## **CHAPTER III**

#### **METHODOLOGY**

## 1.1. Research Design

According to Creswell (2012, p. 293), a research design is a process that a researcher uses to gather, analyze, and interpret data. The method the researcher chooses to gather and evaluate data for the study is known as the research design. The researcher should think about what data should have been collected and how it should be examined when choosing a study strategy. There are three types of traditional research designs: mixed, qualitative, and quantitative (qualitative & quantitative). This research qualitative approach which design a case study.

Based on its targets, this study is an exploratory case study because it aims to increase the researcher's experience in the field of teaching English while integrating technology into instructional activities conducted in the classroom and developing a theory about the use of WordUp application in teaching EFL classroom. Additionally, according to the data source, this case study is a single case study in which the researcher collects and examines data from a single class while also expanding on students' perceptions of using WordUp application in the classroom.

# 1.2. Participants

In this study, researchers investigated students' perceptions of the EFL classroom with the WordUp application. This teaching was carried out by an researcher as second English teacher who taught in class IX of SMP IT Al Hijrah Deli Serdang. There are two classes to be studied, namely classes A and B. The number of participants are 38 students that consist of two classes. Class IX A consists of 19 male students, and Class IX B consists of 19 female students. Researcher found that students were at a low cognitive level in English language skills starting from vocabulary and listening. They experience difficulties in learning English so that it becomes an obstacle in understanding all the material contained in the lesson. Therefore, researcher is interested in proposing variations in learning using technology. WordUp English application was used in the EFL classroom in class IX SMPS IT Al Hijrah. Researcher hopes that this application will have a positive impact on students in learning English. The teacher confidently teaches English lessons with the WordUp application. Class IX students of SMP IT Al Hijrah Deli Serdang were designated as research subjects. The EFL classroom process uses the WordUp application to determine the impact of students regarding EFL classroom

both positive and negative, after learning using the WordUp application. Then, researchers investigated students' perceptions regarding EFL classroom using the WordUp application.

### 1.3. Data Collection Procedure

Researcher applied the WordUp application to students in class IX of SMP IT Al Hijrah as a platform in the EFL classroom. Researchers instructed students to bring smartphones as a learning medium. Researchers asked students to download the WordUp application and install it on their respective smartphones. For students who do not have a smartphone, researchers provide the number of smartphones needed as an alternative tool. Once downloaded and installed on each student's smartphone. The researcher instructed students to open the application. In this application there are several lessons. There is listening, vocabulary and grammar, then the teacher instructs to choose vocabulary items and start from the basic level. Students follow the teacher's instructions. Every student learns English Vocabulary. If students succeed at the basic level, then the students move up to the edium level, at the medium level students experience a level of difficulty that is more than the basic level. At this level students begin to learn about two syllables. If students succeed at this level then they will move on to the difficult level. At this level, students learn English vocabulary which has more syllables.

The researcher used the following actions to gather the data:

### 1.3.1. Questionnaire

Researchers distributed questionnaires after the learning process. In this study, researchers provided questionnaires as one of the supporting factors in obtaining the results of this study. Prior to the interview, the researcher informed students about the questionnaire via a link to a Google form or a printed copy of the questionnaire he made for those without cell phones. The investigator then collected the questionnaires after the students completed them.

A questionnaire created using Google Forms formed the basis of this investigation. This survey consists of 5 open questions and respondents' answers (see attachment 1). It seeks to understand how students feel about using the WordUp application in the EFL classroom. Once survey data is collected, it is analyzed and interpreted qualitatively to explain or further explain the results.

Instructions for filling out the questionnaire are in the list of questions below: First, the researcher made an open questionnaire containing 20 questions about using the WordUp program to obtain vocabulary. generate surveys using Google Forms.

A. The researcher sent out questionnaires to two classes, each consisting of 19 students, for a total of 38 participants in this study. classifications IX A (male) and IX B (female).

- B. The teacher asks students to answer all questions.
- C. The researcher then tries to categorize each response.
- D. The researcher found a solution to ascertain the skill level of the students.
- E. Researchers draw conclusions from research findings.

#### 1.3.2. Interview

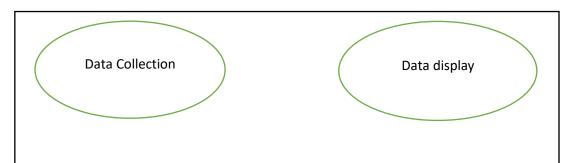
A number of pupils were interviewed by the investigator. The researcher created some precise questions but gave the subject considerable leeway in how they answered. Interviews are used to obtain data that cannot be obtained through visual observation. If an activity can be observed, but the motive for the activity being carried out cannot be fully observed, then in such a situation an interview is needed. In this study, interviews were needed to collect data that were not in the form of actions, such as reasons, motives, perceptions and attitudes.

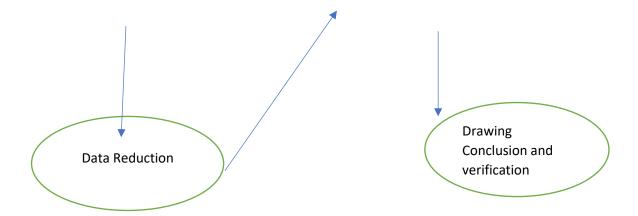
The data obtained from the interview is verbal. Verbal data is the result of conversations or questions and answers conducted by researchers. This interview was conducted to complete the observation data. Interviews were conducted with research subjects, which in this case were conducted with teachers and students of SMP IT Al Hijrah. Interviews conducted or directed to ask questions about research questions in order to clarify data or information that was not clear at the time of observation. The researcher asked the students about learning vocabulary using the WordUp application. Students elaborated on their arguments regarding learning English that they had never learned before using the WordUp application. After the interview, the researcher analyzed the students' answers and concluded that.

