CHAPTER III

RESEARCH METHODOLOGY

This chapter presents the methodology of the research. It provides the research method and design, data, data sources, data collection instrument, and data analysis procedure.

3.1 Research Method and Design

Polit and Hungler (1999: 155) stated that research design is a blueprint or outline for conducting a study in such a way that maximum control will be exercised over factors that could interfere with the validity of the research results. The method of this study was based on qualitative research. Creswell (2009: 164) mentioned that one of the characteristics of qualitative research is interpretive inquiry meaning that researchers make an interpretation of what they see, hear, and understand. The researchers' interpretations cannot be separated from their own backgrounds, history, contexts, and prior understandings. This interpretive inquiry characteristic is the basis of selection of the research method used in this study. Creswell (2009: 164) also explained that in qualitative research, researchers become a key instrument because qualitative researchers collect data themselves through examining documents, observing behavior, or interviewing participants.

Data analysis procedures proposed by Miles and Huberman (1994) were used in this study. According to Miles and Huberman (1994: 10 - 11), there are four steps in analyzing qualitative data, namely 1) data collection, 2) data reduction, 3) data displays and 4) conclusion drawing or verification. First of all, data collection is conducted in order to obtain information needed to achieve research objectives. Data collection can be implemented by using interview techniques, observation, and others (Miles and Huberman, 1994). The next procedure is related to data reduction. Data reduction refers to the process of selecting, focusing, simplifying, abstracting, and transforming the 'raw' data that appear in written up field notes or transcriptions (Miles and Huberman, 1994: 10). In data reduction, researchers will be guided by the goals to be achieved. Examples of this stage include summarizing, direct contact data with people, events and situations in the study site, encoding, making objective notes, making reflective notes, making marginal notes, storing data, making memos, analyzing between locations and making interim templates between locations (Miles and Huberman, 1994).

The third step in the qualitative data analysis procedures according to Miles and Huberman (1994) is data display. Data display is conducted in order to make it easier to understand what is happening and to plan for the next work. In the data display, the data obtained are presented in the form of narrative texts and tables. The data can be arranged in a relationship pattern, so it will be more easily understood. At this stage, the developed models can be used, such as describing the context in the

study, checking matrix, describing the development of time, the role matrix, conceptual matrix of concepts, effects and influence matrices, the dynamics matrix of the location and the list of events (Miles and Huberman, 1994). The final procedure in qualitative data analysis procedures proposed by Miles and Huberman (1994) is conclusion drawing and verification. Conclusion is done by concluding the results of data display. The conclusion of the results can be a tentative conclusion if other strong evidence is found during the data verification process in the field. The qualitative data analysis procedures proposed by Miles and Huberman (1994: 10) can be summarized by the following table.

	Data Collection Period		
Anticipatory	Data Reduction		
	Data Display		= Analysis
	Conclusion: Drawing/Verifying		

Figure 2. Components of Data Analysis: Flow Model

In collecting research data, qualitative researchers may use a protocol or an instrument, but the researchers are here seen as the ones who actually gather the information. Creswell (2009: 166) mentioned that the data collection steps may include setting the boundaries for the study, collecting information through unstructured or semistructured observations and interviews, documents, and visual materials, as well as establishing the protocol for recording information. Creswell (2009: 167) categorized qualitative data collection types into observations, interviews, documents,

and audio-visual materials. In this study, the research data were the EPG documents and curricula of five English education study programs and one pre-service teacher training program. Therefore, the qualitative research of this study was in the form of content analysis.

According to Cole (1988), content analysis is a method of analyzing written, verbal or visual communication messages. Content analysis as a research method is a systematic and objective means of describing and quantifying phenomena according to Krippendorff (1980), Downe-Wamboldt (1992), and Sandelowski (1995).

3.2 Data, Data Sources, and Instruments

Polit and Hungler (1999: 267) stated that data are "information obtained during the course of an investigation or study". In this study, the data were in the form of descriptors of six developement phases in the European Profiling Grid (EPG)-based Key Teaching Competences, learning outcomes in the existing curricula of English education study programs and pre-service teacher training programs, and descriptors of six development phases of the EPG-based Key Teaching Competences in the learning outcomes of the existing curricula of English education study programs and pre-service teacher training programs.

The data sources in this study were taken from the European Profiling Grid (EPG) documents, the existing curricula of English education study programs and pre-service teacher training programs, and the European Profiling Grid (EPG) documents and existing curricula of English

education study programs and pre-service teacher training programs. In collecting data, intruments that were used in this study were developed from Miles and Huberman (1994) in qualitative data analysis.

For research question number one, descriptors of six development phases of the European Profiling Grid (EPG)-based Key Teaching Competences became the data. These data were taken from the European Profiling Grid (EPG) documents by using EPG documents. The EPG documents were used because these documents gives context, significance, and summary to the descriptors of six developemwnt phases of the EPG-based Key Teaching Competences.

