

CHAPTER III

RESEARCH METHOD

A. Type of Research

This research is descriptive qualitative research. According to Creswell (2009) the process of research involves emerging questions and procedures, data typically collected in the participant's setting, data analysis inductively building from particulars to general themes, and the researcher making interpretations of the data (Marini,2018:37).

In qualitative research, the researcher as a human instrument and with participant data collection techniques and in-depth interviews, the researcher must interact with the sources (Sugiyono,2019:11). Therefore, qualitative research must really know the person providing the data. There are some characteristic of qualitative research, namely 1) Qualitative research has the natural setting as the direct source of data and researcher is the key instrument. 2) Qualitative research is descriptive, so the data collected is in form of words rather than number. 3) Qualitative research are concerned with process rather than simply with outcomes or products. 4) Qualitative research tend to analyzed their data inductively.

B. Place and Time of Research

The research was conducted at Senior High School 01 Dua Koto which is located on Panti Simpang Empat street, Pasaman Regency.

C. Respondent of the Research

Respondent of the research in qualitative research can be various. The respondents of this research are two of senior English teachers at Senior High School 01 Dua

Koto, each assigned a code as T1 (first teacher) and T2 (second teacher). Both of them have experience teaching English for more than twelve years at that school.

D. Research Instrument

Research instrument are tools used in collecting data from a study. Instruments can be interpreted as tools that are arranged and developed by following established procedures based on theories and research needs that used to collect research data. Therefore, instruments are also called research data collection tools. In this research, researcher used two types of instruments namely document analysis instrument, classroom observation, and interview. These three instruments are designed to obtain data on the extend of teachers understanding in designing Higher Order Thinking Skills (HOTS)-based learning.

1. Document analysis

Document analysis instrument is used to assess the extent to which HOTS-based learning elements are reflected in the components of teaching modules created by the teachers. This instrument is compiled based on qualitative approach. This instrument is designed to assess the main aspects of learning design, namely: learning objectives, learning activities, learning methods and assessments.

Table 3.1 :General Framework to Determine HOTS Level

Name of the Teacher :

Level of Students : Grade

Semester :

Topic :

Time Allocated :

No	Aspect	Indicators	Level	Notes
1	Learning goals	a. Goals of learning is set up to promote student's critical thinking skills (such as to analyze, evaluate, and create) b. Goals of learning is set up to promote student's knowledge and life skill c. Goals of learning is set up to promote student's knowledge and life skill.		
2	Learning activity	a. Students mostly recall information b. Students rarely practice English c. Students sometimes analyze, evaluate or create something		
3	Learning materials	a. Learning materials requires students to understand b. Learning materials requires students to analyze something		

		c. Learning materials requires students to analyze, synthesize, evaluate and guide students to create something		
4	Method of learning models	a. Learning method encourages students to think at higher level (such as Problem Based Learning, Project Based Learning, Discovery Learning, Case Study. b. Learning method encouraged students to use more English in classroom. c. Learning method uses a student-centered approach		
5	Evaluation	a. Evaluation assesses student's ability to analyze, evaluate and create b. Assessment's instrument uses open-ended questions or project assignments		

		c. Evaluation provides task that encourage student's to think critically		
--	--	--	--	--

The analysis was conducted based on the five main components of the lesson plan (RPP) according to curriculum standards: learning objectives, learning activities, learning materials, learning methods, and learning evaluation. Each component was analyzed using a scoring system to assess the suitability and quality of the lesson plan. Each component is given a score of 16-20 for the Higher Order Thinking Skills (HOTS) category, 11-15 for Middle Order Thinking Skills (MOTS), and 0-10 for Lower Order Thinking Skills (LOTS).

The scores obtained were then categorized into three quality levels: Poor (0–33) → indicates that the lesson plan component is still weak, does not meet standards, and requires fundamental improvement. Fair (31–66) → indicates that the lesson plan component is quite good, but there are still several aspects that need improvement to meet standards. Good (67–100) → indicates that the lesson plan component is good and meets standards and can be used as an example of ideal practice. Therefore, the maximum total score that can be achieved is 100 (if all components score 10). This instrument helps researchers identify the quality of English teachers' lesson plans more objectively, measurably, and systematically.

2. Observation

According to Kotari (1990:96) observation method is the most commonly used method especially in studies relating to behavioural sciences. Observation become

Conclusion					

3. Interview

Table: 3.3. blueprint of interview

Interviewee :

Interviewer :

Day/date :

No	Pertanyaan
1	Bagaimana Ibu memahami konsep HOTS dan perannya dalam pembelajaran di kelas?
2	menurut Ibu, komponen RPP/Modul ajar mana saja yang paling penting untuk diperhatikan dalam mendesain pembelajaran berbasis HOTS?
3	Menurut Ibu, apa saja faktor penghambat yang Ibu hadapi dalam merancang desain pembelajaran berbasis HOTS?
4	Menurut Ibu, apa saja yang menjadi faktor pendukung dalam merancang desain pembelajaran berbasis HOTS?
5	Menurut Ibu, dukungan dalam bentuk apa yang Ibu butuhkan dalam merancang pembelajaran berbasis HOTS?

