CHAPTER III

METHODOLOGY

This chapter elaborates on the methodology used in conducting the research. Furthermore, it also describes the research procedure in order to discover the answers to the research questions stated in chapter one. It covers the research design, site and participants, data collection, and analysis.

3.1 Research Design

A qualitative case study was applied in this research. The case study technique is beneficial to apply when it is necessary to gain a comprehensive understanding of a topic, event, or phenomenon of interest in its natural, real-life setting (Crowe et al., 2011). Furthermore, a case study's design and data collection elements encompass various aspects, including using data triangulation to handle the unique technical condition in which a case study involves a more significant number of variables of interest than data points. Based on that understanding, a case study is preferred when the research question is "why" or "how" (Hollweck, p.75, 2015).

Given that the research aims to investigate how Technology-Mediated Task-Based Language Teaching (TM-TBLT) can help students improve their speaking skills, it is considered essential to apply a method to gain in-depth analysis concerning the particular matter. Furthermore, this study implemented multiple sources of data to collect an understanding of the topic. The content analysis was applied to analyze the recorded videos of online conferences and the Semi-Structured interviews.

## 3.2 Research Site and Participants

The research was conducted in a senior high school in Kuningan, which is located in the province of West Java in Indonesia. This study included a total of seven students who were enrolled in the eleventh grade and took part in a classroom

setting that was designed to execute the TM-TBLT framework over the course of six meetings. These individuals were chosen based on a preliminary task-sharing opinion study. This task has revealed that students have difficulties with fluency and pronunciation. This research utilises the Generation Global website as its technological medium. Furthermore, this research was not integrated with the regular class during its implementation; rather, a new class was developed so that it could subsequently be examined in connection to increasing students' speaking skills, particularly fluency, pronunciation, and adequacy. In the particular case in this research, TM-TBLT attempts to be implemented in this school due to its potential in relation to its technology facilities, despite the fact that technology-based learning has never been implemented before. In addition, the school is actively encouraging the integration of technology in language acquisition by means of the OSIS or intra-school student organizations programme.

3.3 Data Collections

Two instruments were used to answer research questions about improving students' speaking skills. The first is a video and audio recording of each conducted task, namely task types 1, 2, and 3. After students comprehend the use of technology, in this case, the Global Generation, including the benefits and functions of each feature on the website, they undertake these three tasks. Meanwhile, semi-structured interviews were used to support the results of the data analysis of video and audio recordings of student speaking performances. Thus, both instruments were required to answer research queries. The figure below depicts the data collection procedure for the two instruments used in this study.

Figure 3. 1 Data Collection Procedure
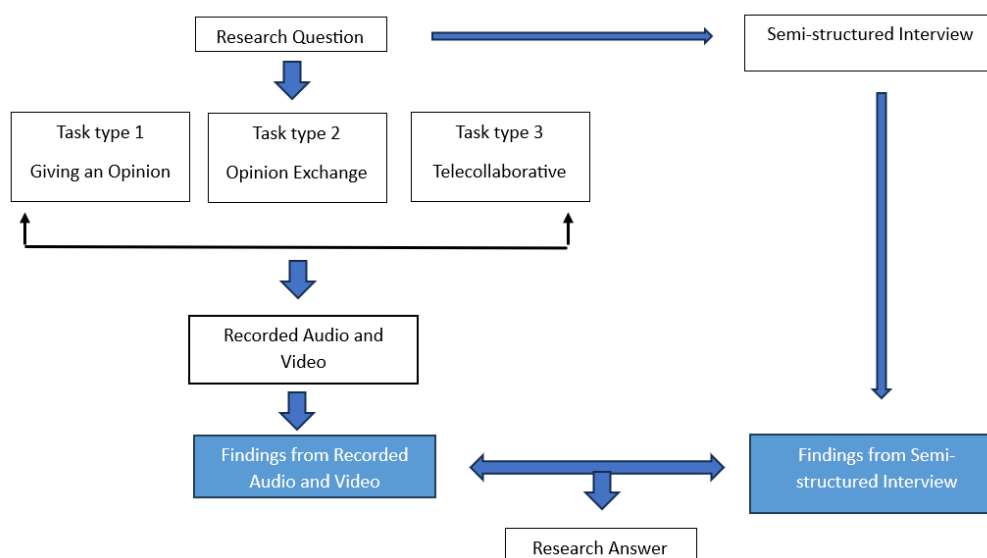
3.3.1 Recorded Audio and Video

The results of each student's audio recordings while performing task types 1 and 2 were collected. The video recordings were acquired while students participated in online video conferences. Two kinds of recordings are used to determine changes in students' speaking skills, beginning with task types 1, 2, and 3. Then, the overall data from the series of tasks will be compared to the outcomes of the preliminary study tasks. Thus, the collected data will be utilized to answer a question from the study regarding how TM-TBLT can assist students in enhancing their speaking skills.

