

## **Chapter Three**

### **Methodology**

This chapter discusses the methodology of this research. The first part of this chapter discusses about the research design implemented in this study. The second part define the setting of the research and the reason why the researcher selected it. Third part is the population and sample of the research. It explains about the population, number of sample and sampling techniques used in this research. The fourth part talks about instrument of the research, where the researcher mentions the instrument which was used in the research. The fifth talks about validity and reliability. Sixth contains the data collection procedure, where the researcher explores the ways data was gathered. In the last part, the researcher explains the process in data analysis.

### **Research Design**

The purpose of the research is to find out the students habit in using dictionary and the types of dictionary used by English Language Education Department students. Based on the purpose, the researcher used the quantitative research method. According to Creswell (1994) quantitative research is a type of research that explains about phenomena by collecting data that are analyzed using mathematically based methods (in particular statistic) (as cited in Bath, 2013). Therefore, the researcher used quantitative research because the researcher aimed to seek the phenomenon about ELED students' habit on the use dictionary in improving vocabulary. The reason for selecting quantitative research as appropriate approach of this study was because this study was based on the

measurement of quantity about student habit on the use dictionary and of dictionary used by student. More data and more participants made the phenomenon and the result of this research more clear and valid. In this research, the researcher chose survey design as the appropriate approach because the researcher collected the data without a deep nature of analysis. According to Creswell (2009, p.137) “survey research provides a quantitative or numeric description of trends, attitude, or opinion of population by studying a sample of population”. “Survey is gathering standardized information and processing statistically” (Cohen, Manion, & Morrison, 2011, p.256).

### **Research Setting**

This study was conducted at English Language Education Department. There were several reasons why the researcher chose English Language Education Department as a place to research. The first reason was accessibility because the researcher studies at English Language Education Department. The second was because the researcher knows the lecturer and the students, so the researcher had an easier time getting permission to collect the data. Third was effectiveness of time in doing research. The last reason was the English Language Education Department applied some subject that needs dictionary during the teaching and learning process. Most of the subjects that were related in teaching and learning process needs a dictionary were as Capita Selecta on Grammar 1-4, Translating, Reading and writing class. The data collection was conducted on April 2018. It took around 1 week for the researcher to enter the data. The researcher distributed the questionnaire to 99 students of ELED batch 2015.

## **Population and Sample**

**Population.** Population is an object or subject that has certain qualities and characteristics set by the researcher to be studied and inferred (Sugiyono, 2011). The population of this research was students of English Language Education from batch 2015. The total of students' batch 2015 was 152 students but when the researcher collected the data on April 2018 only 118 active students, so the total population of this research was 118 students.

There were several reasons for selecting English Language Education Department students' batch 2015 as population. Firstly, the students can be found easily so the researcher can gather the data without significant obstacle. Then, they have some subjects that needed dictionaries, so the use of dictionary was more intensive.

**Sample.** Sample is the smaller group or subject of the total of population. According to Sugiyono (2011) sample is a part of number and characteristics possessed by the population. The researcher took the sample with confidence level 95% and confidence interval 5% (Cohen, Manion, & Marrison, 2011) so the minimum number of samples were 91 students of English Language Education Department batch 2015. From the data gathering process, the researcher involved 99 students as a sample size which means the researcher had more than the minimum size.

There were several techniques that were used to take the sample in the research. One technique is convenience sampling. According to Cohen et.al (2011)

Convenience sampling sometimes called the accidental or opportunity sampling is where the researcher involves choosing the nearest individuals to serve as respondent and continuing that process until the required sample size has been obtained or those who happen to be available and accessible at the time. (p.155).

Based on the statement, the researcher chose convenience sampling because it is easy to access the respondents. Then, the researcher gave out questionnaire in classroom or out of the class. Furthermore, it was efficient in terms of time because the researcher can distribute the questionnaire to respondents who are free or available at around campus.

### **Instrument of the Research**

The instrument of the research was questionnaire. In this research, a set of questionnaire was distributed to uncover the English Language Education Department of students' habit on the use of dictionary and also to identify what type of dictionary are used by student. The research used questionnaire because questionnaire is a data collection technique for measuring variable to be studied (Sugiono, 2011). It is supported by Cohen et.al (2011) who said that "the questionnaire is a widely used and useful instrument for collecting survey information, providing structured, often numeric data, being able to be

administered without the presence of the researcher, and often being comparatively straightforward to analyze” (p. 377). The researcher used a questionnaire because it is more effective. It means that the questionnaires were easy to administer and could save time. For respondents, the questionnaires were easy to answer because respondents only give a check mark on column answer.

