CHAPTER III
RESEARCH METHODOLOGY

This chapter explicates research design, site and participant, data collection and also data analysis.

3.1 Research Design

The use of a qualitative case study design in this study is appropriate for several reasons. Firstly, the study aimed to describe the specific implementation of flipped learning in a non-formal education setting at an English course institution. This context is unique because flipped learning is not just an instructional model designed by individual teacher or researcher, but rather an institutional policy that all teachers must adhere to. The study aims to capture the nuances and complexities of implementing flipped learning in this particular setting, taking into account the institutional context and the training that teachers have received (Creswell, 2007).

Secondly, the utilization of a case study design in this research is particularly relevant given the current state of the research literature. A review of existing studies reveals a significant disparity between the number of studies conducted in formal education settings compared to non-formal education settings (Romi & Schmida, 2009). While numerous studies discuss flipped learning in formal education, there is a dearth of research in the non-formal education context. Additionally, the existing studies in non-formal education often suffer from limitations in terms of subject matter coverage, methodological approaches, and theoretical frameworks.

By employing a case study design, this research seeks to address these gaps and contribute to a better understanding of flipped learning implementation in non-formal education. As Yin (2006) suggests, a case study approach can provide a comprehensive and detailed exploration of a specific phenomenon within its real-life context. In this case, the focus is on understanding how flipped learning is implemented by teachers in a non-formal education institution to facilitate student's listening comprehension. Through an in-depth examination of the implementation process, the study aims to generate insights that can inform and improve educational practice.

Moreover, adopting a case study design aligns with Creswell's (2007) assertion that it leads to a better understanding of the phenomenon under investigation. By examining the intricacies of flipped learning in a non-formal education context, the research can shed light on the unique challenges, successes, and experiences encountered by teachers and students in this setting. The findings can contribute to a deeper understanding of flipped learning within the non-formal education landscape and serve as a foundation for further theoretical development and practical improvements.

In summary, the case study design employed in this research addressed the limited research on flipped learning in non-formal education and contributes to filling the gap in the literature. By examining the implementation process, challenges, and successes of flipped learning in this specific context, the study provides valuable insights that can inform and enhance educational practices. The findings have the potential to guide educators, policymakers, and researchers in designing and implementing effective flipped learning approaches in non-formal education institutions.

3.2 Site and Participants

This study focused on a non-formal education institution that has branches across Indonesia and has been in operation since 1959. This institution is known to have implemented flipped learning for all classes and made it a flagship program offered to the consumers. For the purpose of accessibility and research scope, the branch located in Jambi city, Sumatra, was chosen as the research site. In comparison to larger cities, Jambi only has one branch of this institution. The English program offered at this branch is similar to the programs offered at other branches, which includes English for Teenagers, English for Adults, and Conversation classes. These programs are classified based on the students' English proficiency levels, which range from elementary to higher intermediate. By selecting a branch in Jambi, the study aims to gain insights into the implementation of flipped learning in a non-formal education context within a specific geographical location, contributing to a more comprehensive understanding of flipped learning practices in diverse settings.

This research specifically focuses on the utilization of flipped learning at the elementary level and pre-intermediate level for Senior High School students. The rationale behind recruiting the observed levels is to enrich the data by involving more than one teacher. At the research site, each level is typically taught by only one teacher. Therefore, to address this limitation, an upper level is added, namely pre-intermediate. Consequently, two teachers have agreed to participate in this study. The two teacher participants in this research, named as Teacher A (teacher of elementary class) and Teacher B (teacher of pre-intermediate class), have distinct backgrounds and experiences related to the teaching and implementation of flipped learning.

Teacher A is a female teacher who has been teaching at the non-formal education institution since 2016. She has undergone two bridging courses to enhance her teaching skills specifically in the teenager and adult levels. In the beginning of 2019, she received training on implementing flipped learning, indicating her familiarity with this instructional approach. She has demonstrated a commitment to self-development in implementing flipped learning as evidenced by her two internal publications discussing strategies and techniques to enhance the implementation of flipped learning. She has received recognition as the best teacher twice in the last four years, highlighting her expertise and dedication to teaching.