In this study, interviews were conducted to gather information and investigate students' perceptions regarding EFL classroom by using the WordUp application at SMP IT Al Hijrah.

## 1.4. Data Analysis Techiques

Four main forms of data (observation, interview, questionnaire, and documentation) were gathered and stored on computers and smartphones. In addition, voice recordings from the interviews were included in the audio data, which was continued at the transcribing stage. According to Miles and Huberman (2014), this technique has three analysis components: data reduction, data display, conclusion, and verification. The flowchart of data analysis in this study as follows:





(Mile & Huberman, 2014)

And in this study, the researcher utilized the following four stages to examine the data:

## 1. Data Collection

In this study, the researcher began by gathering all of the data through observations, questionnaires, and interviews before catagorizing it in accordance with the research aim and subsequently refining it using data search. When researcher approaches and establish relationships with research subject it is also a process of collecting data which was processed later.

Following the identification of the issue, the researcher conducted interviews with students to learn more about the teaching and learning process. The researcher created a transcription of the recording after compiling all the recording-related data. The transcribing was how the researcher got the data. The researcher then made a WordUp application in EFL classroom depending on how the students saw it.

The data used in this study includes information on vocabulary learning using the WordUp application as a tool to assist students improve their English. This digital learning process looks into student perceptions of how to use the program and issues that come up during learning.

## 2. Data reduction

Reduction can be interpreted as a process of selection, concentration, and attention to simplification of data that emerges from field notes (Patilima, 2006:98). The essence of this data reduction is the process of combining all forms of data obtained in the field into a script that can then be analyzed. The results of the recorded interviews were formatted into a verbatim form of the interview. The contents of this interview verbatim are the ongoing interview process, the essence of the interview, informant information, and the theme of the questions asked, then classify the results of the questionnaire that has been answered by students. This questionnaire helps strengthen the results of the interview.

Using this technique reduces the amount of information that must be stored in a data storage environment. In this study, researchers took data that had been collected through questionnaires and interviews during the research regarding students' perceptions of learning English using the WordUp application during the learning process in class, then categorized and selected the data simply.

# 3. Data Display

After all the data has been formatted in written form, the next step is to display it. The presentation of data is the management of semi-finished data resulting from data reduction into data that is categorized according to a simpler theme, and then the data is specified so that the results are almost visible.

In order to make inferences and take appropriate action, the researcher at this point developed a framework for summarizing the material. In this study, narrative writing is a popular approach for presenting facts. Narrative material was used by the researcher to discuss previously declassified data regarding the perceptions of students of the teacher's usage of the WordUp application in EFL classroom. The data were evaluated and described qualitatively.

### 4. Drawing the conclusion and verification

Drawing final conclusions in a series of qualitative data analysis according to the interactive model put forward by Miles & Huberman in Herdiansyah (2012). The conclusion in a series of qualitative research contains descriptions of all the sub-category themes listed in the categorization table. In this conclusion, the findings and results of the research are presented by providing an explanation of the conclusions from the answers to the research questions posed. In this study, researchers used a triangulation model of data sources. The intention is to

dig up the truth of certain information through various methods and sources of data acquisition, in this study using interviews, questionnaires and document analysis.

Finally, the researcher came to a conclusion and tested it by looking at the significance or symptom she had learnt from the study's participant. At this stage, the researcher derived conclusions from the previously completed data and compared them to the notes and observations they had made during the analysis.

#### 1.5. Trustworthines

In this qualitative study, the researcher used a technique to gather data gradually over time depending on her requirements until the data was sufficiently saturating. As a result, in this study, the triangulation approach and member check were employed to determine the reliability of the data (the people involved in this learning vocabulary by WordUp application).

Triangulation is a method for leveraging additional sources to verify the accuracy of data. By using something else unrelated to the data for verification and comparison with the collected data, the validity of the data is verified. Triangulation was broken down into three categories by Satori & Komariah (2011: 170-171): source triangulation, technical triangulation, and time triangulation. By looking for data from many sources that are still connected to one another, source triangulation is carried out. Technical triangulation reveals the data that is transported to the data source by utilizing a variety of approaches. While time triangulation is accomplished by gathering information at several times.

Triangulation is a method for utilizing additional sources to verify the accuracy of data. By using something else that is not related to the data for verification and comparison with the data collected, the validity of the data can be verified. Triangulation is divided into three categories according to Satori & Komariah (2011: 170-171): source triangulation, technical triangulation, and time triangulation. By searching for data from many sources that are still related to each other, source triangulation is carried out. Technical triangulation uncovers data transported to data sources utilizing various approaches. While time triangulation is done by collecting information several times. In this study, researchers used a triangulation model of data sources. The intention is to dig up the truth of certain information through various methods and sources of data acquisition, in this study using interviews, questionnaires and observation. From this type of triangulation, researchers use sources triangulation to obtain data validity.

Apart from that, researchers collected data using questionnaires and in-depth interviews to get in-depth answers from participants. Apart from that, the researcher uses a list of observations as supporting data and the researcher also uses documentation which can provide evidence that the participants are people who are worthy of being research subjects. After all that is done, the researcher gets the results of the research.