For research question number 2, learning outcomes in the existing curricula of English education study programs and pre-service teacher training programs became the data. The data were taken from the existing curricula of English education study programs and pre-service teacher training programs and they were analyzed by using data accounting sheet, which was developed from Miles and Huberman (1994: 80 – 81). The data accounting sheet was developed and used because it can be seen quite clearly the coverage of the EPG-based Key Teaching Competences in the curricula of English education study programs and pre-service teacher training programs. The data accounting sheet that was developed and used can be seen as follows.

Course	Development Phase																
	1.1	1.2			2.1			2.2				3.1				3.2	
	Descriptor 1	Descriptor 1	Descriptor 2	Descriptor 3	Descriptor 1	Descriptor 2	Descriptor 3	Descriptor 1	Descriptor 2	Descriptor 3	Descriptor 4	Descriptor 1	Descriptor 2	Descriptor 3	Descriptor 4	Descriptor 1	Descriptor 2
Teaching Practice	X	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Micro Teaching	X	X	X	X	X	X	√	X	X	X	X	X	X	X	X	X	X

For research question number three, the data were descriptors of six development phases of the EPG-based Key Teaching Competences in the learning outcomes of the existing curricula of English education study programs and pre-service teacher training programs. These data were taken from the European Profiling Grid (EPG) documents and existing curricula of English education study programs and pre-service teacher training programs and they were analyzed by using codes and coding that was developed from Miles and Huberman (1994: 55 – 69). The codes and coding were used since the extent of the EPG-based Key Teaching Competences are included in the curricula of English education study programs and pre-service teacher training programs can be investigated by coding the range of development phases of the EPG-based Key Teaching Competences based on the development phases themselves. The coding of the extent of can be seen as follows.

Sub Category	Range of Development Phases
Methodology: Knowledge and Skills	1.1, 1.2, 2.1, 3.2
Assessment	3.2
Lesson and Course Planning	2.1, 2.2, 3.1
Interaction Management and Monitoring	1.2, 3.2

Based on the research questions and the purposes of this study, the data, data sources, and data collection instruments were summarized as follows:

Table 3.1 Data, Data Sources, and Instruments

Research Question Number	Data	Data Sources	Instruments
1	Descriptors of six development phases of the European Profiling Grid (EPG)-based Key Teaching Competences	The European Profiling Grid (EPG) documents	Researcher
2	Learning outcomes in the existing curricula of English education study programs and pre-service teacher training programs	Existing curricula of English education study programs and pre-service teacher training programs	Data Accounting Sheet
3	Descriptors of six development phases of the EPG-based Key Teaching Competences in the learning outcomes of the existing curricula of English education study programs and pre-service teacher training programs.	The European Profiling Grid (EPG) documents and existing curricula of English education study programs and pre-service teacher training programs	Codes and Coding

3.3 Data Analysis Procedures

According to Miles and Huberman (1994), there are four steps in analyzing qualitative data. Those steps are 1) data collection, 2) data reduction, 3) data display, and 4) conclusion drawing or verification. Data collection was the first step of the data analysis procedures in this study. The existing curricula of five English education study programs and one pre-service teacher training program were collected directly from the coordinators of five English education study programs and one pre-service teacher training program. Meanwhile, the EPG-based Key Teaching Competences were downloaded from the EPG documents available from the EPG project website.

Data reduction was the second step of this data analysis. After collecting required data, the EPG-based Key Teaching Competences in the existing curricula of English education study programs and pre-service teacher training programs were analyzed. The descriptors of EPG-based Key Teaching Competences were set as the indicators to analyze the existing curricula in order to elaborate what the descriptors of the European Profiling Grid (EPG)-based Key Teaching Competences as the basis to analyze its coverage in the curricula of English education study programs and pre-service teacher training programs are, to examine how the European Profiling Grid (EPG)-based Key Teaching Competences are covered in the curricula of English education study programs and pre-service teacher training programs and to investigate to what extent the European Profiling Grid (EPG)-based Key Teaching Competences are

included in the curricula of English education study programs and pre-service teacher training programs. The EPG-based Key Teaching Competences contain 4 sub categories: 1) methodology: knowledge and skills, 2) assessment, 3) lesson and course planning, and 4) interaction management and monitoring. The EPG-based Key Teaching Competences also have 6 development phases: 1.1, 1.2, 2.1, 2.2, 3.1, and 3.2 with each development phase has its own descriptors.

Data display, the third step in the qualitative data analysis proposed by Miles and Huberman (1994), was the next step in these data analysis procedures. The results of data analysis were presented in the form of checklists, tables, and narrative texts. Conclusion drawing and verification was the last step of data analysis procedures in this study. After narrating the results of data analysis, the researcher concluded the results in order to answer the research questions. As a result, the descriptors of the European Profiling Grid (EPG)-based Key Teaching Competences as the basis to analyze its coverage in the curricula of English education study programs and pre-service teacher training programs, the coverage of the European Profiling Grid (EPG)-based Key Teaching Competences in the curricula of English education study programs and pre-service teacher training programs, and the extent of the European Profiling Grid (EPG)-based Key Teaching Competences in the curricula of English education study programs and pre-service teacher training programs could be determined.