Teacher B is a senior male teacher who has been teaching since 2009, indicating a significant amount of teaching experience in the non-formal institution. He has been trained to teach with a flipped learning model in 2019 demonstrating his involvement in the institution's efforts to adopt this innovative instructional model. During the initial interview, he acknowledged his struggle with technology in teaching, indicating a potential hurdle in effectively implementing flipped learning.

This study involved a total of six students to participate. They were shared equally in Teacher A's class and Teacher B's class. The recruitment process for student participants followed several steps. Initially, both teachers provided recommendations for 10 students who served the study best. These recommendations were based on students' performance in completing the flipped

learning materials and their level of cooperation. The teachers have given a warning that students are rather reluctant to attend any activities outside the ones that have already set for their program by the institution. Hence, it is important to take students' willingness to participate in the research into account when selecting the participants.

Later, the researcher reached out to the recommended students through a messaging platform (WAG) to explain the study's purpose, procedures, and their potential role in the research. The students were asked to voluntarily approve their participation. Out of the 10 recommended students, only 6 expressed their willingness to join the study. The basic information about the student participants is summarized in the following table.

Table 3. 1

Basic Information of Student Participants

Student	*Gender*	*Class*	*Teacher*
Student 1	Female	A	Teacher A
Student 2	Female	A	Teacher A
Student 3	Male	A	Teacher A
Student 4	Female	B	Teacher B
Student 5	Female	B	Teacher B
Student 6	Female	B	Teacher B

3.3 Data Collection

The following section briefly describes the tool and instruments used and also procedure of data collection.

3.3.1 Instruments

The data of this study are gathered with multiple methods that are recommended by Yin (2018) which include initial interviews, classroom observations, document analysis and post- observation interview.

3.3.1.1 Interviews

Interviews enabled the participant to reflect and expand on answers, allowing for more detail in their responses than would have been possible through a survey or opinion poll. Equally important, interviews allowed the researcher control over

the line of questioning (Creswell, 2009). It also allowed the interviewer to follow up with probes, while noting visible facial expressions, physical gestures, and tone of voice. Interviews were conducted with a semi-structured approach, to both collect specific data and permit some amount of exploration of the topic with the participants (Merriam, 2009). There were two kinds of interviews used for this study. The first was the initial interview with the teachers. The second one was post-observation interviews with the teachers and student participants.

Initial interview protocol was used to gather teacher's background information, their practices of teaching listening under flipped learning model, and also students' difficulties in listening sessions. To gather detailed information about the teachers' practices, various aspects were explored including learning materials and media, technologies employed, out-of-class activities, in-class activities, after-class activities, observed changes in students' listening comprehension following the implementation of flipped learning and also teacher's challenges. There was a revision made to the data collection aspects due to the absence of after-class activities in this non-formal institution, as a result, that point was deleted.

Post-observation interviews were applied to student and also teacher participants. It was used to allow for further clarification, elaboration and validation of the observed teachers' practices for in-class activities and students' responses, providing a more comprehensive understanding of the phenomenon being studied.

3.3.1.2 Document

This study also documented the content of the learning management system and the student's book to review and analyze student's out-of-class activities for listening sessionss. Document analysis is employed to review and analyze the out-of-class activities of the students, as these activities take place in their personal space. By examining these documents, the researcher gains insights into the concepts or materials which students deal with outside the classroom, as well as how the teacher integrates these activities with the in-class activities. This analysis provides a comprehensive understanding of the connection between the students' independent learning and the teacher's instructional strategies within the flipped learning model.

3.3.1.3 Classroom Observation

Observations gave the researcher a first-hand experience, allowing the researcher to keep field notes of participants' actions in class as they occurred, and were helpful in examining actions that may have been difficult for participants to discuss openly (Creswell, 2009). Observations also improve the validity of a study since they help the researcher gain a clearer understanding of the context being studied (DeWalt and DeWalt in Yin, 2018). Observations were also useful in determining if people behaved in the way they claimed (Bell in Yin, 2018).