3.3.2 Semi-Structured Interview

Semi-structured interviews involve posing predetermined open-ended questions to respondents, allowing in-depth topic exploration; in-depth interviews are often employed for conducting interviews with a person or occasionally with a group (Jamshed, 2014). The semi-structured interview was conducted in a casual form where the students who have distinguished elaboration in TM-TBLT were

asked several questions about three different themes. The interview consists of their opinion regarding the task, technology, and their response towards TM-TBLT. Each of the themes will be explained below.

- Recalling experiences of speaking class

    In this theme, students are expected to be able to discuss speaking-related classroom learning experiences. It includes how the learning process is conducted, whether speaking practice is performed, and the types of speaking assignments students complete. This theme will determine how the classroom environment was before the TM-TBLT was implemented, and the next theme will compare the improvement in students' speaking abilities through instrument analysis and interview questions.

- Recalling experiences of TM-TBLT (technology matters)

    In this portion of the interview, students will discuss the difficulties they encountered when the classroom was mediated by technology. These issues will be associated with the Pedagogic Technology Task (PTT) found in Task Type 1, Task Type 2 (Opinion-Exchange Task), and Task Type 3 (Online Video Conference). Thus, researchers can determine whether or not students are capable of overcoming technological challenges.

- Recalling experiences of TM-TBLT (task matters)

    This section discusses student responses to the provided task types, including Task Type 1, Task Type 2 (Opinion Exchange Task), and Task Type 3 (Online Video Conference). It is expected that linguistic aspects or the Pedagogy Language Task (PLT), which are related to the problems faced by students, can be gathered from the interview data in order to strengthen data analysis from other instruments.

- Students' response towards TM-TBLT

    In this part of the interview, the primary focus will be on how students respond to the overall learning mediated by TM-TBLT. Detailed information regarding the effects of learning completion on students can also be found on this particular section. The intended impact will be concentrated on the improvement of students' speaking skills.

3.4 Research Procedure

The present study utilizes the TM-TBLT Curriculum, which has been derived from the work of González-Lloret and Ortega (2014). Therefore, performing a Need Analysis is an essential component of this research. The NA will facilitate the acquisition of information pertaining to various sorts of tasks and the relevant technological tools suitable for implementation inside the classroom. As the first phase in this research, a preliminary study was undertaken to assess the initial proficiency levels of students, particularly in terms of their speaking abilities, prior to the implementation of the Technology- Mediated Task- Based Language Teaching (TM-TBLT) approach. This data was acquired by administering an assignment that involved soliciting opinions on the subject of identifying the most influential women. The outcomes of the task will serve as a point of reference, which will then be compared with the outcomes of executing the TM-TBLT curriculum. The outcomes of these comparisons will provide answers to the research question in this study. Further information can be obtained from the schematic technique depicted in the figure 3.2 in the preceding page, which outlines the methodology employed in this research.