The questionnaire of this research was in form of statements. The form of questionnaire was close ended statements because the researcher provided alternative answers so the respondents can directly choose appropriate answers. Close ended questionnaire contains some questions followed by some alternative answers provided by researcher (Reja, Manfreda, Hlebec, & Vehovar, 2003). The questionnaire had 25 items and contained two parts.

The first part of the questionnaire was used to access the students’ habit on using dictionary. The questionnaire was adapted from Koca, Pojani, & Cicko (2014). There were some modifications done in order to suit the context and the objective of this study and also there were some questions that were changed or removed. Then, the statement in the questionnaire were translated into Indonesia language, because Indonesia language is the mother tongue of respondents and it was used to avoid misunderstanding in the statement.

The statement consisted of 17 items. The respondent gave response to the instruments items by giving a mark on one of the 5 scales. The scales include “never”, “rarely”, “sometimes”, “often,” and “always”. The score of option can be seen on the table below:

Table 3.1 <i>Table of score criteria in questionnaire item</i>	
<b>Description</b>	<b>Scale</b>
always	5
Often	4
Sometimes	3
Rarely	2
Never	1

The second part was used to inquire the types of dictionary used by students. In this part, the questionnaire consisted of 8 close ended statements. The answer of statement used the four-point Likert scale that is presented in the table 3.2. The researcher did not use Neutral (Netral) option because if the researcher used it as one of the options, the respondents will tend to choose it. This statement is supported by Edwards and Smith (2014) that respondents will be more likely to select neutral option than report their actual opinion. The four-point Likert-scale can be seen as the following:

Table 3.2 <i>Table of score criteria in questionnaire item</i>	
<b>Description</b>	<b>Scale</b>
Strongly Agree	4
Agree	3
Disagree	2
Strongly Disagree	1

### **Validity and Reliability**

**Validity of instrument.** The items of this research were measured to check its validity. The researcher used expert judgement to measure the questionnaire validity. According to Sugiyono (2011) expert judgment facilitates the researcher to develop the questionnaire and check the validity of

questionnaire. Expert judgment can provide useful information for forecasting, assessing risk and making decisions (Hora, 2009). There were three experts. The experts were three lecturers at ELED. The expert gave scores based on the rating scale ranging from 1 = not relevant, 2 = less relevant, 3 = quite relevant, and 4 = very relevant. The ratings were later calculated by using Aiken's formula in Supranto (2008). Aiken's formula is shown as the following:

$$V = \frac{\sum s}{n(c-1)}$$

Where:

V = validity score

s = score from each expert minus the lowest score of the category

c = numbers of categories

n = numbers of experts

The item validity was categorized into three categories. They are low, moderate and high. The validity is low if the score is lower 0.4 and moderate if the score is between 0.4 – 0.8. The item validity is high if the score is higher than 0.8. The result of item validity of questionnaire would be shown as the following:

Table 3.3 Result of item validity of questionnaire										
Items	Rater 1	Rater 2	Rater 3	s1	s2	s3	$\Sigma s$	V	Category	information
Part 1										
Q1	4	4	4	3	3	3	9	1.00	High	Valid
Q2	4	4	3	3	3	2	8	0.89	High	Valid
Q3	4	4	3	3	3	2	8	0.89	High	Valid
Q4	4	4	4	3	3	3	9	1.00	High	Valid
Q5	4	4	4	3	3	3	9	1.00	High	Valid
Q6	4	4	4	3	3	3	9	1.00	High	Valid
Q7	4	4	4	3	3	3	9	1.00	High	Valid
Q8	4	4	4	3	3	3	9	1.00	High	Valid
Q9	4	4	4	3	3	3	9	1.00	High	Valid
Q10	3	4	4	2	3	3	8	0.89	High	Valid
Q11	3	4	3	2	3	2	7	0.78	Moderate	Valid
Q12	3	4	4	2	3	3	8	0.89	High	Valid
Q13	3	4	4	2	3	3	8	0.89	High	Valid
Q14	3	4	4	2	3	3	8	0.89	High	Valid
Q15	3	4	4	2	3	3	8	0.89	High	Valid
Q16	3	4	4	2	3	3	8	0.89	High	Valid
Q17	1	4	4	0	3	3	6	0.67	Moderate	Valid
Part 2										
Q1	3	4	4	2	3	3	8	0.89	High	Valid
Q2	3	4	4	2	3	3	8	0.89	High	Valid
Q3	3	4	4	2	3	3	8	0.89	High	Valid
Q4	3	3	4	2	2	3	7	0.78	Moderate	Valid
Q5	3	4	3	2	3	2	7	0.78	Moderate	Valid
Q6	3	4	4	2	3	3	8	0.89	High	Valid
Q7	3	4	4	2	3	3	8	0.89	High	Valid
Q8	3	4	4	2	3	3	8	0.89	High	Valid

Table 3.3 showed the item validity which consists of 25 items. The validity was 0.67 to 1.00. In the part 1, the validity of Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q12, Q13, Q14, Q15, Q16 was 0.89 – 1.00 which indicated that this questionnaire was of high validity. However, the validity of Q11 was 0.78 and Q17 was 0.67 which indicate that this questionnaire was of moderate validity. Then in part 2, the validity of Q1, Q2, Q3, Q6, Q7, Q8 was 0.89 which indicated



that this questionnaire was of high validity. However, the validity of Q4 and Q5 was 0.78 which indicated that this questionnaire was of moderate validity.

