CHAPTER III

RESEARCH METHOD

A. Research Design

The researcher chooses qualitative research and case study design. As defined by Brink in (Mohajan H, 2018), people's experiences, convictions, and personal meaning systems pique the interest of qualitative researchers. Qualitative research does not make use of statistical analysis or empirical computation. A case study gains much more power when the phenomenon being studied takes place in a complicated, real-world developing environment where it is challenging to isolate the phenomena from the setting since the number of components relevant to the study quickly outnumbers the total number of data points. Case studies are excellent at producing a comprehensive and in-depth understanding of a particular context and the people who live in it because of their capacity for the methodical analysis of many types of data, as claimed by Zohrabi in (Mohajan H, 2018).

A case study is a research technique that thoroughly comprehends an issue or phenomenon occurring within a particular system. To fully understand a phenomenon in real life, case study research requires an indepth investigation into an individual, group, or event. It is widely used in the humanities and social sciences to examine complex issues and explain specific events or situations. Documents, observations, interviews, and other information sources can all be used to gather data for a case study. Case study investigation aims to fully comprehend the case subject while generating new theories or insights (Hayden, 2022).

However, recent developments in case study methodology have shown that it is a legitimate approach for describing and investigating ideas, forming informal connections, and developing and bolstering theories. Qualitative case studies come in three varieties: explanatory, exploratory, and descriptive. A descriptive case study offers a comprehensive account of a phenomenon. In contrast, an exploratory case study investigates scenarios where a single outcome is unknown, and an explanatory case study clarifies the causal relationship (Peng and Shiyu, 2019).

Tellis (1997) proposed the following steps in using the case study method:

1. Determine and define the research questions

The first step toward defining a clear research focus is coming up with specific research questions about the issue or circumstance being studied, which could relate to a program's efficacy, an entity's operations, a person's behavior, or a group's responses. After that, conducting a thorough literature review to inform the research questions and gain knowledge from previous studies becomes crucial in determining the design, execution, and final public dissemination of findings of the study while simultaneously embarking on an extensive case study investigation using a variety of data collection techniques that are in line with these

research inquiries. In this research, the researcher created two questions related to the research title focused on differentiated learning. The questions are about the factors of differentiated learning within an independent curriculum that contribute to students' progress and satisfaction in ELT and the challenges teachers face in implementing differentiated learning strategies in an independent curriculum for ELT.

2. Select the cases and determine data gathering techniques

Selecting 'single' or 'multiple' cases for in-depth analysis entails treating each as a separate unit contributing to the overall study, requiring decisions about their distinctiveness, representativeness, or diversity in terms of geography or other factors, all while continuously matching selections with the goal of the study to identify relevant incidents and evidence, guaranteeing a careful selection process that helps to define the boundaries around the selected case or cases precisely. This research selected a single case study because it allows researchers to focus on a particular context about the application of differentiated learning in an independent curriculum for ELT. This allows an in-depth understanding of how this learning method is applied and perceived by students in certain situations.

Predefining the evidence to be collected and the analytical methods to handle the data is essential during the careful planning phase. Various tools, including observation, documentation reviews, interviews, and even the collection of physical artifacts, are considered. In this research, the researcher collected data by observing and interviewing students to determine how attitude, motivation, confidence, proficiency gaps, and schemata can influence student progress and satisfaction when learning English through differentiated learning in the classroom. The researcher also interviewed a teacher about the challenges of teaching differentiated learning in the classroom.

3. Prepare to collect the data

Careful planning for organized data storage and handling is necessary to handle the potentially overwhelming volume of collected data systematically and avoid deviating from the original research purpose and questions. This includes making preparations for handling substantial data in a documented, structured manner, which may involve establishing a pilot site for preliminary testing using planned datagathering techniques, keeping track of problems encountered to improve strategies for the actual study, as well as creating introductory letters, confidentiality protocols, and being prepared to review and revise the research design and initial set of research inquiries. In this research, data was collected through observation and interviews. The researcher created research tools, such as observation guidelines in the classroom and interview protocols, which were provided to students and teachers.

