CHAPTER III

RESEARCH DESIGN

This chapter explains about the methodology of this study. It covers the research design, participant and data collection techniques.

3.1 Research Design

This study was designed to find out vocabulary learning strategies used by the students in a senior high school in Sleman. This study is a survey study using quantitative research. The data is collected by using questionnaires that printed into booklet to get the data from participants. The researcher used quantitative research method and survey study to identify the most and least strategies regarding to the vocabulary English language learning.

3.2 Population and Sample

This study was done in a senior high school in Sleman for the XII grade who learn English language as compulsory subject. English language subject became a necessary subject in last examination. Last examination was carried out to complete education at the secondary school level to go to a higher education level, namely college. Students learn how to answer the question from the paragraph, make a sentence, learn new vocabulary. The population in this study was all students who in the XII grade. The population consist of 118 students. The sample size was calculated by using Slovin's formula:

$$n = \frac{N}{1 + Ne^2}$$

Explanation:

n   = Number of samples

N   = Population

e = Error rate (5% = 0.05)

Population 118 students

$$n = \frac{118}{1+(118)(0.05^2)}$$

$$n = \frac{118}{1,295}$$

$$n = \frac{118}{1.295}$$

$$n = 91,119 \text{ or } 91$$

Sample 91 students

3.3 Data Collecting Techniques

This subchapter explains the data collecting techniques which are instrument, validity and reliability.

3.3.1 Instrument

In this study, researcher used questionnaire to collect the data to find the result. Instruments is a tool used by researchers to collect research data. With the tools in the form of this instrument researchers can facilitate the process in the work and search data to find the results of the research.

In this study, the researcher used questionnaire Vocabulary Learning Strategies (VLS) to collect the data. According to Creswell (2012) questionnaire is a form containing from personal data and questions that are able to fill by the respondents. The researcher used questionnaire develop from Subon (2013)'s, the researcher wants to identify the pattern of vocabulary learning strategies. This questionnaire is used in senior high school, college and the questionnaire using five Likert-scale ranging from (never-always) consist of 28 items divided into eight sub categories Dictionary use (DIC) 4 items include number

of 6, 13, 15, 27. Guessing (GUE) 2 items include the number of 10, 14. Perception (PER)

4 items include number of 1, 5, 7, 11. Encoding (ENC) 5 items include number of 3, 8, 9,

16, 17. Rehearsal (REH) 2 items include number of 4, 28. Activation (ACT) 2 items

include number of 20, 24. Management (MAN) 5 items include number of 12, 22, 23, 25,

26 and source (SOU) 4 items include number of 2, 18, 19,21.

Table 1. Statement of the questionnaire items

Category	Questionnaire
DIC	Saya membawa kamus saku (termasuk kamus elektronik) untuk mencari kata-kata yang saya tidak tahu.
DIC	Ketika mencari sebuah kata dalam kamus, saya membaca semua arti dari kata-kata baru.
DIC	Saya mencari kata-kata dalam kamus Inggris-Indonesia.
DIC	Saya mencari kata-kata baru dalam kamus Inggris-Inggris.
GUE	Saya menebak arti dari kata-kata yang tidak saya ketahui.
GUE	Saya menebak arti dari kata-kata yang tidak saya ketahui.
PER	Saya memperhatikan pelafalan kata baru.
PER	Saya memperhatikan contoh cara menggunakan sebuah kata dalam bahasa Inggris.
PER	Saya memperhatikan pola tata bahasa (contohnya jenis kata, kata benda yang bisa dihitung/tak bisa dihitung) dari kata baru.
PER	Saya memperhatikan penggunaan yang tidak biasa dari kata yang sudah saya ketahui.
ENC	Saya mencoba mengingat kalimat dimana kata tersebut digunakan guna mengingat kata tersebut.
ENC	Saya menganalisis susunan (kata dasar dan imbuhan) dari kata baru untuk mengingatnya (contohnya *in-formal, color-less*).
ENC	Saya menghubungkan kata-kata barudengan kata-kata lain yang sudah saya ketahui.
ENC	Saya mencoba mengingat padanan kata tersebut dalam bahasa Indonesia.
ENC	Saya membedakan kata-kata dengan makna yang mirip.
REH	Saya mengulang kata baru beberapa kali dengan suara keras agar mudah mengingatnya.
REH	Saya berulang kali membayangkan kata-kata baru untuk mengingatnya.