E. Research Procedure

The data about the teacher's ability to design HOTS-based learning design collected by the researcher. The researcher analyzed the RPP or learning module documents created by the teachers, conduct classroom observation and semi-structured interview to obtain data. After collecting the data, the researcher analyze them by using Miles and Hubbermans Model.

F. Technique of Data Collection

Data collection techniques are the most strategic step in the research, because the main objectives of the research are to take data. Data collection can be done in various setting, various sources and various ways. When viewed in terms of how, data collection techniques can be carried out with observation, interview, questionnaires and documentation or combined all four.

The data in this research came from the teacher's instructional design such as learning module or lesson plan (RPP), classroom observation and open-ended interview. There are some steps follow in collecting data. First the researcher analyzed the document of learning module or lesson plan created by English teachers. There are components of learning module that analyzed by researcher, namely: learning module, learning activity, learning material, learning method and evaluation. The result of an analyzes. The data is presented in tabular form and scored to determine the HOTS level of learning module created by the English teacher.

The second, the researcher observed the English learning process in the classroom. The most important thing at this stage is the teacher's directions and the students responses during the main teaching. This allows conclusions to be

drawn about the extent to which the teachers has implemented HOTS during the learning process.

The last steps is the researcher conducted the open-ended interview with both respondents. After conducting the interview. The interview result were coded. According to Miles and Hubberman (1994:56) coding is an analysis to review a set of field notes, transcribed or synthesized ant to dissect them meaningfully, while keeping the relations between parts intact, is the stuff of analysis. The purpose of this coding is to organize and focus the essence of the teacher's responses. This way, a baseline of the teachers strength and weaknesses in designing HOTS-based learning was identified.

G. Technique of Data Analysis

Mile and Huberman (1994) state that the most serious and central difficulty in the use of qualitative data is that method of analysis are not well formulated. While Spradley (1980) defined that analysis of any kind involve a way of thinking, it refers to the systematic examination of something to determine its parts, the relation among parts and the relationship to the whole. In qualitative research, the data were obtained from various sources using data collection techniques and were carried out continuously until the data was saturated. Susan Stainback said that there are no guidelines in qualitative research for determining how much data analysis are necessary to support and assertion, conclusion, or theory.

Data analysis in qualitative research is carried out at the time of data collection within a certain period. At the time of interview, the researcher had analyzed the answers of the respondents. It the respondent's answer after being analyzed are

not satisfactory, the researcher continue the questions again, until a certain stage, the data is considered credible. Miles and Huberman (1984) suggested that activities in qualitative data analysis were carried out interactively and continuously until they were completed. Activities in data analysis, namely data reduction, data display, and conclusion drawing/verification (Sugiyono, 2019:243).

1. Data Reduction

There are quite a lot of data obtained from the field, so it is necessary to record it carefully and in detail. As already stated, the longer the researcher is in the field, the longer the researcher is in the field, the larger the amount of data, complex and complicated, for this reason, it is necessary to immediately conduct data analysis through data collection. Reducing data means summarizing, choosing the main things, focusing on the important things, looking for themes and patterns. Thus, the reduced data provided a clearer picture, and make it easier for researchers to collect further data, and look for it if needed. Data reduction can be assisted with electronic equipment such as mini a computers, by providing codes on certain aspects. In reducing data, each researcher guided by the goals to be achieved, and the purpose of qualitative research itself is the findings.

In this stage the researcher collected data through documentation, which involves lesson plan made by English teachers. Each teacher aske at least 2 of lesson plans or learning modules to be analyzed by researcher. Apart from documentation, researcher also collect the data through classroom observation and interviews in which the English teacher became the respondents. This aims to dig deeper into

teacher's perspective and understanding regarding HOTS-based learning design. Through interviews researcher will also find the answer regarding the difficulties or the weakness experienced by English teachers in designing HOTS-based learning design.

2. Data Display

After doing the reduction, the next step is data display. Data display is a step of presenting the data from the data reduction. The researcher display the data in short description, chart, the relation among the category and other formats. By data display, then the data is organized, arranged in a pattern that can be more understandable. Miles and Huberman (1984) said that the most frequent form of display data for qualitative research data in the past has been narrative text.

3. Conclusion drawing/Verification

Conclusion drawing/verification is the last phase of analysis data. According to Miles and Huberman conclusion drawing or verification is a step of drawing conclusion from the beginning to the final process.

In a summary, the step in data analysis are as follows: 1) the data is gathered by researcher through documentation, questionnaires and interview result. By referring to the research problem, the researcher then select, identifies, and concentrates on the data. 2) after collecting information, the researcher organized it into meaningful sentences. 3) the conclusion is reached when the data has been displayed. The narrative text analyzes the documentation and documentation result in order to make them more understandable and particular.