4. Collect data in the field

Effectively gathering and organizing various sources of evidence in an all-encompassing and methodical way to allow for estimation, in addition to carrying out observations to identify possible factors influencing observed phenomena or behaviors, is essential for case study research. Any modifications must be methodically documented to preserve flexibility, focusing on careful field note recording of observations or interviews to aid in pattern recognition or possibly require revisions to the data collection strategy due to new trends or the need for reformulation. In this research, the researcher collected data at MTsN 1 Kotawaringin Barat by conducting interviews and observing how differentiated learning can influence students' satisfaction in learning English and the challenges teachers face when implementing differentiated learning in the classroom.

5. Evaluate and analyze the data

Analyzing raw data through diverse interpretations to establish connections with the initial research questions, leveraging multiple data collection methods to triangulate information for reinforced research findings, and engaging in categorization, tabulation, and data recombination to address the primary research inquiries; encountering data discrepancies or outliers may necessitate revisiting subjects for verification or fact-checking, ensuring fair treatment of evidence throughout, culminating in analytical conclusions that address the primary "why" and "how" questions from research. In analyzing the data, the researcher selected Miles and Huberman's interactive data analysis model, based on the three-part theory framework: data reduction, data

display, and conclusion drawing and verification.

6. Prepare the report

The case study comprehensive report seeks to show that all aspects of the subject and its boundaries have been thoroughly examined. The written report aims to simplify complex issues for reader comprehension, fostering independent understanding while potentially enabling readers to apply the experience to real-life scenarios; the case study's findings and insights can be conveyed in a variety of formats by presenting multiple cases as separate chapters or by organizing the study chronologically or narratively.

B. Research Setting

This research was conducted at MTsN 1 Kotawaringin Barat, specifically among the 9th-grade students. This school is located on Jl. Cilik Riwut 1, precisely in Arut Selatan District, Pangkalan Bun City, Kotawaringin Barat Regency, Central Kalimantan. It was carried out from January until February 2025. This school implemented the independent curriculum three years ago, starting around August 2022. I chose this school because MTsN 1 Kotawaringin Barat was the first to introduce an independent curriculum in Pangkalan Bun, Kotawaringin Barat. MTsN 1 Kotawaringin Barat is one of the pilot schools utilized as a model by MTsN Lamandau to better understand the implementation of the independent curriculum.

C. Participants

The participants of this research are a teacher who teach English lesson and 9th grade students at MTsN 1 Kotawaringin Barat. The researcher generates data dealing with one teacher and fifteen students' views were chosen from two classes: seven from 9A and eight from 9B, concluding five males and ten females, such as factors of differentiated learning within an independent curriculum contribute to students' satisfaction with ELT and the challenges discovered by teachers in putting differentiated learning strategies in an Independent Curriculum for ELT.

D. Data

In this research, the researcher explores the factors that influence students' progress and satisfaction and the challenges discovered by teachers of differentiated learning. The research subjects or data sources consisted of several 9th grade students and a teacher from MTsN 1 Kotawaringin Barat, who were active participants in this research. Data was gathered through classroom observations and interviews with students and teachers who implement differentiated learning in English language teaching (ELT) within an independent curriculum.

E. Technique of Data Collection

The researcher used case study in this research, so the researcher took an observation and interview to collect data.

1. Observation

The main method of data collection in qualitative research is

observation. It includes monitoring things like actions, events, or physical traits as they happen in the wild. Two kinds of observations exist: overt observations, in which the participant is aware of the fact they are being viewed, and covert observations, in which the subject stays hidden and nobody knows they have been monitored. One advantage of covert observation is that people are destined to behave naturally because they are not aware of the fact that are being watched. However, the researcher often needs to provide an overt observation because of the possible ethical issues about sharing his or her observation (Ekka, 2021). In this study, the researcher used overt observation, in which the researcher observed students directly in the classroom by observing from behind. Researcher conducted observations once a week in each class according to the English learning schedule of classes 9A and 9B for 7 weeks.