ACT	Saya menggunakan kata-kata yang baru saya pelajari sesering mungkin baik dalam lisan maupun tulisan.
ACT	Saya mempelajari kembali kalimat yang saya buat menggunakan kata-kata yang baru saya pelajari.
MAN	Saya menandai kata-kata yang penting bagi saya.
MAN	Saya mengulas kembali kosa kata saya secara teratur.
MAN	Saya membuat rencana untuk pembelajaran kosakata.
MAN	Saya mengelompokkan kata-kata menggunakan cara saya sendiri agar mudah mengingatnya.
MAN	Saya memiliki buku catatan kosa kata untuk mencatat kata-kata baru yang ingin saya pelajari
SOU	Saya menggunakan buku teks untuk mempelajari kata-kata baru.
SOU	Saya mendengarkan lagu-lagu berbahasa Inggris, program radio, menonton film-film berbahasa Inggris, dan lainnya untuk mengembangkan penguasaan kosa kata saya.
SOU	Saya membaca cerita, majalah, dan lainnya di luar kelas untuk mengembangkan penguasaan kosa kata saya.
SOU	Saat saya menemukan kata baru, saya mencatatnya.

3.3.2 Validity

In quantitative study, validity is a picture made to expand the concept in quantitative research. Validity is something appropriate and valid to measure a data. With the instrument that will produce valid data also or can also be said if the data generated from a valid instrument, then the instrument is also valid (Widoyoko, 2012). The researcher using 21 students as a sample for trial.

To calculate validity SPSS are use in this study the difference is significant if R count is higher than R table it can be said the instrument each item is valid. According to the Sujarweni (2014) The value calculated (Pearson Correlation) > r table of 0.4329, for df = 21-2 = 19. The validation each statement is show in the table below:

Table 2. Validity each statement

Statement	R count	R table	Judgement
1	0.536	0,4329	Valid
2	0.464	0,4329	Valid
3	0.607	0,4329	Valid

4	0.440	0,4329	Valid
5	0.631	0,4329	Valid
6	0.512	0,4329	Valid
7	0.512	0,4329	Valid
8	0.560	0,4329	Valid
9	0.667	0,4329	Valid
10	0.679	0,4329	Valid
11	0.595	0,4329	Valid
12	0.714	0,4329	Valid
13	0.500	0,4329	Valid
14	0.714	0,4329	Valid
15	0.595	0,4329	Valid
16	0.583	0,4329	Valid
17	0.571	0,4329	Valid
18	0.679	0,4329	Valid
19	0.440	0,4329	Valid
20	0.548	0,4329	Valid
21	0.607	0,4329	Valid
22	0.524	0,4329	Valid
23	0.476	0,4329	Valid
24	0.524	0,4329	Valid
25	0.583	0,4329	Valid
26	0.452	0,4329	Valid
27	0.571	0,4329	Valid
28	0.560	0,4329	Valid

3.3.3 Reliability

Reliability shown while performing tests in different places still shows consistent results. The test instrument is said to be reliable if it gives a consistent or consistent result when it is tested many times (Widoyoko, 2012). The questionnaire was translated into Bahasa Indonesia. The researcher found the reliability of the 28 items addressing strategies for vocabulary learning strategies was computed by Cronbach the validity and reliability score was Alpha 0.913 (excellent reliability) in the vocabulary learning strategies. The consistency in this questionnaire is highly acceptable.

Reliability Statistics

Cronbach's Alpha	N of Items
.913	28

3.4 Data Indicator

Based on Subon (2013) data of vocabulary learning strategies are Dictionary use, Guessing, Perception, Encoding, Rehearsal, Activation, Management, Sources will be classified into the highest and lowest score. The medium level of mean ranged from 2.22 to 3.80.

3.4.1 Steps of Data Analysis Techniques

The researcher takes the same steps in accordance with this study.

- Literature review of VLS questionnaire.

- Adopted VLS (Vocabulary Learning Strategies) as the instrument.

- Consulted the Indonesian Version of Subon's (2013) Vocabulary Learning Strategies Questionnaire to thesis supervisor to have it validated

- Did the questionnaire trial to 21 students to check it items validity by using SPSS 23

- 28 items were proven valid

- Checked the reliability by using SPSS 23. The items were proven valid to be reliable with Cronbach's Alpha: 0.913 (excellent reliability)

- Distributed for 91 students in a senior high school in Sleman.

- Used Microsoft Excel to input the data and SPSS to calculate Mean and Standard Deviation for descriptive statistics analysis and presented the findings into charts