**Reliability of instruments.** In this research, the researcher also analyzed the reliability of instrument. All of the items of the questionnaire were tested to prove the reliability. The reliability test is used to measure whether the items is consistent or dependable (Cohen et al, 2011). By checking the reliability, the researcher will know whether the instrument of the research is reliable or not.

The researcher used SPSS program 24.0 to check the reliability of instrument. Reliability of instruments was examined by identifying the results of Cronbach's Alpha. Cohen et al (2011) divided the reliability categories into five levels. It is presented below.

Table 3.4 <i>Category of instrument' reliability</i>	
<b>Cronbach's alpha</b>	<b>Internal Consistency</b>
>0.90	Very highly reliable
0.80-0.90	Highly reliable
0.70-0.79	Reliable
0.60-0.69	Marginally/minimally reliable
<0.60	Unacceptably low reliability

The reliability value of the questionnaire was 0.880 based on items. It means that the questionnaire had high reliability. The table of Cronbach's Alpha are shown in the table below:

Table 3.5 <i>Reliability Statistics</i>	
Cronbach's Alpha	N of Items
.877	25

### **Data Collection Procedure**

The procedures of this study were the following: first, the researcher made the questionnaire items based on the theory in the literature review. Second, the researcher asked to the expert or usually called “expert judgment” to check the questionnaire. The experts were lecturers of English Language Education Department. After doing expert judgment, the researcher got the feedback about validity of the questionnaire. Most experts said that all of researcher questionnaire were correct but there were grammatical errors. After the expert judgment, the questionnaires were revised. The original questionnaire retracted in appendix 1 and the all detailed feedback were presented in Appendix 2. The final questionnaire version could be seen in appendix 3. After that the questionnaire was ready be distributed. Distributing questionnaire was conducted in the classroom and it was distributed it in four classes of ELED batch 2015. Before distributing the questionnaire, the researcher asked permission to the lecturer for his or her students to become respondents in this research. The researcher told to the respondents that they would be asked to give their opinions based on the statements on questionnaires. After getting the data from the distributed questionnaire, the researcher analyzed the questionnaire through descriptive statistic in SPSS program.

### **Data Analysis**

The data analysis process used the statistical package for social science (SPSS) version 24.0. The statistic software, SPSS version 24.0 was used to answer

the research questions. This research employed descriptive statistical analysis.

Descriptive statistics are statistics used to analyze the data in ways that describe the data that has been collected (Sugiyono, 2011). Descriptive statistics is used to find frequencies, percentage, mean and median.

The mean score of each item were classified based on the categories to infer the general information of the respondents' responses. The categories used based on the interval formulation from Supranto (2008). The formulation was

$$C = \frac{X_n - X_1}{k}$$

Where:

C: The range prediction (class width, class size, class length)

k: The number of class that research wants

$X_n$ : The maximum score of variable

$X_1$ : The minimum score of variable

Based on the formula, the category of mean score can be seen in the table 3.4

below:

Table 3.6 The categories of student habit on the use dictionary	
Interval	Category
1.00 – 2.00	Low
2.01 – 3.00	Average
3.01 – 4.00	High
4.01 – 5.00	Very High

The table showed mean score of interval and category. An interval category of student habit on the use of dictionary is 4.01 - 5.00 interpreted by very high, which means that the students always use a dictionary for 7 days a week. An interval of 3.01 - 4.00 interpreted high; which means that students often use a dictionary for 3-5 days a week. An interval of 2.01 - 3.00 as an average category that said to be an average category, which means students sometimes use a dictionary for 2-3 days a week. An interval of 1.01 - 2.00 was low, it said to be low which means students rarely category use dictionary only 1 day per week.

Then, the categories mean score to know the kind of dictionary used by students was presented below:

Table 3.7 The categories of kind of dictionary used by student	
<b>Interval</b>	<b>Category</b>
1.01 – 2.00	Seldom
2.01 – 3.00	Often
3.01 – 4.00	Always

The table showed the category kind of dictionary used by students. The first interval 1.00 – 2.00 was in seldom category. The second interval 2.01 – 3.00 was in often category and the last interval 3.01 – 4.00 was in always category.