

CHAPTER III

RESEARCH METHOD

A. Research Design

The two types of research designs, qualitative and quantitative, are based on the theory of research approach. The approaches used in qualitative research included reading literature reviews, assessing current problems, establishing ideas, creating conceptual constructs, and interviewing respondents to obtain comprehensive details. A qualitative researcher usually gathers data from multiple sources and has more options than ever regarding data collection, including online and email-based methods. To collect this data, the researcher creates written forms or protocols for documenting the information. For example, protocols for observations or interviews must be developed. Additionally, the researcher must prepare for potential "field issues" that may arise during data collection, such as insufficient data, the need to leave the field or site early, or the loss of information. Ultimately, a qualitative researcher needs to choose a method for data storage that allows for easy retrieval and protects against loss or damage.

A case study is an empirical investigation that examines a phenomenon in its actual setting. As Yin (2009) highlighted, Several data collection techniques are employed in case study research because they entail thoroughly

examining a phenomenon. It should be emphasized that, as Yin (2009) pointed out, a case study is a research strategy or design to examine a social unit rather than a technique for gathering data. Creswell (2014) clearly and thoroughly explains case study research. Several steps in the data collection and analysis procedures for case study research must be appropriately organized and carried out for an accurate and thorough analysis of the study data.

1. Selection of research case

The first step in a case study is selecting the research case. The researcher focused on the teacher's implementation of differentiated assessment in English within the independent curriculum and the teacher's and student's perspectives on the benefit of implementing differentiated assessment in English within the independent curriculum in the school.

2. Establish the research question

- a. How does the teacher implement differentiated assessment in English subject within the independent curriculum context?
- b. What are the benefits of implementing differentiated assessment in English subject from the teacher and students perspectives?

3. Determine data collection

This data collection entails gathering information through interviews and observations. The researcher has developed research tools such as semi-structured classroom observations that can be used to collect data for the stages of learning, implementation of differentiated assessment in

English subjects with the teacher, and structured interview guidelines that are provided to benefit from teachers' and students' perspectives.

4. Data organization and coding

Once the data related to implementing differentiated assessment in English within the independent curriculum has been collected, it is essential to organize and code it for analysis. The data should be organized into themes or categories that align with the research question and objectives.

5. Analyzed the data

The researcher applied interactive data analysis and thematic analysis to help readers understand the research findings based on themes. The researcher analyzed and organized the data in the field notes and interview transcripts to categorize the data into groups. After reviewing all the results, the researcher evaluated the data, looking for general and specific information. This information was then explained using the sequence of events.

6. Validation and conclusion of findings

Maintaining the accuracy of the results needs an important step: validation of the findings, implementation of differentiated assessment, and the benefits of differentiated assessment from the teacher and students perspectives. The researcher double-checked whether the data was correct and by the research questions and conversations. Then, it was summarized

into a conclusion, and the researcher added a description of the research results.

B. Research Setting

The researcher conducted this study at SMAN 5 Banjarmasin, South Kalimantan, Indonesia. The researcher made initial observations before deciding which school to study. The researcher chose the school because it fulfills several research criteria. The factors were that the school implemented an independent curriculum and became a driving school. The study was conducted from 22 October 2024 to 28 November 2024.

C. Participant

The participants in this study were an English teacher and 10th grade students of SMAN 5 Banjarmasin, South Kalimantan. The research was conducted through a differentiated learning process using differentiated assessment in-class observation and interviews with the teacher and twenty students from the four classes selected for the study. The researcher selected five students from lower, intermediate, and higher students each class to represent the population and the recommendation of the class teacher based on the diagnostic assessment.

D. Data

Data were collected through observations and semi-structured interviews in the classroom with the teacher and students who participated in implementing differentiated assessment in English subjects in the independent

curriculum. The researcher also investigated the benefits of implementing differentiated assessment in an independent curriculum. Research participants or data sources included several tenth-grade students and a teacher from SMAN 5 Banjarmasin who actively participated in the study.

