CHAPTER III
RESEARCH METHOD

This chapter discusses research design, population and sample, research instrument, data collection procedure and data analysis.

A. Research Design

This research is descriptive quantitative. A descriprive study determines snd reports things. It means that descriptive study is a research that happens naturally and it has no control over the condition and the situation, and could only measure what already exists.

The quantitative approach to the study of social and behavioral phonemena holds that the aim and methods of the social sciences are, at least in principle, the same as the aim and methods of the natural or physical sciences. Quantitative research strives for testable and confirmable theories that explain phenomena by showing how they are derived from theoretical assumpsions.[1]

This research design is survey. Survey research is a study that gathers data on the characteristics adn views of informants about the nature of the language or language learning through the use of oral interviews or written questionnaires.[2] In survey research, investigators ask questions about people's beliefs, opinions, characteristics, and behavior. A survey researcher may want to investigate association between respondents' characterictics such as age, education, social class, race, and their current attitides toward

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[1]Donald Ary, et al, *Introduction to Research in Education,* (Eight Edition), Wadsworth: Wadsworth Cengange Learning, 2010, p.420-421.
[2]Sandra Lee Mc Kay, *Researching Second Language Classroom*, Mahwah (New Jersey): Lawrence Eribaum Associates Publishers, 2006, p.35.

some issue.[3] The data collections in this study were mostly in the form of description and explanation.

This research is tracer study that is not intended to test a particular theory or hypothesis but rather to attempt presenting the response of users of graduates' performances to get input for the development of the study program. The response of the users on the performance of graduates include 7 (seven) types of abilities: (1) integrity (ethics and morals), (2) the expertise based on science (professionalism), (3) English language, (4) the use of information technology, (5) communication, (6) teamwork, and (7) personal development.

By the explanations mentioned above, the writer assumes that survey research is a process of collecting information about the respondents of population. In this case, the writer uses survey with descriptive quantitative design because the writer measure, describe, identify and explain the users'perception on graduates performances.

B. Population and Sample

1. Population

Donald Ary states that population is the larger group about which the generalization is made. A population is defined as all members of any well-defined class people, events, or objects.[4] Zoltan claims that population is a group of people whom the survey is about.[5] Arikounto defines population as the entire subject of research.[6] The population of the study also states the size of this population, if size can determined, and how it will be defined. Question of access arises here, and the writer might refer to availability of sampling frames-mailing lists or published lists of

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[3]Ibid, Donald Ary, et al, *Introduction to Research* .... p.351.
[4]*Ibid*, Donald Ary, et al, *Introduction to Research* .... p.148.
[5]Zoltan Dornyei, and Tatsuya Taguchi, *Questionnaire is Second Language Research (Second Edition),* New York: 270 Madison Avenue, 2010, p.60.
[6]Suharsimi Arikunto, *Prosedur Penelitian*, Jakarta: Rhineka Cipta, 1992, p.108.

potential respondents in the populations.[7] As population, the writer took the graduates users in Palangka Raya.

2. **Sample**

According to Zoltan, sample is the group of people whom researchers actually examine.[8] The small group is observed is called a sample. A sample is a portion of a population.[9] The samples are used to represent the population from which they are drawn.[10]

Zoltan states that certain multivariate statistical procedures require more than 50 participants; for factor analysis, for example, we need a minimum of 100 subjects. Questionnaires typically attract an initial response rate of only around 30%, and over 50 % can already be seen as a good response.[11]The writer needed around 50% participants of populations and for this research the writer took 56 respondents of total 107graduates users in Palangka Raya.

The writer used random sampling. Donald ary states that random sampling is the best known of probability sampling procedures. The basic characteristic os simple random is that all members of the population have an equal and independent chance of being included in the random sample.[12] The selection of a simple random sample is usually carried out according to a set of mechanical instructions which guarantees the random nature of the selection procedure.[13]

C. **Research Instrument**

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[7]John W Creswell, *Research Design: Quantitative and Qualitative Approaches,* California: SAGE Publication Inc., 1994, p.59.

[8]*Ibid,* Zoltan Dornyei, and Tatsuya Taguchi, *Questionnaire in ....* p.60.

[9]*Ibid*, Donald Ary, et al, *Introduction to Research...*

[10]Del Siege, *Sampling – Educational Research,* (Online) URL: http://www.gifted.uconn.edu/siege/research/Samples/instructornotesamples.html, (accessed on August, 15th, 2016).

[11]*Ibid,* ZoltanDornyei, and Tatsuya Taguchi, *Questionnaire in ....* p.63-64.

[12]*Ibid*, Donald Ary, et al, *Introduction to ....* p.150.

