#### **CHAPTER III**

#### RESEARCH DESIGN

This chapter presents methods that the researcher uses, including research design, data preparation (participants, types of data, sources of data, and inform consent), data collecting techniques, data analysis, and trustworthiness of the research.

# 3.1 Research Design

In this research, the researcher used pure qualitative method. In this case, there is a question of research or data created before the research began. The research areas and questions using administration in order to analysing training data or interference in the research context.

A research design is a logic that relates the data to be collected and the conclusion to be drawn to the initial questions of study (Yin, 2014). It is a scheme that used to answer where, when, and how data are collected and analysed in a research. It can also be defined as a plan to conduct a research with control over factors that may affect validity of research findings.

This study used case study approach which it is in depth description and analysis of a bounded system. According to Baxter and Jack (2008) qualitative case study is an approach to research that facilitates exploration of a phenomenon within its context using a variety of data sources. The researcher used case study to understand the object of study and not only to explain what

the object under study, but to explain how and why the existence of such cases may occur.

In this design, the researchers did not manipulate treatment or placement of the subject. Furthermore, Creswell (2007) explains that it is a study of an issue through one or more cases within bounded system including setting, context, and so forth. At the end of this design, the researcher will answer questions relating to this study. Finally, this research will solve the problems in the teaching of English in the classroom.

# 3.2. Data Preparation

There were several aspects in data preparation that researcher need to do during the research. Those aspects were subject of research, types of data, source of data, and inform consent from the institution.

# 3.2.1. Setting and Participants of Research

Setting of research is an environment where the phenomenon being studied takes place. Meanwhile, participants of research are chosen by the researcher to be studied and to contribute in the research. This research was conducted in SMA N 1 Pakem, Yogyakarta. The population was the high achiever English learners grade X. Not all of students who became are sampled. Research sample was 1 students of each class from 3 classes (MIPA) and 1 classes (social program) who get the higher score of English examination. Total participant of this research are 4 students from 4 classes.

The data of this study were taken from English learners of high school students' at SMA N 1 Pakem, Yogyakarta. Researcher collected all the data from the respondents, all data (raw data) were extracted and categorized. To identify outstanding learning English in grade 10, the researchers asked the teacher to show their English test scores and the average value of learning English in the classroom.

# 3.2.2 Types of Data

The researchers divided into two types of categories of data are:

- a. Data of introducing Edmodo. This data included an observation at classroom and the first interview about the traditional media used by the teacher.
- b. Data of introducing Edmodo which consisted of second interview about students' perception over Edmodo, documentation, and video analysis

The data were gathered are analysed and processed using analysis technique. Finally, the result of this process was used to answer the research question.

## 3.2.3 Source of Data

The source data of this research was collected from the high achiever learners who gave information about perception of the high achiever student's in using Edmodo for English subject. The observation data gained by the researcher from the teachers and the school environment that the researcher

seen and analysed during the stage of observation, the stages is: observation and video analysis.

#### 3.2.4 Consent Letter

After choosing the setting, participants, type of data, and source of data, the next process conducted by the researcher was informing consent. Based on Herdiyansyah (2010), sometimes access to the participant and location of the research are involving licenses and official procedure especially if relating to the institution. In this research, the researcher needed to get permission to Head of SMA N 1 Pakem, Head of students' academic, Teacher of English at SMA N 1 Pakem and also Head of Faculty of Socio Cultural Sciences and the stakeholder. Meanwhile, the researcher also gave consent letter to the students before introducing Edmodo. Not to mention, before doing an interview, the researcher also asks the students whether they wanted to become a sample of the research or not.

# 3.3 Data Collecting Techniques

According to Muh.Nazir (1983: 63), descriptive methods can be defined as a method in researching the status of human being, an object, a set of conditions, a system of thought or an event in the present. The purpose of qualitative research is to create a description, picture or painting in systematic, factual, accurate information on the facts. The properties and the relationship between the phenomenon are investigated.

Data is taken with observation and in-depth interviews with the students, questionnaire and documentation or things related to the research. Instruments

are researchers and respondents surveyed (students). Data collected are in the form of words or phrases not in the form of numbers. Form of data video recording field (field notes), interview transcript, photo, video, and other official records. There is no particular time duration of the study. The research depends on the saturation of data. When data is redundant, of the data collection process is ended. Data saturated if respondents gave the same answer and there is no new data. To have trustworthiness of data taken, the process of triangulation is needed.

In this research, the researchers used primary data. Primary data is data collected or obtained directly from the source of the main researchers.

## 3.3.1 Observation

The observation is the basis of all science. Scientists can only work based on the data, the facts about the world of reality obtained through observation. Data was collected and often with the help of various tools are very sophisticated, so the objects are very small (protons and electrons) or very much (space objects) can be observed clearly, (Sugiyono, 2012:226).