E. Technique of Data Collection

The data were collected through semi-structured in-class observation and interviews because the researcher chose the case study as an approach for investigating the independent curriculum case. Jamshed (2014) explained that observational research is a qualitative research method involving participant observation and research in the field. Observed data can be used for additional or confirmatory research. Observation in this study was carried out directly, namely observing the teacher implement differentiated assessment in English language learning within an independent curriculum. The researcher follows learning activities from beginning to end in class. Observations were conducted from 22 October 2024 – 28 November 2024, and were conducted eight times in four classes and twice each. The following is a schedule of observations made by researcher:

Table 3.1 Observation Schedule

No	Date	Time	Class
1	Tuesday, 22 October 2024	10.00 - 12.15	X I
2	Tuesday, 29 October 2024	10.00 - 12.15	X I
3	Thursday, 31 October 2024	07.30 - 09.45	X G
4	Thursday, 07 November 2024	07.30 - 09.45	X G

5	Monday, 18 November 2024	13.00 - 14.20	X J
6	Tuesday, 19 November 2024	07.30 - 08.15	X J
7	Thursday, 21 November 2024	10.05 - 12.15	X H
8	Thursday, 28 November 2024	10.05 - 12.15	X H

Observations are beneficial for gaining insights into a specific situation and actual behavior instead of reported behavior or opinions. During the observation, the observer notes everything or selects particular aspects of what is happening around them (Busetto et al., 2020).

The researcher also conducted the observations belongs to the most significant forms of case study research. Interviews are frequently used in case study research, nevertheless. Rather than being organized queries, they would seem like organized conversations. In a case study interview, the researcher would ask several questions using interview guidelines and face-to-face. The inquiry included open-ended questions, resulting in various responses to enhance the clarity of information (Rubin, 2005). In this study, the researcher chose to use in-depth interviews. Before going to the field, the researcher prepared well what questions the researcher would ask the teacher and students regarding implementing and knowing the benefits of differentiated assessment in English language learning in the independent curriculum during the interview process. The interviews conducted by the researcher were conducted in stages, with five meetings from 23 October 2024 - 28 November 2024. The following is a table of the interview schedule conducted by researcher:

Table 3.2 The Interview Schedule with the Teacher

No	Date	Time
1.	Wednesday, 30 October 2024	13.00 – 15.00

Table 3.3 The Interview Schedule with the Students

No	Date	Time	Class
1	Wednesday, 23 October 2024	10.05 - 10.45	X I
2	Tuesday, 05 November 2024	10.05 - 10.45	X G
3	Thursday, 28 November 2024	10.05 - 10.45	X H
4	Thursday, 28 November 2024	12.00 -13.00	X J

In addition, The researcher also conducted unstructured interviews to find out more deeply by developing questions based on the answers given by the teacher and students regarding the implementation and benefits of differentiated assessment.

F. Research Instrument

The researcher employed two methods to collect qualitative data: an interview guideline and semi-structured in-class observation. It attempted to resolve the two research questions raised in Chapter 1. Table 3.4 serves as the instrument to answer each research question (RQ).

Table 3.4 Research Instrument

No of RQ	Point of Research Question	Research Instrument
1	The Implementation on Differentiated Assessment in English Subject within Independent Curriculum	Observation Protocol Interview Guideline
2	The Benefit on Differentiated Assessment in English Subject within Independent Curriculum from the teacher and students perspectives	Interview Guideline

Research instruments were used to collect data through observation and semi-structured interviews in the classroom with the teacher and students who participated in implementing differentiated assessment and its benefits in English subjects in the independent curriculum.

G. Data Analysis

The researcher chose to apply two approaches in data analysis techniques, namely the interactive data analysis model and thematic analysis. Both methods were designed to provide a comprehensive framework and simplify data processing at a later stage. The interactive data analysis model helps to select and detail essential data, while thematic analysis detects, analyzes, and interprets patterns of meaning (themes) in qualitative data. These two analyses are very appropriate data analysis methods used to investigate what is happening from the researcher's perspective and analyze data from the implementation and benefits of differentiated assessment in English language learning in the independent curriculum.

1. Interactive Data Analysis Model by Miles et al. (2014)

The results of in-depth interviews and classroom observations were processed using the interactive data analysis approach proposed by Miles et al. (2014). These data analysis steps describe four simultaneous processes.

