

## CHAPTER 3

### RESEARCH METHOD

#### A. Research Design

The study presented here is a quantitative research; the rationale for this is that quantitative research conducts the inquiry in unbiased manner (Cresswell, 2008). In this quantitative research, the researcher focuses on the research questions that require the researcher to collect quantifiable data by asking specific questions based on participants' opinion. Survey design is used in this research, a design in which the researcher administers a survey to an entire population of people to describe their opinions toward profile of their English teachers in Muhammadiyah Senior High School in Yogyakarta. Survey design used here is cross-sectional survey design. In the design the researcher simultaneously collect data at one point in time (Cresswell, 2008). By using the cross-sectional survey, this research will be useful for evaluating teachers' competency based on students' opinion.

#### B. Population and Sample

Population is a group of individuals having same uniqueness (Cresswell, 2008). Hence, sample is subgroup of students that representative of the whole population of this research (Brown, 2001).

The population in this research is all students of Muhammadiyah Senior High School in Yogyakarta Municipality. In deciding the sample, the researcher used convenience sampling in which the researcher selected participants because they are willing and available to be studied (Cresswell, 2008). In this convenience sampling the researcher gets participants of this research from grade X and grade XI. From the population, the sample consists of students of Muhammadiyah Senior High School in Yogyakarta grade X, and XI. In each grade, the researcher took one class as a sample.

**Table 1. Participants' Gender**

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	125	50,8	50,8	50,8
Valid Female	121	49,2	49,2	100,0
Total	246	100,0	100,0	

Table 1 deals with the participants' gender participating in the research. From the table we know that there is no significance difference between the genders of the participant participating in the research. The boys are 50,8% while the girls are 49,2%. Moreover, the table 2 below shows the grade of the participant participating in the research. Only 6 students (2,4%) of the participant are in Grade 12<sup>th</sup>. It happens because most of students of grade 12<sup>th</sup> prepare for their national examination, thus in some school the researcher is not allowed to administer the questionnaire for participants that are in grade 12<sup>th</sup>. In addition to the participants' gender, it will not influence the result of

**Table 2. Participants' Grade**

	Frequency	Percent	Valid Percent	Cumulative Percent
10	133	54,1	54,1	54,1
Valid 11	107	43,5	43,5	97,6
12	6	2,4	2,4	100,0
Total	246	100,0	100,0	

### **C. Data Collection Method**

In attempt to conduct this study smoothly, the researcher obtains permission to conduct this research. The permission includes; formal permission both in the participants' school and some stakeholders of the schools. The permission is useful to give information that the participants agree to cooperate in this study. Moreover, the permission also gives the legislation requires that the researcher here guarantees the participants' right and treats them ethically.

As mentioned above, the sample consists of students of Muhammadiyah Senior High School in Yogyakarta from seven schools. It consists of around 270 students of the first year, and 270 students of the second year.

In collecting the data, the researcher gives questionnaire to the sample of this research. The questionnaire used in collecting data, consists of 28 questions and five demographic questions including name, gender, level, major of study and school. The demographic questions will be useful for the researcher to get information of the participants. In the beginning of the questionnaire the researcher put an introduction and instructions. The aim of

writing the instruction is to explain to the participants on how to fill the questionnaire given.

a. Variable of the research

A variable of the research is four competences of English teachers should have pedagogical competence, personal competence, social competence and professional competence.

b. Instrument of the research

The researcher collects quantitative data on instrument. An instrument is a tool used in measuring, observing, and documenting quantitative data (Cresswell, 2008). In the research, the researcher uses modified instrument which the instrument specially modified for the research. In creating the instrument of the research, the researcher makes the outline of the instrument based on Minister of Education Rules Number 16 Year 2007.

**Table 3. The instrument of the research**

No	Teachers' competence	Core Competence	Questions
1.	Pedagogical competence	Understanding Learners' characteristics	1; 2
		Mastering learning theories	3; 4
		Developing curriculum	5;
		Designing instruction	6;
		Using appropriate technology	7; 8;
		Facilitating learners' learning	9;

		Communicating effectively	10;
		Making effective assessment	11; 12;
		Engaging in regular reflection	13;
2.	Personal competence	Examples high ethical and moral standards	14; 15;
		Maintaining high ethical and moral standards	16; 17; 18;19;
3.	Social competence	Understanding cross-cultural differences	20;
		Communicating effectively	21;
		Easily adapting and enjoys people	22;
		Keeping up a regular conference/workshop	23
4.	Professional competence	Understands the linguistics system of English phonology, grammar, and discourse	24;
		Understands competency standard and basic standard of the subject	25;
		Creatively designing materials	26;
		Engaging in regular reflection	27;
		Using technology for self development	28;

To measure the reliability of the instrument, the researcher piloted the questionnaire twice to know the internal consistency of each item (Cresswell, 2010, p. 223). To measure the reliability of the questionnaire, the researcher pilots the questionnaire. Piloting means trying the questionnaire out before the real administering the questionnaire to the participant of the research (Brown, 2001).

#### D. Data Analysis Method

A 5-point Likert Scale is used to collect data about students' opinion on their English teachers' profile, with the type of the Likert Scale is frequency response categories. In analyzing the data gathered, the researcher scores the data by assigning a numeric score. These numbers are:

**Table 4. Scores of data collected**

5	4	3	2	1
Always	Usually	Sometimes	Seldom	Never

**Table 5. Scores of demographic questions**

1			2			
Male			Female			
1			2			
X (Tenth)		XI (Eleventh)		XII (Twelfth)		
1	2		6			
None		IPA		IPS		
1	2	3	4	5	6	7
SMA	SMA	SMA	SMA	SMA	SMA	MA
Muh. 1	Muh. 2	Muh. 3	Muh. 5	Muh. 6	Muh. 7	Muallimin

Categorical score is used in categorizing the male and female (Cresswell, 2010). After scoring the data, the researcher then uses Statistical Package for Social Science (SPSS) version 22 in which the researcher input the data to software provided. The researcher enters scores of the data from the instruments. In analyzing the data, the researcher then calculate the value based on number provided by the data. Here, inferential statistic is used to draw conclusion of the data. In reporting the result of the research, the researcher conducts descriptive analysis (Cresswell, 2008).

Descriptive statistics are used to describe the basic feature of the data in a study. They provide simple summaries about the sample and the measures. Together with simple graphics analysis, they form the basis of virtually every quantitative analysis of data (Teaching 2006)