2. Interview

One of the most popular qualitative methods is conducting indepth interviews. Furthermore, conducting and participating in interviews can be a fulfilling experience for both interviewers and participants. In-depth interviews give participants, whether part of the study population or someone connected to it professionally, the chance to express themselves in a way rarely possible in everyday life. Many people find talking about their beliefs and life experiences with someone who genuinely listens to them flattering and even cathartic. Interviewers who participate in in-depth interviews are granted the opportunity to understand the personal lives of practical strangers (Mack et al., 2011).

The interview schedule must be designed with questions that will address the main objectives and goals of the study, as well as those that are likely to provide a wealth of knowledge regarding the phenomenon being studied. A good interview question should be openended, sensitive, comprehensible, and neutral, it should not only accept a yes or no response. It frequently works best to start with questions that are easy for participants to answer before introducing more delicate or complex topics. This can help interviewees feel more comfortable, gain their confidence and rapport, and frequently produce rich data that further develop the interview (Gill et al., 2008).

In this research, researcher using semi-structure interview, the interview begins with the issues covered in the interview guidelines. Researchers can develop questions and decide for themselves which issues to raise. Although interviewers aim to obtain the participants' perspectives, they must remember that they need to control themselves to achieve the research objectives and topics explored (Rachmawati, 2007)

F. Research Instrument

In this qualitative research, the researcher used two instruments to gather the qualitative data, namely, the interview protocol and observation guidelines. Interview protocol ensure that researchers obtain the same type of data from participants. Researcher can save time in this manner. Interview guidelines focus on specific research areas but can be revise after interviews as new ideas emerge later (Rachmawati, 2007). Observation guidelines is a guide consists of the questions intended to be answered through observation. This guide will serve as a foundation for observations, reminding us of what researchers are searching for and why.

G. Data Analysis

In analyzing the data, the researcher selected Miles and Huberman's interactive data analysis model, based on the three-part theory framework of Miles and Huberman in (Miles et al., 2014): data reduction, data display, and conclusion drawing and verification.

1. Data reduction

Data reduction is the process of selecting, condensing, reducing, abstracting, and modifying the data that appear in composed field notes or transcriptions.

2. Data display

The second primary flow through analysis activity is data play. A display is typically a streamlined, orderly collection of information that facilitates action and conclusion drawing. Observing displays enables us to make sense of what is going on and to act either by conducting additional analysis or by acting on our understanding. The most popular way to present qualitative data.

3. Conclusion Drawing and Verification

The third flow of research activity is conclusion drawing and verification. Initially, the qualitative analyst notes regularities, patterns, explanations, possible designs, causal circulates, and propositions in an effort to begin deciphering the meaning of the data. "Final" conclusions may not be made public until after gathering information is finished, depending on the scope of the database of observations, the structuring, storage, and retrieval strategies used, the analyst's level of experience, and the funding agency's requirements.

As the analyst moves forward, conclusions are also checked. Verification can be as quick as an analyst's brief digression into the field notes during writing, or it can be as long and involved as protracted deliberation and discuss with colleagues to create a thorough plan to duplicate the result in a different set of data. Testing is necessary to determine the validity, plausibility, and "confirmability" of the meanings that emerge from the data. If not, we are left with fascinating stories about what transpired that may or may not be true or useful.

H. Technique of Data Trustworthiness

In light of the increasing use of qualitative research methodologies, it is crucial to provide thorough guidance to ensure the quality of the methods used. The important criteria identified by Lincoln and Guba cited by (Afiyanti, 2008) which are credibility, transferability, dependability, and confirmability.

1. Credibility

Susanto et al. (2023) pointed out, credibility is a criteria that gauges the truth value of information and data gained. This means that the results of the study must be critically trusted by all readers, as well as the participant as the source of information. Then, Afiyanti (2008) added, a qualitative study result becomes credible if the findings fulfill their goal of examining problems or portraying settings, processes, social groups, and various or complex interaction patterns.