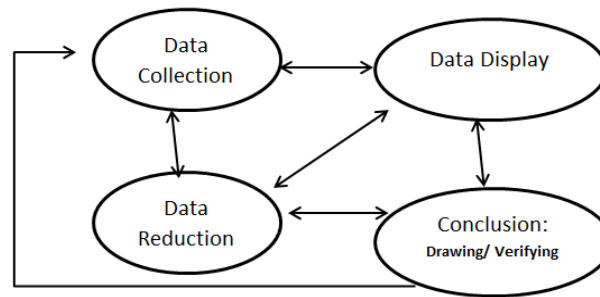


Figure 3.1 Interactive Data Analysis Model by Miles

The researcher conducted a study on a specific study topic, focusing on data reduction and data display. The researcher collected data through field observations and interviews, made transcripts, and presented them in a descriptive format. The data was then displayed using charts, short descriptions, and relationships between categories. The final step is to make provisional conclusions until supported by consistent evidence when returning to the field. The purpose of the conclusion is to answer the research question, which shows the credibility of the researcher's findings.

2. Thematic Analysis

The researcher would analyze the data to find themes and identify patterns in the data (Braun, 2006). The following are the stages of thematic analysis with a description of the analysis process adapted from (Braun, 2006). Based on (Braun, 2006), six phases and themes can be found in the data, namely:



Figure 3.2 The Steps of Thematic Analysis (Braun, 2006)

- a. Phase One: Familiarisation with the Data
 - 1) Transcribing the results of the teacher and students interview data from audio to text.
 - 2) Reading back the data gathered through observation in the class.
 - 3) Interview and observation data were grouped and named for simple analysis and organization.
 - 4) Maintaining transcripts, journals, and reflective observation notes.
 - 5) Saving data backups.
- b. Phase Two: Generating Initial Codes
 - 1) Read the deep meaning of the data from the interviews and observations that have been carried out.
 - 2) Each data type uses a different code to make it easier to group them.
 - 3) Rechecking the code that has been created.
- c. Phase Three: Searching for Themes
 - 1) Describe the themes temporarily through the phenomena being studied.
 - 2) Make notes related to creating themes in interview and observation data.
- d. Phase Four: Reviewing Themes

- 1) Verify that the themes and subthemes are consistent with the data collected through observations and interviews with the teacher and students.
 - 2) In the reflexivity journal, ensure that the research questions are based on the raw data obtained from interviews and observations.
 - 3) Evaluating research questions to confirm topics and facts are relevant.
- e. Phase Five: Defining and Naming Themes
- 1) Assign labels to each theme in the data that has been collected.
 - 2) Confirming the theme is in line with the research questions.
 - 3) Documentation for theme naming.
- f. Phase Six: Writing Report
- 1) Selection of clear and engaging extract examples in data collection.
 - 2) Reconnect the analysis with the research questions, objectives, and previous literature reviews with the data that has been obtained.

In this case, the researcher made a serious effort to ensure the validity of the information collected. The researcher rechecked the observations' results from the beginning of the interview to describe the valid results that answered the formulated problem. All this was done to achieve the research objectives.

Table 3.5 The Matrix of the Research Instruments and Data Analysis Techniques

No of RQ	Technique of Data Collection	Instrument	Participant	Investigated Data	Design	Data Analysis
1	Interview and Observation	Interview and Observation Guideline	<ul style="list-style-type: none"> • Teacher • Student 	<ul style="list-style-type: none"> • Steps for implementing differentiated assessment in English subject within independent curriculum • Elements that appear in differentiated assessments in English subjects in the independent curriculum 	Qualitative Phenomenology	Interactive Model of Data Analysis Thematic Analysis
2	Interview	Interview Guideline	<ul style="list-style-type: none"> • Teacher • Student 	<ul style="list-style-type: none"> • Benefits experienced by the teacher and students after implementing differentiated assessment in English subject within independent curriculum 	Qualitative Phenomenology	Intearactive Model of Data Analysis Thematic Analysis

