

## **Chapter Three**

### **Research Methodology**

In this chapter, the researcher mentioned the methodology which was used in conducting the study. This chapter included research design, research population, sampling technique, and sample. Additionally, this chapter also determined the data collection instrument and data collection procedure certainly. Moreover, data analysis was also presented in this chapter.

#### **Research Design**

This research was aimed at investigating the characteristics of an effective EFL teacher from the viewpoints of the students. Thus, the researcher chose to adopt quantitative approach because the researcher wanted to present a research problem by analyzing and describing the trends. This was in line with Creswell (2012) who stated that in quantitative research, the researcher tries to answer the research problem by identifying the tendency of individual responses in which the result will inform how population views an issue. The research design used by the researcher in the study was survey design.

As part of quantitative research, survey design included set of procedures in which researchers administer a survey to a large number of respondents to describe opinions or characters of the population. There were two types of survey designs namely cross-sectional survey design and longitudinal survey design. In this research, the researcher was interested in using cross-sectional survey design in conducting the study. Cross-sectional survey design helps the researcher in collecting data at one point in time. This type of survey design also provides information in a short amount of time, such as the time required for administering

the survey and collecting information (Creswell, 2012). As one of the forms of quantitative research, this type of survey design would help the researcher in measuring the current opinions about an effective EFL teacher in perceptions of students. This was also in line with Creswell (2012) who deliberated that survey design in the form of questionnaire is intended to identify trends in attitudes, opinions, behaviors, or characteristics of a population.

### **Research Setting**

The researcher conducted the study at the English Language Education Department of one of the private universities in Yogyakarta. The reason for choosing the intended place was that it belongs to the only faculty in the campus which was aimed to provide programs that could enable future educator candidates to take the opportunities to become an effective English teacher. The research was conducted in November 2017 and considering the process of collecting and analyzing the data, the research finally was finished in April 2018.

### **Research Population, Sampling Technique, and Sample**

**Population.** A population is a group of individuals who share the same characteristics (Creswell, 2012). The population of this research was second-year up to fourth-year students of English Education Department of a private university in Yogyakarta. The population of the current research was chosen based on the experiences in taking numerous courses related to teaching English as foreign languages. First-year students are not included as they have not attended any courses related to pedagogical skills. The total number of the population from second-year up to fourth-year students was 366.

**Sampling Technique.** To select a sample of this study, the type of quantitative sampling strategies that was used by the researcher in the study was probability sampling. The reason for choosing this strategy was to reduce bias because, in probability sampling, the researcher tries to look for the individuals to be the representatives of the population. Cohen, Manion, and Morrison (2011) stated that in a probability sampling, the researcher can make generalizations and this also enables the researcher to reduce the risk of bias compared to non-probability sampling.

The researcher chose random stratified sampling as the sampling technique. As a form of probability sampling, stratified sampling involves the researcher to stratify the population into several specific characteristics and followed by randomly select sample from each subgroup of the population (Creswell, 2012). In this study, the specific characteristic was the classification of the year according to number of credits students have taken namely second-year, third-year, and fourth-year.

**Sample.** In order to decide the sample size for this study, the researcher tried to consider the error margins to be tolerated. Cohen et al. (2011) deliberated that to determine the sample size for a probability sample, the researcher needs to take into consideration about the error margins which are represented in terms of the confidence level and confidence interval. The confidence level that the researcher used in this study is 95 percent and the confidence interval was 5 percent. The confidence interval is the diverse or variation range which the researcher wants to ensure (Cohen et al., 2011).

From the sample size calculation service for a probability sampling which is offered by Cohen et al. (2011), the sample size in this study was 196 respondents from the total population of 366. From 196 respondents, with proportionate stratification, the sample size for each stratum was proportionate to the population size of the stratum. Strata sample sizes were determined by the following equation:  $n_h = (N_h / N) * n$  where  $n_h$  was the sample size for stratum  $h$ ,  $N_h$  was the population size for stratum  $h$ ,  $N$  was the total population size, and  $n$  was total sample size. Thus, in this research, the following was the calculation for the sample size of the strata.