[13]Ross Kenneth N, *Quantitative Research Method in Educational Planning,* Paris: UNESCO, 2005, p.9.

1. **Research Instrument**

The writer used questionnaire as the instrument of this research. Questionnaire is an instrument in which respondents provide written responses to questions or mark items that indicate their responses.[14] Hornby states that questionnaire is a written or printed list of questions to be answered by a number of people especially as part of a survey.[15] Survey questionnaire can take a variety of forms. The two main types of questions are open-ended and close-ended questions.[16] Therefore the writer used the close-ended questions toward this research. This type was suitable with the topic of the research which asked the users'perception on graduates performances.

In compiling the results of the research the writer did coding. Because the writer used Scaled Items in the structure of the questions, the interval scales are also used for coding the questions. Each response gave a number, for example Very Poor = 1, Less Than Adequate = 2, Adequate = 3.[17] The questionnaire is constructed in the form of scaled items which consisted 7 items from Borang.

Zoltan explains that the questionnaire research makes the inherent assumption that the respondents can read and write well. The writer focused on measuring the questionnaires to answer the problem of study. There were some procedures that the writer carried out.

In preparation of the research questionnaire, each question in the questionnaire is an elaboration and indicator that will be the question. The preparation of the questionnaire are as follows:

a. Choosing grating instrument can be used as a guide to compile the questionnaire.

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[14]*Ibid*, Donald Ary, et al, *Introduction to ....* p.648.
[15]A.S, Hornby, *Oxford Dictionaries: Advanced Learner's,* article "Questionnaire", p.952.
[16]*Ibid,* Mc Kay, Sandra, *Researching Second ......* p.37.
[17]*Ibid*, Donald Ary, et al, *Introduction to ....* p.393.

b. Making a list of questions based on the grating instrument that made in brief, concise, and clear to facilitate the participants completing the questionnaires.

c. Creating alternative answers that consist of four options.

d. Creating a questionnaire instruction to avoid mistakes in filling out the questionnaire.

Tests of research instruments are conducted by discussing the matters related to the preparation of the data, the instruments that will be used and the steps of composition arrangment.

This research is conducted to reveal the perception of users on the performance of graduates of English Education by using Scaled Items model instrument. The use of questionnaires in this study is with the aim that the proposed statements can record, gather information and uncover relevant information.

2. **Research Instrument Validity**

a. **Construct Validity**

Sugiyono states *"Construct validity test can be used with the opinion of experts (experts judgment). In this case, after the instrument is constructed on the aspects that will be measured based on a particular theory, then it is consulted with experts. The experts will make a decision: the instrument can be used without revisions, adding some improvements or possibly a total revison. The number of experts involved at least three people and generally they have a doctoral degree within the scope of the investigation ".*[18] The statement above explains that the test can use the construct validity of expert opinion in the form

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[18]Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif dan R&D*, Bandung : Alfabeta, 2009, p.177

of theories as the basis of aspects that will be measured. Then it is subsequently consulted with the advisors.

b. Content Validity

The questions listed in the questionnaire are the items that are listed on Accreditation Standards III on Graduates User Perception that covers seven points (1) Integrity (ethics and morals) (2) Skills based on science (professionalism) (3) English (4) The use of information technology (5) Communication (6) Teamwork (7) Personal development.

3. Research Instrument Reliability

According to Sugiyono by quoting the opinion of Stainback statement *"reliability is often defined as the consistency and stability of the data findings. From a positivistic perspective, reliability typically is considered to be synonymous with the consistency of the data produced by observations made by different Researchers (e.g test retest), or by splitting a set of data in two parts (split half) ."*[19] The point is that the reliability is about the degree of consistency and stability of the data or findings. In the view of positivistic (quantitative), the data is declared as the reliable one if two or more researchers within the same object produce the same data, or a group of data when splitted into two parts shows no different data.

Suharsimi Arikunto states that *"the reliability is associated with trust. A test can be said to have a high level of confidence if the test can provide consistent results, then the reliability of tests is dealing with the consistency of test results, or if the results change, the change has no impacts."*[20]

D. Data Collection Procedures

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[19] *Ibid.*, p.364

[20] Suharsimi Arikunto, *Prosedur Penelitian - Suatu Pendekatan Praktik,* Jakarta:Rhineka Cipta, 2011, p.86.

There were two basic data-gathering techniques in survey research: interviews and questionnaires.[21] Instrument of the study was needed in the research. It was because the instrument were tools to ge the data of the study. In which the data were the important things to help the writer in answering the problems of the study.