The researcher observed the class as a non-participant observer The researcher felt the non-participant observer role caused fewer ethical problems than the participant observer as the researcher had little influence over the participants, removing the possibility of bias.

The interview questions and classroom observation sheet underwent a rigorous review process by an expert and two experienced teachers. The selection criteria for the validator were carefully considered. The expert chosen is an active lecturer in the English Language Education program, specializing in Teaching English as a Second Language (TESL) and blended learning. Additionally, he has extensive experience in teaching ICT for language teaching and learning. In December 2022, he conducted research on the concept of integrated flipped learning. Given his expertise and experience, he possesses the necessary qualifications to assess the instruments used in this study, particularly those related to the implementation of flipped learning to facilitate listening comprehension.

The other two validators are experienced teachers. The first teacher has been actively teaching since 2015, specializing in teaching integrated skills in an English as a Foreign Language (EFL) classroom. Additionally, she holds a senior teaching position at a private education institution that implements the flipped learning model and she has received training in teaching under the flipped learning model. The second experienced teacher serves as a senior teacher. She holds a master's degree in English language education and has an extensive experience in curriculum development. She has also conducted research in the field of curriculum formulation. Both of these experienced teachers possess valuable expertise and

insights related to teaching, curriculum development, and the implementation of the flipped learning model, making them well-suited to serve as validators for the study.

The validation process began with the researcher proposing their request for approval to the validators. Once the validators agreed to participate, the researcher sent the research instruments via email without the validation sheet. The validators reviewed the instruments and provided their comments and suggestions within a period of two weeks. The comments mainly focused on grammar, making the questions more specific, and simplifying the interview questions.

After receiving the validators' feedback, the researchers revised the instruments within three days and sent the revised version back to the validators, this time including a validation sheet. The validators then completed the validation sheet and returned it along with the instruments without any additional comments to the researchers.

3.3.2 Procedure of Data Collection

Data for this study were collected through multiple sources, including face-to-face oral interviews conducted at different stages of the research process, four classroom observations spanning a period of one and a half months, and document analysis of four links from the students' learning management system (LMS).

In the fourth week of February, the researcher conducted a pre-participation approach by visiting the teachers to provide further explanation about the purpose of the study and their role in it. The purpose of this visit was also to discuss and schedule the interviews and planned classroom observations.

The initial interviews with Teacher A and Teacher B took place on March, 23 2023 in the teachers' office at the observed institution. Prior to the interviews, the interview protocol was revealed to the teachers, allowing them to familiarize themselves with the questions and ensuring clarity. This approach helped the teachers anticipate the questions and ensured that the researcher's intentions were well-understood. The interviews were recorded using a recording application on an Android device. During the initial interviews, the researcher also sought permission from the teachers to access and review the Learning Management System (LMS) used for the observed classes. The teachers provided the necessary links, allowing

the researcher to examine the content of the flipped materials utilized in the classroom. This access to the LMS provided additional insights and information for the research analysis. The schedule for classroom observation followed the teacher's schedule for teaching listening.

Listening was taught every two weeks because in one unit there were 4 lessons each assigned to focus on different skill of English. The listening always came in the first meeting of each unit. Each meeting lasted for 90 minutes, during which the researcher used a classroom observation sheet to track observed points and take detailed notes on the events. There were 4 classroom observations conducted in this study, scheduled on March 27, 28 and April 10, 11. However, direct observation and note-taking sometimes resulted in the loss of important points due to lack of concentration. To overcome this, a camera was positioned in one corner of the classroom to record all students' activities effectively. Video footage was chosen as it allowed the researcher to replay the videos and examine them in greater detail. This approach was suitable for evaluating whether the teaching met specific standards or expectations (Hora & Ferrare, 2013). The researcher positioned themselves near the tripod-mounted camera to ensure adjustments could be made if the teacher or students moved. Throughout the study, careful observation of learning activities that facilitated students' listening comprehension in line with the principles of flipped learning was conducted, and detailed information was added to the fieldnotes for each aspect.