Table 1. Number of Sample Size		
Year	Number of people in Strata	Number of People in Sample
Fourth	152 (from class A to D)	$196/366 * 152 = 82$
Third	118 (from class A to D)	$196/366 * 118 = 63$
Second	96 (from class A to C)	$196/366 * 96 = 51$

Based on the table above, the researcher chose the classes by writing up the name of each of the classes from batch 2014, 2015, and 2016 on a piece of paper followed by folding all of them. Then, the researcher randomly selected two parallel classes from each batch. The actual number of respondents used in this research is 196 in which 82 came from fourth-year, 63 was from third-year followed by 51 from second-year students.

### **Data Collection Instrument**

The researcher used a questionnaire as the instrument to collect the data. The type of questionnaires the researcher used in the research was structured

questionnaire because it can enable the patterns to be observed and the final form will involve a range of possible responses that can be reasonably foreseen (Cohen et al., 2011). The type of responses that provided was a rating scale. The researcher used a Likert scale in providing the responses because it built in the degree of sensitivity and differentiation of response while still considering the use of numbers (Cohen et al., 2011). The scales were (1) Not Important at All, (2) Not Important, (3) Important, and (4) Very Important. The researcher adapted and reduce one out of five scales in Likert scale to avoid the tendency of choosing the neutral option or moderate option.

The questionnaire items of this study was adapted from the research conducted by Kourieos and Evripidou (2013). The original questionnaire consisted of three big categories including personal and interpersonal characteristics, subject-matter knowledge, and approach to language teaching. The total number of the original questionnaire items were 35 and the questionnaire was presented in Appendix 1. Items number 1 to 9 talked about personal and interpersonal characteristics, items number 10 to 15 presented the characteristics from subject-matter knowledge, and items number 16 to 35 included approach to language teaching. The final version of the questionnaire consisted of 34 items from three categories and the items were randomized.

### **Data Collection Procedure**

The researcher conducted a self-administered questionnaire in the presence of the researcher because it can enable the researcher to gather the data from large number of respondents simultaneously at one time and give immediate response to the respondents in case they find any difficulties while filling out the

questionnaire items. Cohen et al. (2011) described that the presence of the researcher is beneficial as it can solve any queries and uncertainties the respondents might find and it can also enable the researcher to make sure the questionnaire items are filled in correctly by the respondents.

The researcher invited the respondents which were spread into the selected classes from second-year, third-year, and fourth-year to complete the questionnaire items provided for the present study. The researcher also tried to find the classes in which the respondents had enrolled in the same course for each batch to avoid them from filling out the same questionnaire for more than one time. To make sure that the respondents understand what they should do with the questionnaire, the researcher was explaining the direction.

There was approximately 15 minutes for the respondents to complete all the items. After completing the questionnaire items, the respondents were asked to return the questionnaire to the researcher. The researcher took the data from fourth-year students class B on December 7<sup>th</sup> at 8.50 a.m. and class C on December 8<sup>th</sup>, 2017 at 07.00 a.m. and 01.00 p.m. in Academic Presentation course. For third-year students, the researcher went to distribute the questionnaire to class B on December 12<sup>th</sup> at 15.55 and D on December 14<sup>th</sup> 2017 at 15.55 in Curriculum Design course. For the second-year students, the data was gathered on December 13<sup>th</sup> at 7 a.m. for class C and at 15.15 for class A in which the respondents enrolled in Entrepreneurship course.

## **Validity and Reliability**

**Validity.** Validity is a part of the instrument to assess what is intended to describe and validity in quantitative research aims to provide the appropriate instrument and data statistical treatments (Cohen et al., 2011).

The researcher tried to test the instrument validity, which was questionnaire, by using expert judgement. In this case, the researcher asked two people who were considered to have an expertise in the field to assess whether the items were clearly stated or not. The expert judgements were lecturers of English Language Education Department in a private university in Yogyakarta. Both of them suggested the researcher to replace some words in the questionnaire in order for the respondent to understand the questionnaire more easily.

For the sake of validity, the development of the questionnaire underwent the following stages namely conducting expert judgment, revised the items, and selecting the final items. In order to make it more appropriate and also intended to avoid confusion, the questionnaire were administered using *Bahasa Indonesia*. Thus, the respondents would be comfortable in filling out the questionnaire items because it was written in their first language.

The researcher invited two experts to review and check the translation of the questionnaire items from English to *Bahasa Indonesia* for the expert judgement stage. Then they rated the relevance of each item to each category by answering “very poor”, “poor”, “good”, and “very good”. They were also asked to give notes and recommendation to the items.

