{SS_b}{df_b}$$

7). Find out the degree of freedom within group :

$$Df_w = N - 1$$

8). Calculated within group mean score (MS_w) :

$$MS_w = \frac{SS_w}{df_w}$$

9). Find the F ratio

$$F = \frac{MS_b}{MS_w}$$

10).Determined the level of significant of F_{observed} by comparing the F_{observed} with the F_{table} .

2. Data Analysis Procedures

The writer did some steps in data analysis procedure, they are as follows:

- a. Collected the students' reading score of pre-test and post-test.
- b. Arranged the obtained score into the distribution of frequency of score table.
- c. Calculated mean, median, modus, standard deviation and standard error of students' score.
- d. Measured the normality and homogeneity.
- e. Analyzed the data by using one-way analysis of variance to answer the problem of the study. In addition, the SPSS program is applied.
- f. Interpreted the result of analyzing data.
- g. Make discussion to clarify the research finding.
- h. Drawn conclusion.
- i. Summary