CHAPTER III

RESEARCH METHOD

This chapter presents some detailed steps used in conducting the research, they are: research design, data sources, research instruments, data collection, data analysis techniques, and research validation.

A. Research Design

This research is a descriptive research of analysis or document types. Analysis of content or documentary analysis is shown to compile and analyze the official documents, documents whose validity and validity are guaranteed to be good including the question of national exam (sukmadinata, 2012).

In qualitative research, data are collected in the form of words or pictures rather than numbers. The goal is a holistic picture and depth of understanding rather than a numeric analysis of data. In line with Creswell (2009:3).research design is plans and also the method for research to detailed methods of data collection and analysis. The design of this research is useful to ensure that the evidence gained allows us to answer the initial questions as clearly as possible.

B. Data Sources

Creswell (2015) states that document analysis represent a good source for text data in a qualitative study. He explains that this data analysis will understand central phenomena through textbook, essays, newspaper, novels, magazine articles, pictures, songs, and public or private documents. This implies that the content of the analysis is indeed compatible with academic education-based research especially Indonesian curriculum which must facilitate students with HOTS. High-level thinking skills are the ability that learners can use to solve a problem through critical and creative thinking skills.

The object in this study was the English national exam question Junior high school year 2018/2019. National examination always implemented annually throughout the country starting from primary school to senior high school level. English is one of national examination lesson in Indonesia. In the implementation of national examination in 2018/2019, not every schools applying CBT (Computer Based Test) or usually called as UNBK. UNBK is a system of carrying out national examination using computer as a media. Only some of school can apply it. Where the school has the media such as a computer, good internet connection, and using the 2013 curriculum as their learning system. Analysis done is an analysis for one bundle of questions UN, so that the final conclusion to the characteristics of the HOTS problem in the UN is obtained when all categories are fulfilled on a single item.

C. Research Instrument

Research instruments are tools developed by researchers to achieve their stated objectives when conduct a research study. In other words, research instruments are designed tools that contribute the collection of data for the purpose of analysis. There are two types of research instrumentin a qualitative research; primary and secondary instrument (Ary, 2010).

Primary instrument is result study from researcher self. (Ary, 2010) stated that in qualitative research, researcher or human investigator is used to gather and analyzed the data as a primary instrument. Primary instrument is a tool for collect data from themselves. According to Hatch (2002), to understand the needs of being studied object, it is necessary to emphasizes human ability. Based on those statements above, the researcher considers herself as the primary instrument in this research because she serves determining focus of the research, selecting information as data source, collecting data, analyzing data, and drawing a conclusion based on data analysis. In case to make sure and make this research more accurate the researcher needs other instrument called as secondary instrument. Secondary instrument can be collected from document analysis, interview and observation. In this research, researcher chooses document analysis.

D. Data Collection

The researcher used documentation to collect the data. According to Ary et al (2010) said that qualitative researchers may use written documents or other artifacts to gain an understanding of the phenomenon under study. Document analysis can be of written or text-based artifacts (textbooks, novels, journals, meeting minutes, logs, announcements, policy statements, newspapers, transcripts, birth certificates, marriage records, budgets, letters, e-mail messages, etc.) or of non-written records (photographs, audiotapes, videotapes, computer images, websites, musical performances, televised political speeches, YouTube videos, virtual world settings, etc.). The first thing researchers do to collect data is to download the question of the English national junior high school test. The data collected in two stages are analyzed by the author and then examine each element of the material in more detail.

E. Data Analysis Techniques

After collecting the data, the researcher initiated to organize the data. The description is presented below:

1. Organizing and Familiarizing

In the first stage of analyzing techniques from qualitative data, the researcher grouped the question of English national examinations belonging to the HOTS category. This research will answer whether there is a group of types of HOTS, namely stimulus, critical thinking skills, and problem solving skills, and the percentage in the problem of English national examinations in the year 2018/2019.

2. Coding and Reductioning

Coding is a common procedure for qualitative data analysis. As a result, the researcher decided to use coding as one of the data analysis processes. At this point, researcher focus on interpreting and representing the results of this study in interpretation, researcher should study meaning and give explanations (Ary et al., 2010). By representing, researchers provide how the data is presented clearly.

3. Research Validation

In testing the validity of researchers' data using triangulation techniques, which is the validity check of data that utilizes something else beyond the data for the purpose of checking or as a comparison to the data, and the most widely used triangulation technique is by examination through other sources. According to Moloeng (2007:330), triangulation is a technique of data validity checking that takes advantage of something else. Outside the data for purposes of checking or as a comparison to the data. The most widely used triangulation technique is examination through other sources. Denzin in Moloeng (2007:330) distinguishes the four kinds of triangulation as an examination technique utilizing the use of data, methods, investigators, and theories. Of the four kinds of triangulation techniques, researchers use techniques of investigator triangulation. Investigator triangulation is by way of utilizing researchers or other observers for the purpose of re-checking the degree of data trust. Researchers doing triangulate by evaluating from Rani Wulandari as English teacher where she was often participated in several seminars and workshops related to HOTS and was one of the representatives of the MGMP teacher in making of HOTS questions. Then,

Jundullah Faris Mu'tashim, S. Pd as a postgraduate student at STIKIP Al-Hikmah and English teacher of SD Muhammadiyah 1 & 2 Taman, who has attended HOTS learning seminars in English class. Validation is intended to ensure that the coding results conducted by the researcher are correct.