Figure 3. 2 Research Procedure
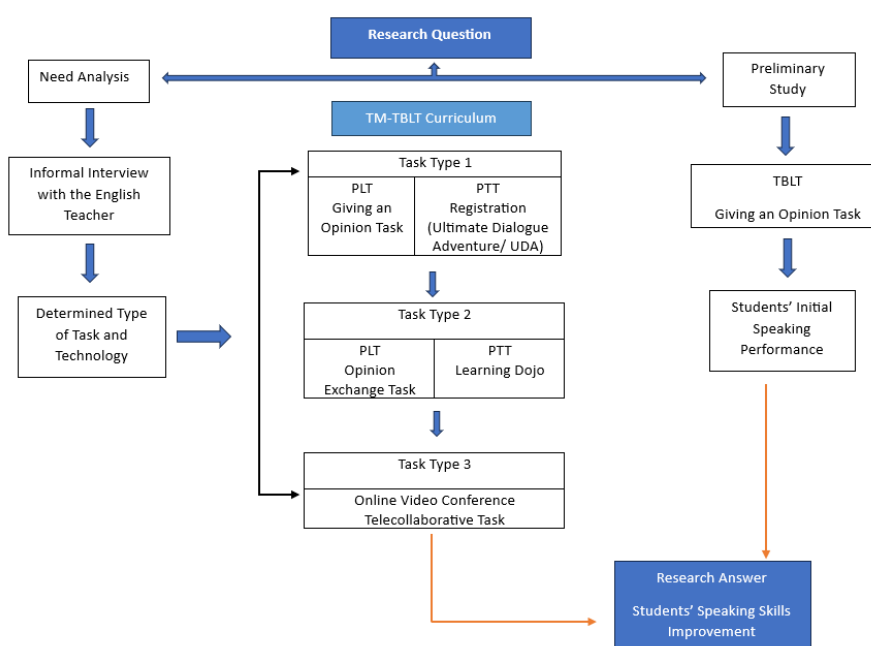
3.5 Data Analysis

The analysis of student artifacts, particularly audio and video recordings, was conducted through the lens of the theoretical oral proficiency assessment categories proposed by Brown (2004). The idea incorporates elements pertaining to the evaluation of students' oral communication skills. Nevertheless, in order to enhance the comprehensiveness of data analysis, various supporting theories have been employed in specific areas. One of the objectives is to conduct an analysis of the fluency aspect, utilizing the theoretical framework proposed by Crowther et al. (2015). The present study examines the task-related components, namely, PLT and PTT as well as adequacy, through a model of theory (González-Lloret & Ortega, 2014). This study employed close reading, understanding, and synchronization. This study modified the to encompass all aspects of speaking skills and the task itself. Several modifications were made to maximize the function of technology in improving students' speaking skills.

The process of analyzing data from audio and video recordings was accomplished by transcribing each student's speaking performance for task types 1, 2, and 3. (Refer to the appendix 4 and 6) for the student transcription analysis Excerpt and the rubric). Moreover, in order to maintain the reliability and validity of the data assessment, this study employed two experts in evaluating student scores in order to minimize the possibility of bias.

The investigation of semi-structured interview data was conducted using a thematic analysis approach. During the course of the study, the theory is implicitly referenced (Crowe et al., 2011), which outlines six sequential stages for the analysis of data, as mentioned below:

- Familiarization with Data:

    The initial phase is developing a comprehensive understanding of the data that has been gathered, encompassing many sources such as interviews, transcripts from focus groups, or any other textual materials. It is recommended to engage in a comprehensive examination of the data,

repeatedly reviewing it in order to get a profound comprehension of both its substance and the circumstances in which it is situated.

- Generating Initial Codes:

     The first step in the coding process involves producing initial codes. These codes serve as concise labels or tags that are allocated to certain regions of the data, highlighting noteworthy features or ideas. The procedure entails a methodical examination of the data, with the objective of identifying and emphasizing significant content.

- Searching for Themes

     In the process of data analysis, it is important to conduct a search for themes by consolidating codes that exhibit similarities. Themes refer to overarching patterns or recurrent concepts that encapsulate fundamental elements of the data. Conduct a comparative analysis of the codes in order to identify commonalities and disparities, which will facilitate the development of thematic patterns.

- Theme Review:

     After the identification of prospective themes, it is crucial to undertake a thorough review and refinement process to ensure their accuracy in reflecting the facts and their coherence and meaningfulness. Themes should possess specificity, clarity, and relevance in relation to the study objectives.

- Defining and Naming the Theme:

     The process of defining and naming themes involves the careful refinement of identified themes, followed by the explicit articulation of their substance and meaning in an exact manner. This process entails the formulation of precise and succinct explanations for each theme, rendering them comprehensible to external parties.

- Drafting the Report:

     The final stage is composing the theme analysis report. Please provide an analysis of the themes identified in the data, accompanied with pertinent quotes or extracts that serve as supporting evidence. Analyze and

examine the results in relation to the study goals and previous scholarly works, offering a comprehensive evaluation of the underlying themes.