After conducting the classroom observations, post-observation interviews were conducted. Each interview lasted 45 up to 60 minutes. These interviews involved both the teachers and the students. Post-observation interviews with the teachers focused on observed behavior rather than to what the observer thinks the teacher is (Arikan, 2004). They were conducted one-on-one, taking into consideration that the teachers had different schedules. There were 4 post-observation interviews conducted. It had been done no longer than a week after their classroom observation. All interviews were conducted in the teachers' office using English.

The post-observation interviews with the students focused on asking how flipped learning facilitates their listening comprehension in the classroom. They were conducted one day after the classroom observation in the teachers' office. Similarly, the interviews with the student participants were also conducted one day after the classroom observation on a one-on-one basis. This decision was made because the researcher had previously encountered challenges in interviewing students within a group discussion setting. During such discussions, the student participants tended to rely on their peers' answers and were hesitant to provide detailed insights into their experiences. However, the 2nd post-observation interview with 3 students was conducted via phone due to the conflict on scheduling. At the start of the sessions, the researcher inquired about the language preference of the students. Two participants expressed their preference to use English, while the remaining four participants opted to use Indonesian language.

3.4 Data Analysis

The data for this research was analyzed through qualitative data analysis. All data were categorized and analyzed on the basis of research questions. An ongoing data analysis and interpretation in this study were conducted carefully. The data analysis process is described as follows.

Firstly, the data from the initial interview were transcribed to code their flipped learning practice especially in facilitating students' listening comprehension. Their answers about out-of-class activities and also in-class activity they did in the listening section were coded as raw information about their usual practices. The information about their difficulties and also the challenges were also coded. Transcribing process will be conducted immediately after the interview. Verbatim transcription is used to capture every utterance from the participant, this process also familiarized the researcher with the set of data (Lester et al., 2020)

After recording the teaching and learning process on video, the researchers meticulously watched the videos to validate the information recorded on the observation sheet. This step was taken to ensure the accuracy and reliability of the observations made during the classroom sessionss. By reviewing the videos, the

researchers could cross-reference the recorded observations with the actual events and activities that took place during the teaching and learning process. This process helped to verify and confirm the data collected through direct observation.

All the data were transcribed to text and processed by using Word's Insert Comment reviewing option. The data analysis process involved focusing on the units of transcripts obtained from the observation sessionss, initial and post-observation interviews, and the results of the LMS document analysis. This allowed for the development of initial codes related to how flipped learning facilitates students' listening comprehension and the challenges faced by non-formal education (NFE) teachers in implementing the flipped learning model. The analysis approach used in this study was inductive, meaning that the themes emerged directly from the data itself (Patton in Cohen et al., 2018). To support the identified themes in the study, relevant excerpts from the data were also provided.

Throughout the coding and data analysis process, the initial codes evolved into themes that the researcher used to categorize and establish connections within the data, aligning with the research questions. The themes that were developed in the analysis include: 1) Facilitating students' listening comprehension through flipped learning which have three sub-themes, flipped learning featured in the research context, flipped material to facilitate students' listening comprehension, and also teachers' strategies during in-class sessions to facilitate students' listening comprehension. 2) Teacher's Challenges in Utilizing Flipped Learning.

In order to ensure the trustworthiness of the research findings, two methods were applied, triangulation and member checking. Triangulation involved analyzing the data from multiple perspectives by using various data collection methods which aimed to provide a more comprehensive picture of the results (Heale & Forbes, 2013). This study employed initial and post-observation interviews, classroom observations, and document analysis. These approaches helped provide a comprehensive understanding of the research topic by considering different sources of information.

Additionally, member checking was employed to verify the accuracy of the findings and interpretations. It supported a holistic view of validity (Koelsch, 2013).

In this process, the transcripts of interviews and raw findings were shared with the teachers and students who participated in the study. They were given the opportunity to review the data to ensure that they aligned with their own experiences and perspectives. Later, the members signed the member check form sent via WhatsApp and returned it to the researcher.

By implementing both triangulation and member checking, the research aimed to enhance the credibility and validity of the findings, as well as to ensure that the voices of the participants were accurately represented in the research outcomes.