In qualitative research, data can be considered to be credible when there is a similarity among what the researcher explains and what actually happens to the subject under study (Mekarisce, 2020). Testing the authenticity or trustworthiness of qualitative research data involves establishing observations, conducting continuous surveys or interviews, triangulation, employing reference materials, and member checks (Susanto et al., 2023)

a.) Extension of observation

Sugiyono clarified on (Mekarisce, 2020) in the expansion of observation to assess the trustworthiness of research data, specifically by observing whether previously gathered data is correct when checked back into the field. If it is correct after checking back into the field, it indicates that it is credible, and the researcher can end the observation extension time.

b.) Increasing persistence

Researchers can increase tenacity in the form of checking again when the data that has been acquired is right or incorrect, by making continual observations, reading numerous book references and connected study or paperwork, so that the researcher's insight will be wider and deeper (Mekarisce, 2020). This allows researchers to examine any information they get carefully, in detail, and in depth in order to determine which data is meaningful and that which is not (Susanto et al., 2023)

c.) Triangulation

The aim of triangulation is to improve the theoretical, methodological, and interpretive strengths of qualitative research. Triangulation is also defined as the process of reviewing data from several sources, techniques, and time (Mekarisce, 2020).

1.) Source triangulation

Source triangulation can be implemented by comparing data gathered from several sources.

2.) Technique triangulation

Technique triangulation can be accomplished via examining data from the same source but using different procedures.

3.) Time triangulation

Time triangulation can be obtained by re-checking data to the source and applying the same technique but with a different time or circumstances.

d.) Using reference materials

Reference materials are used to verify the authenticity of data discovered by researchers. When in-depth interviews with participants are conducted, audio-visual recordings of the data are gathered.

e.) Member check

Member check is the process of verifying data against the data source. The goal of conducting a member check is to ensure that the material in the research report is consistent with what the data source or informant intended. A member check can be undertaken following the conclusion of a data collection period. The process can be carried out individually, with the researcher meeting the data source or participating in a group discussion forum. Additionally, Susanto et al. (2023) conveyed, the researcher distributed transcripts of the in-depth interviews to the participants to balance impressions, asked if there was anything else that needed to be added or modified, and approved on the transcripts.

2. Transferability

Transferability is a criteria that indicates the degree of accuracy of a research result, which means that it is used to determine how well the findings of a study conducted on a specific population may be applicable to other groups in the same circumstance. This criteria is vital for ensuring the validity of qualitative research. A full description of the findings collected will considerably assist other researchers who intend to use the data from this study as a foundation for carrying out additional research linked to the data or research outcomes that have been obtained (Susanto et al., 2023). Transferability indicates the degree of accuracy or the extent to which the study's results were applied to the population from which the participant was picked (Mekarisce, 2020).

3. Dependability

As stated by Afiyanti (2008), dependability is a criteria for measuring the extent to which qualitative research findings are consistent when conducted by various researchers at different times using the same technique and interview scripts. Dependability is defined as the ability to replicate the study and conduct checks that include a full and detailed assessment of the data and supporting literature by an external reviewer (Susanto et al., 2023). If the researcher does not have a track record of their field or research activities, then their dependability can be doubted (Mekarisce, 2020).

4. Confirmability

Confirmability in qualitative research is more commonly interpreted as the concept of intersubjectivity or transparency, in other words, researchers' willingness to disclose clearly about the process and components of their research so that observers or researchers can make findings about their results (Afiyanti, 2008).

Confirmability is the process of examining criteria, specifically the methods taken by researchers to confirm the results of their studies. Researchers use a variety of methods to improve the confirmability of their findings, including peer debriefing, member checking, and reflexive journaling (Mekarisce, 2020). Peer debriefing entails soliciting input from colleagues or experts to authenticate interpretations and mitigate researcher bias. Member checking, a process in which participants thoroughly examine and validate the accuracy of the findings, enhances the level of confirmability. In addition, reflexive journaling enables researchers to record their thoughts, biases, and reflections, promoting transparency and reducing subjectivity.