

CHAPTER III

RESEARCH METHOD

A. Research Design

In this research, the researcher uses a quantitative approach and the type is correlational study. Correlational study is used to describe the degree or magnitude of the relation between two variables. The application of correlation in this research is indicate that one variable is followed by another variable, and the correlation is positive.

B. Research Setting

The writer conducts this research at Madrasah Aliyah Muhammadiyah 2 Al-Furqan Banjarmasin, located on Jl. Sultan Adam gang Kadar Permai 2 in Academic Year 2015/2016. This research will be conducted during two months.

C. Subject and Object of the Research

1. Subject of the Research

Subject of the research is Eleventh Grade students of Madrasah Aliyah Muhammadiyah 2 Al-Furqan in academic year 2015/2016. They are mixed between science program students and social program students. The total numbers of them are 21 students that can be seen in the following table.

Table 3.1. The Eleventh Grade Student at Madrasah Aliyah 2 Al-Furqan Banjarmasin

No.	Class	Sexual Status		Total
		Male	Female	
1.	XI Science Program Students	1	6	7
2.	XI Social Program Students	7	7	14
Total		8	13	21

2. Object of the research

The object of this research is students' learning strategies and vocabulary mastery at eleventh grade of SMA Muhammadiyah 2 Al-Furqan Banjarmasin in academic year 2015/2016.

D. Research Instrument

1. Questionnaire

This technique is used to collect the data about the eleventh grade students' learning strategies at Madrasah Aliyah Muhammadiyah 2 Al-Furqan Banjarmasin in academic year 2015/2016. It is Strategy for Inventory Language Learning (SILL) Questionnaire and also taken from R.L. Oxford that consists of fifty items.

2. Written Test

This technique is used to collect the data about the eleventh grade students' mastery in vocabulary at Madrasah Aliyah Muhammadiyah Al-Furqan Banjarmasin in academic year 2015/2016. The type of the test is multiple choices. It contains forty items. The test is taken from the research Aisyarani (2014) written by the student of English Department Teacher Training and Education Faculty of Maria Kudus University entitled, "The

Vocabulary Mastery of the Eleventh Grade Students of MA Nahdlatul Muslimin in the Academic Year 2013/2014 Taught by Using Animation Video.”

3. Documentary

This technique is aimed at looking for the data related to this study and for all written reports or documents such as description about research setting, headmaster of Madrasah Aliyah Muhammadiyah 2 Al-Furqan Banjarmasin, teachers and administration staff.

Table 3.2. Specification of Questionnaire of Learning Strategies and Vocabulary Mastery.

Indicators	Item Number
Learning Strategies (X)	
Memory Strategies	1-9
Cognitive strategy	10-23
Compensation strategy	24-29
Metacognitive strategy	30-38
Affective strategy	39-44
Social strategy	45-50
Vocabulary Mastery (Y)	
Find the similar meaning of certain words.	1, 2, 3, 4, 5, 6
Find the opposite word of word provided.	20, 31, 32, 33, 34, 35, 36
Find the definition from the sentence provided.	12, 13, 14, 15
Find the contrary word of certain word	27, 28, 29, 30
Find the meaning of certain word	16, 24, 26

Find the different meaning of certain words.	37, 38, 39
Find the same meaning of certain word.	7, 8, 9, 10
Find the description of the underlined word.	25, 23
Find the classification from the sentence provided	40
Find the converse word of certain word	21
Find the categorization from the sentence provided.	19
Find the matching meaning of certain word.	11
Find the name of certain word. □	18
Find the term of the underlined word.	17
Find the category of the underlined word.	20
Find the explanation from the sentence provided.	22

E. Design Measurement

1. Questionnaire

In order to measure students' learning strategies, the writer Strategy for Inventory Language Learning (SILL) questionnaire. Then, the writer will analyze the questionnaire that answered by students. Students answer the questionnaire by choosing one alternative, from A, B, C, D, and E. Then, they will be analyzed by Likert scale as follows.

Table 3.3. Likert Scale Interpretation

Items	Categories	Value
A	Never	1
B	Seldom	2
C	Sometimes	3
D	Often	4
E	Always	5

Then to know the learning strategies most widely by students, the writer counts the sum of them one by one. After that, the writer counts the average of the sum of the one by one and it will be interpreted as follows.

Table 3.4. Keys to Understanding the Averages Score (retrieved from <http://www.finchpark.com/arts/sille.doc>)

High	Always or almost always used.	4.5 to 5.0
	Usually used.	3.5 to 4.4
Medium	Sometimes used.	2.5 to 3.4
	Generally not used.	1.5 to 2.4
Low	Never or almost never used.	1.0 to 1.4

2. Written Test

Vocabulary mastery can be known by giving written test to the students. It contains forty multiple choice questions. First, the writer gives score the test based on students' answer. The category for total score is 100. Later, the data is interpreted by counting the scores that obtained by the students. After that, to measure the score that will be gotten by students, the writer will give each question 2.5 if the students' answer is true.

Then, to know students' vocabulary mastery generally, the writer uses mean formula below.

$$M = \frac{\sum X}{N}$$

M : Mean score

$\sum X$: Total score

N : Number of students

F. Data Collection Procedure

There are four steps of collecting data procedure. First, the writer will give the questionnaire to the students. It contains fifty items and to know students' learning strategies. Second, the writer will analyze the questionnaire that was answered by the students. Third, writer will give the test to the students to measure their mastery in vocabulary. Fourth, the writer will give score based on students' answer of the test.

G. Data Analysis Procedure

Data analysis is done after data has been interpreted. There are three steps of analyzing data. The first step is to know students' learning strategies by analyzing the questionnaire that answered. The next step is to know the students' mastery in vocabulary. The last step is to find out the correlation between students' learning strategies and mastery in vocabulary.

In order to know of students' learning strategies, their mastery in vocabulary and the correlation degree of them:

1. To measure students' learning strategies, the writer will analyze the questionnaire that answered by students. Students answer the questionnaire

by choosing one alternative, from A, B, C, D, and E. Then, they will be analyzed by Likert scale. After that, to know the learning strategies most widely by students, the writer counts the sum of them one by one. Then, the writer counts the average of the sum of the one by one.

2. The writer gives score to the vocabulary test based on their answers, then put them in table. Later, to know students' score generally, the mean formula is used and it will be categorized into five levels based on Harris (1969) as follow.

80 – 100	: Excellent
70 - < 80	: Good
60 - < 70	: Fair
50 - < 60	: Low
0 - < 50	: Very Low

3. In order to measure the degree of correlation between students' learning strategies and mastery in vocabulary, the writer uses Pearson product moment correlation coefficient formula according Drs. Murdan, M. Ag, (2012, p. 136) in his book.

Formula can be seen as follow:

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

r_{xy} : Coefficient of correlation between X variable and Y variable

N : Number of cases

$\sum X$: Sum of X score in distribution

$\sum Y$: Sum of Y score in distribution

$\sum XY$: Sum of multiplication of X and Y

$\sum X^2$: Sum of X quadrate

$\sum Y^2$: Sum of Y quadrate

Table 3.5. The correlation index number interpretation product moment
(Zen Aniruddin, 2010)

Rxy	Interpretation
0,00 - 0,20	There is a correlation between variable X and Y but very low
0,20 - 0,40	There is a correlation between variable X and Y but low
0,40 - 0,70	There is medium correlation between variable X and Y
0,70 - 0,90	There is high correlation between variable X and Y
0,90 - 1,00	There is very high correlation between variable X and Y