In this study, the writer used content or document analysis design. Donald Ary states that content or document analysis is a research method applied to written ar visual materials for the purpose of identifying specified characteristic of the material. The materiala analyzed can be textbooks, news paper, web pages, speeches, television programs, advertisement, musical composition, or any of a host of other types of documents. [22] The writer used this research design because the writer analyzed the users'perception on graduates performances and it was formed in questionnaire guideline.

In collecting the data, the writer used questionnaires to obtain the data in order to answer the problems of the study. To collect the data, the writer applied the steps as follows:

1) The writer prepared the questionnaire

This stage consists of preparing, collecting data in what place the graduates are working, reproducing the questionnaire that has been provided, and determining the date for data collection.

2) The writer distributed the questionnaire

This stage consists of distributing questionnaires and picking questionnaires.

3) The writer processed the data

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[21]*Ibid.*, Donald Ary, et al, *Introduction to Research ....* p.379
[22]*Ibid*, Donald Ary, et al, *Introduction to ....* p.457.

The process of processing and analyzing research data can be broadly described as follows:

a) Verificating the data by checking the respondents' answers.

b) Scoring each item of respondent's answer.

c) Tabulating the data according to the study variables.

d) Analyzing the data that have been classified based on the study variables.

e) Describing the data that have been processed and analyzed by giving description and tables, so the topics discussed can be clearly delineated.

f) Concluding the research results.

E. Type of Data and Data Collection Techniques

Type of data collected from this research activity is the primary data. Primary data are data obtained directly from the field. The data are collected by using questionnaires.

Processes and mechanisms of the tracer study are conducted by sending a questionnaire to the address where graduates are working. The data collection of graduateswas conducted in two ways: (1) collecting data through books graduates of the faculty (2) searching for data via social media (social networking facebook) and cellphone.

F. Data Analysis

1. Data Compiling

The writer used interval scale and collected the data by using the questionnaire with close-ended questions.

Data analysis techniques in this study isdescriptive quantitative analysis providing a descriptive overview of the results of research using frequency tables.

The response of the users on the performance of graduates from seven types are shown in percentage. The writer calculated Mean, Median and Modus using formula.

a. Mean

$$\overline{X} = \frac{\Sigma X}{N}$$

$\overline{X}$ = Mean Value

Σ = Sum of

X = Raw score

N = Number of case.[23]

b. Median

The median is defined as that point in a distribution of measure which 50 percent of the cases lie.[24] Example:

    18   20   22   25   25   30

Median: any point from 22.5 to 24.5 fit definition of the median. In this case, $\dfrac{22.5 + 24.5}{2} = 23.5$.

c. The Modus / Mode

The mode is the value in distribution that occurs most frequently.[25] Example:

    14   16   16   17   18   19   19   21   22

The mode of this distribution is 19 because it is the most frequent score.

2. **Data Displaying**

In compiling survey results, the first thing a researcher needs to do was to decide coding categories. The writer assigned a numerical code to the data, the data needed to be recorded in some fashion. The best way to do this was in some type of a

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[23]*Ibid.,* Donald Ary, *et al, Introduction to Research .... p.109.*
[24]*Ibid.,* p.110.
[25]*Ibid.,* p.111.

table in which the writer identified the respondents in the left-hand column and used the rows in the table to list the participant's response to each item.[26]

The writer adopted the Fukuda's way to display data results.[27] Fukuda displays her results in table. The table summarize shows many respondents selected *always, usually, sometimes, occasionally*, and *never* to answer the questions listed earlier. The table also includes the percentage of respondents for each response and finally theme an for the question.[28]

The writer used questionnaire with the close-ended questions as the instrument for collecting the data. Sandra states that once the information is compiled in a table, it needs to be displayed in some way. There were several possible alternatives.[29]

1. One is to simply report the *frequency* of each response. Hence, in the example of having students rank the importance of each skill, one could simply describe how many students ranked writing as one, and how many ranked listening as one, and so on.

2. A second alternative is to describe the results in *percentages*. If researchers choose to describe the results in terms of frequency or percentages, they could also display these results in a figure using a bar graph or pie chart. Visually displaying results in this way often makes it easier to highlight the results of the survey.

3. Finally, with interval scales one could describe the data in terms of *central tendency*. The most common types of central tendency are the mean, mode and median. The *mean* or average is calculated by adding up the scores and dividing by the number of participants. The *median* is the number in a set of numbers that

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[26]*Ibid.,* Sandra Lee Mc Kay, *Researching Second ....*, p.42.
[27]*Ibid.,* p.44
[28]*Ibid.*, p.45
[29]*Ibid.*, p42

represent the point at which 50% of the items are above and 50% are below. The *mode* is simply the most common number.