H. Technique of Data Trustworthiness

Each research project must undergo several validation processes before the public can approve it and persuade readers to trust their findings. Sugiyono (2020) claimed that the data validity checking technique provides the highest confidence level and is responsible for the truth. The researcher must build research protocols and processes to ensure their findings are helpful. The overall criterion for qualitative research is trustworthiness. They established four parallel criteria: credibility for internal validity, dependability for reliability, transferability for external validity, and confirmability, similar to the objectivity criteria (Laumann, 2020). On the authority of Lincoln and Guba (1985), there are four steps to test the validity of the data :

1. Credibility (Internal validity)

This research verifies data validity (trustworthiness) using credibility criteria. Credibility aims to show that the information the researcher collects is based on the facts in the field. The following is how to obtain the credibility of the research results:

a. Extended observation

In this case, the researcher conducted field observations eight times for four classes, with each class being observed twice, to deeply understand the implementation and benefits as well as the application of various assessments in the English subject within the Merdeka

Curriculum, to ensure that all critical data is collected and can answer all research questions. After the data was collected, the researcher returned to the research position to check or recheck whether the information previously collected had been modified. If there is no change in the data, the researcher concludes the research. With the increase in the extension of observation, the interaction between the researcher and the informant would be more familiar (there is no distance anymore), open, and trust each other so that no information is hidden.

At this stage, the researcher tests the newly collected data for the first time to see if they would change at the next meeting. The extended observation ends if there is no change and the data is correct.

b. Increase accuracy

In this way, the researcher continuously make careful observations in the classroom by reviewing and verifying the data collected from interviews and observations with resource persons related to the implementation of differentiated assessment and benefits in English subjects within the independent curriculum. The researcher also read several related sources to obtain additional information for accurate and systematic results.

c. Triangulation

In this way, the researcher can re-evaluate the results by comparing them with different sources, methods, or theories. One way to do this is to ask the question again with other variations to test whether the answers given by the participants are consistent.

As stated by Sugiyono (2013), source triangulation means collecting data from various sources and evaluating them later. The researcher double-checked the data obtained from interview participants and analyzed it to arrive at conclusions.

a. Triangulation of Source

Sugiyono (2012) mentioned that source triangulation means getting data from various sources by checking data from multiple sources. The researcher double-checked and analyzed the interview participants' data to make conclusions.

b. Triangulation of Technique

Based on Sugiyono (2012), the triangulation technique is a type of data collection in which different methods are used to check data from the same source. In this stage, the researcher re-investigate interview transcripts and observation results. The researcher would discuss whether there are different data sources to ensure the data is correct.

d. Using Reference

Referencing supporting materials provided by the researcher demonstrates that the researcher conducted the study, including recordings of the teacher and student interviews, interview notes, and photographs of classroom observations. These materials can help conduct qualitative data research so that the data can be trusted.

2. Transferability (External Validity)

Sugiyono (2013) states that the transferability test is a technique for testing external validity in qualitative research. To achieve transferability standards, the researcher provide a thorough, detailed, clear, and systematic description of the entire study on implementing differentiated assessment in English subjects within an independent curriculum. This was done so that the research context could be described clearly and by the researcher's ability. In this way, a detailed description of the research findings would be beneficial for other researchers who want to use this study's data or results as a basis for additional research related to these findings or data.

3. Dependability (Reliability)

Dependability Reliability is research that can be trusted. In other words, the extent to which the findings show consistency after several trials conducted by different researchers at different times but carried out with the same methodology and script. Dependability testing is done by conducting an audit of the entire research process. Using an independent auditor or independent supervisor auditing all activities carried out by the

researcher in research, as claimed by Sugiyono (2020), the researcher collect all relevant data and then organize it as well as possible. Furthermore, the researcher examine the information carefully.

4. Confirmability (Objectivity)

Confirmability in qualitative research is to validate the research results to meet the confirmability standard. The researcher provided details about the methodology and components of the study and provided transcripts of the data results to the respondents so that they could double-check and then review the transcripts for errors or additional information about their experiences if there was any further information or mistakes from the findings of the implementation and benefits of differentiated assessment in English subjects in the independent curriculum. The researcher also sought approval and advice from the supervisor.