In this study, the researcher used participant observation to collecting the data as a method to get the data result, Patton (2011) says that, the observation is one method that is accurate and easy to perform data collection and aims to find out and understand all the activities that take place which becomes the object of study in his research.

In this study, the researchers used observations to gain additional data to be data obtained to be very accurate. The additional data are; video analysis and class observation.

### 3.3.2 Interview

The interview is a communication process of interaction between the two parties at least one of them had a serious purpose that has been established and involves the process of question and answer about something, Steward and Cash, (2010).

Based on the theory above, the researcher did Q & A session as the first interview to several students during teaching program. The results obtained by the researchers are the one of the reasons researchers to continue the study. The reason researchers used a technique interview is for the questions in the interview can be expanded further and also has a high value for researchers. The researcher has been doing a few students to do interview with 3 students from X mipa, and 1 student from X social 2, total students are 4. Students who do an interview session are the same students in the data collection by introduction of Edmodo.

The researcher has been doing a few students to interview with 1 delegation students from MIPA program and social. Total students who have been doing the interview are 4 students. The students who interviewed are students who do the questionnaire

Interviews have been conducted during PPL program PPL in SMA N 1 Pakem Yogyakarta from 15 - August 20<sup>th</sup> 2015. Interview conducted by researchersunstructured interview, only to find out any media that has been used for teaching English teacher in the classroom.

The researchers conducted the interviews that are not unstructured or which are known as informal interviews. Total students who as the participant of getting the interview data are 2 students from high achiever students of MIPA program. Researchers interviewed the students with relaxed and questions may have appeared while it is in talks and there is no list of questions that must be strictly followed.

The researcher used Kirkpatrick's theory for taking the 1<sup>st</sup> interview and the theory about the displays of Edmodo. In Kirkpatricks' theory, the researcher discusses and asked the students perception about Edmodo. And then, the researcher asked the students about the effectiveness of using Edmodo as an English media in the class.

## 3.3.3 Introducing Edmodo

Edmodo is an educational website that takes the ideas of a social network and renews them and makes it appropriate for a classroom (Cauley, ND). Researchers have carried out the introduction Edmodo to 10 other students in which the other students participated in the data collection questionnaire and 4 students participated in data collection interview. Researchers do an introduction to the high achiever students in SMA N 1 Pakem on November 3, 2016. The introduction of Edmodo to high achiever students gets a good response to the 10 students.

Process of introducing Edmodo on students with alternately ways to apply it. Many of the students wanted to know how teachers and students interact through Edmodo and students wanted to know how the teacher explains and duties and also how students responded to the task. With another sense, the introduction of Edmodo makes students enthusiastic and curious to know a lot about this Edmodo. Some students tried to make their accounts so that they could try it again elsewhere.

# 3.4 Data Analysis

The researcher used the Flow Diagram of analysis made by Miles and Huberman (1994:12) to analyze the data.

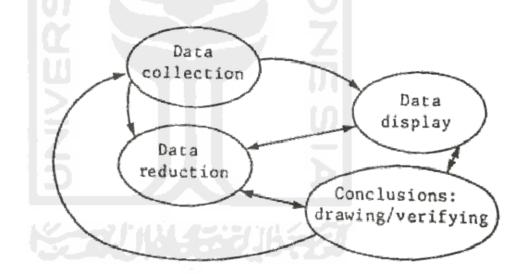


Figure 3.4 Flow Diagram of Qualitative analysis data by Miles and Huberman (1994:12).

Flow Diagram above consisted of three flows interactive activities are: Data reduction, Data display and Conclusions: Drawing/verifying.

#### 3.4.1. Data Reduction

Data, which is gathered from the open ended questionnaire, interview, class observation, and video analysis by introducing Edmodo.

Data reduction in this research was done through the process of selecting, focusing, simplifying, abstracting and transforming the data that emerge in written-up field notes and interview transcript. Data reduction in this research was started even before the data collected. Anticipate data reduction was occurring as the researcher decides which conceptual framework, case, research question and data collection techniques to choose. Then, further phases of data reduction occurred as the data collection proceeds. The data reduction activity continued until this final report was completed.

In this research, the result of interview as changed into verbatim form, observation result was turned into field notes, and document analysis result was arranged into document analysis transcript. Then, to reduce the data of this research, the researcher focused on research question, which are about students' perception and characteristics of high achiever students' at SMA N 1 Pakem.