The expert judgements can be seen in Appendix 2. After being reviewed by the experts, there were some items needed to be revised. Most of the

suggestion from the experts involved were about the words choice in translating the questionnaire from English into Bahasa Indonesia. The final version of the questionnaire which consists of 34 items in three categories are randomized as follows:

Table 2. Characteristics of an Effective EFL Teacher (Kourieos & Evripidou, 2013)	
Category	Items
Personal and Interpersonal Characteristics	1. Be eager to help students in and outside the classroom 5. Encourage students to express and discuss their needs for language learning. 9. Praise effort 10. Be friendly to students 16. Treat students fairly regardless of achievements 21. Take into consideration student' difficulties with the foreign language 24. Express confidence in students' language abilities 31. Be open-minded 34. Use authority to maintain discipline
Subject-matter Knowledge	33. Use English competently 2. Have a broad vocabulary in the FL 3. Have a native-like accent 8. Have a sound knowledge of the English grammar 14. Be familiar with language learning theories 22. Be acquainted with the target culture



Approach to	25. Follow the book rigidly.
Language	4. Make frequent use of other material
Teaching	6. Integrate computer-aided instruction into FL teaching
	7. Use English as the predominant means of classroom communication
	11. Provide opportunities for students to use English beyond the classroom setting
	12. Simplify his/her classroom language to facilitate comprehension of what is being said
	15. Not grade language production (speaking/writing) primarily for grammatical accuracy
	17. Use activities which draw learners' attention to specific grammatical features
	23. Set activities which require students to interact with each other in English
	19. Thoroughly explain new grammar rules before asking students to practice relevant structure
	25. Grade written assignments predominantly for grammatical accuracy
	26. Grade written assignments predominantly for effort and content
	27. Set activities which require students to work in pairs or small groups

	<p>32. Set activities which expose students to the target culture</p> <p>13. Correct students immediately after making a grammar mistake during communicative activities</p> <p>18. Address error by immediately providing explanation as to why students' responses are incorrect</p> <p>20. Expose students to real life topics</p> <p>28. Set activities which require students to work individually</p> <p>29. Design or select material according to students' major</p>
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**Reliability.** According to Cohen et al. (2011), “reliability is essentially a synonym for dependability, consistency and replicability over time, over instruments and over groups of respondents”. The researcher used reliability to indicate whether the instrument were reliable or not. In order to find out the reliability of the instrument, the researcher used Cronbach Alpha statistical technique. Cohen et al. (2011) stated that there were five levels of reliability indicators were as follow:

<b>Value</b>	<b>Category</b>
>0.90	Very highly reliable
0.80-0.90	Highly reliable
0.70-0.80	Reliable

0.60-0.70	Marginally/minimally reliable
0.50-0.60	Unacceptably reliable

From the data obtained, the finding showed that there were 32 items of questionnaire that were categorized reliable. The reliability of the items was reported on the table below.

Table 4. Reliability Statistic	
Cronbach's Alpha	N of items
.913	32

The Alpha score of the questionnaire was 0.913. Based on the category of the reliability, it was considered very highly reliable. Therefore, the questionnaire was acceptable to be used and the total number of the questionnaire used were 32 items.

### **Data Analysis**

The data analysis used in the research was descriptive statistics. The researcher described the data obtained statistically using numbers. In descriptive statistics, the researcher tried to find out the frequency of the data. In order to answer the research question and to know about the trends of the characteristics of an effective EFL teacher, the researcher used the ordinal scales. According to Cohen et al. (2011), the ordinal scales can be used not only to classify but also to create order of the data.

Rating scales were used in this research as it was able to establish the sensitivity degree and diverse responses while maintaining to generate numbers

(Cohen et al., 2011). There were four categories: (1) Not Important at All, (2) Not Important, (3) Important, and (4) Very Important. The class interval for the each category can be known from the following calculation.

The maximum scale should be minus by the minimum scale then divided by the n category. The maximum scale was 4 and the minimum scale was 1, while the n category is 4. The formula will be  $(4 - 1) : 4 = 0.75$ . So, the class interval for each category was 0.75. The following was the category table.

<b>Scale</b>	<b>Category</b>
1 – 1.75	Not Important at All
1.76 – 2.5	Not Important
2.6 – 3.25	Important
3.26 – 4	Very Important

From the frequency table, the researcher was be able to identify the mean value of the questionnaire items as well as the mean score for each item. By knowing the mean value and mean score, the researcher would be able to see what category each item belong to.