In this research, the researchers have reduced some of the data from the data that is irrelevant or unnecessary associated with the media that is used by the teacher while learning English in school, and researchers are acquiring irrelevant data such as; student dissatisfaction against the value they get for learning English and their dissatisfaction with hours of study at the school. In this case, the researchers conducted several data reductions.

## 3.4.2. Data Display

Display means an organized, compressed assembly of information that allows drawing conclusion. Data displays can helps to comprehend what is happening and to do something.

There are various different forms of data display for different kinds of research. The data displays used in this research included brief notes and narrative text.

## 3.4.3. Drawing Conclusion and Verification

The third step in the data analysis in qualitative research is the conclusion and verification. The initial conclusion presented still provisional, and will change if it cannot be found strong evidences that support the next phase of data collection. But if the conclusion presented in the early stages was supported by evidence of valid and consistent when researchers returned to the field to collect data, the conclusions put forward a credible conclusion (Matthew B. Miles and A. Michael Huberman).

a) The data analysis techniques are to process the results of video analysis, class observations, open ended questionnaires, interview transcripts, and other things that researchers have found. Data processing is done by way of sorting the data into smaller units. These units are analysed by comparing the units with the existing data. Then, the results of the comparison are categorized according to the pattern of existing data. Finally, the results further categorization given appropriate themes.

- b) The data will be analysed by using inductively format to focusing the data and result of data and the procedure are:
- 1. Collecting all obtained data (raw data)
- 2. Analyzing the video
- 3. Reducing the raw data to be the units in the cards.
- 4. Comparing the units.
- 5. <u>Categorizing the units</u> with coding the data used qualitative inquiry is most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data.
- 6. Showing new themes or research focused by the results of categorize.
- 7. Sharpening the focus by doing in-depth interview again.
- 8. Doing the comparison, the categorization and themes.
- Doing interview again until saturation data (redundant). In this occasion, doing triangulation by interviewing teachers, including comparing with supporting documents.
- 10. Fixing categorization.

#### 3.5 Trustworthiness

Assigning the trustworthiness of this research, it showed the credibility, transferability, transferability, dependability and conformability. The researcher taken into accounts all the complexities in the study and show problem that are not easy to explained (i.e., credibility). The researcher included descriptive, context relevant, statement so that someone knowing

about or doing an experience of the study can identify with the setting (i.e. transferability). The researcher included as much detail as possible so others can see the setting for themselves. The researcher also addressed the stability of the data collected (i.e. dependability) and the neutrality and objectivity of the data (i.e. conformability).

The trustworthiness of a qualitative study can be increased by maintaining high credibility and objectivity. A research definition of trustworthiness might be: "Demonstration that the evidence for the results reported is sound and when the argument made based on the results is strong. In the qualitative approach, truth value is measured by credibility: having an adequate engagement in the research setting so recurrent patterns in data can be properly identified and verified. Applicability is established with transferability: allowing readers to be able to apply the findings of the study to their own situations. Since a qualitative researcher's perspective is naturally biased due to his or her close association with the data, sources, and methods, various audit strategies can be used to confirm findings (Bowen, 2009; Miller, 1997).

To check the credibility of the data, the researcher used triangulation. According to Sugiyono (2010) triangulation is defined as data collection techniques that are combining of various data collection techniques and data sources that already exist. There are four major keys of triangulation; sources, method, researchers, and theories. In this research, the researcher used sources and theories. The sources were gotten from the interview transcript,

observation form, and document. Meanwhile, the writer checks the theories which are related to the vocabulary learning strategies.

Sugiyono (2010) states that transferability is external validity that indicate the degree of accuracy of the research' result which implemented in the setting. Therefore, the researcher wrote the report of the research in detail, systematically, clear and trustworthy in order to make the readers understand the result and decided whether or not to implement the research in the other setting. According to Faisal (1990) in Sugiyono (2010), When readers obtain a research report which so clearly "what sort of" a result of research can be applied (transferability) then the report meet the standard transferability.

In qualitative research, dependability was called reliability. The research was reliable if the other person can repeat or replicate the process of the research. In this study, dependability test was conducted by audit to the whole process of research Sugiyono (2010). Dependability refers to the stability and track ability of the changes in both data collection and data analysis. The researcher read and re-read the data to gain certainty and stability of the data.

The researcher ensured that the data are coherence with the research question. Therefore, the examining of the process of data collection and data analysis was conducted by the researcher by matching the research question with the research result of data collection in order to achieve the degree of dependability. The researcher also conducted consultation with the supervisor in order to audit the whole researcher's activities when conducting the process of research.

Conformability test also called as objectivities test in qualitative research. According to Sugiyono (2010), the research was objective if the results of the research are agreed by some people. In this research, the researcher asked and checked the whole data to the supervisor and some lectures to provide suggestion and opinion about the data analysis.

