

CHAPTER III

RESEARCH METHODS

A. Research Design

This study used a qualitative approach with a case study design as described by Stake (2008), the case study was chosen because it allows the researcher to examine in depth a case that has certain uniqueness and encourages the researcher to understand it comprehensively. In line with that, Coombs (2022) explains that case study research is a qualitative research method that focuses on in-depth exploration of a phenomenon in a real context. This exploration is carried out through the participants' perspective as well as the social interactions that occur in their natural environment, as also affirmed by Lima et al. (2021). The qualitative approach is considered appropriate for this study because it allows the researcher to understand the processes, interactions, and dynamics of Inquiry-Based Learning (IBL) in an authentic classroom context.

The research was conducted in the even semester of the 2024/2025 academic year using purposive sampling techniques. Nurrisa and Hermina (2025) emphasize that purposive participant selection ensures that the data obtained are truly relevant to the research focus. The research subjects consisted of 30 seventh-grade students aged 12–13 years with diverse socio-economic backgrounds and variations in reading–viewing

abilities, and three English teachers who served as the main informants.

B. Location and Time of Research

1) Research Location

This research was conducted at SMPN 20 Kota Bengkulu, involving seventh-grade students enrolled in the English learning program.

2) Time of Research

This research was conducted in the even semester from August to September of the 2024/2025 academic year.

C. Data Source

1. Type of Data

- 1) Primary data in this research are obtained directly from the original sources. This data includes:
 - a. Interview: In-depth interviews with teachers regarding their experience in inquiry-based learning and its impact on reading and viewing skills.
 - b. Observation: Direct observation of the learning process in the classroom, including the interaction between students and teachers, as well as the application of the inquiry method in teaching and learning activities.
 - c. Documentation: Collection of documents or learning materials used during the inquiry-based learning process.

- 2) Secondary Data: Secondary data are obtained from pre-existing sources. Which include:
 - a. School documents: Annual reports, curriculum, and school policies related to the implementation of learning methods.
 - b. Related Literature: Books, articles, and journals that discuss inquiry-based learning and reading and viewing skills.

2. Data Source

- 1) Research Subjects: The research participants consist of 31 seventh-grade students from SMPN 20 Bengkulu City, whose activities were observed to collect the observation data.
- 2) Research Informants: The informants in this study consisted of teachers who taught seventh grade and had experience in implementing the inquiry-based learning model, in order to obtain semi-structured interview data.

3. Characteristics of Subjects and Informants

1) Students

Table 3. 1 Characteristics of Subjects

No	Male	Female	Class
1.	15	16	7A
2.	17	14	7C
3.	15	15	7H

The seventh-grade students were between 12 and 13 years old, came from diverse socio-economic backgrounds, and had varying levels of reading-viewing proficiency.

2) Teachers

Table 3. 2 Characteristics of Informants

No	Name	Gender	Class
1.	ERS	Female	7A
2.	FF	Female	7C
3.	MYE	Female	7H

The teachers involved have more than 5 years of teaching experience and have attended training on inquiry-based learning.

D. Data Collection Technique

Data were collected through observation, semi-structured interviews, and documentation. Observation was conducted to examine the implementation of Inquiry-Based Learning (IBL) in the classroom, with particular attention to students' engagement and inquiry processes. Semi-structured interviews were carried out with the teacher to explore perspectives and challenges in implementing IBL. In addition, documentation, such as lesson plans and students' work, was analyzed to support and triangulate the research findings.

A case study design was employed to explore the implementation of Inquiry-Based Learning in enhancing students' reading-viewing skills. The collected data were analyzed using the stages of data reduction, data display, and conclusion drawing. In this study, the researcher adopted the data collection technique model proposed by Nurrisa and Hermina (2025), which emphasizes systematic procedures to ensure the credibility and depth of qualitative findings.

1. Case Determination

Case determination was carried out by establishing the research focus on the implementation of Inquiry-Based Learning (IBL) in improving the reading-viewing skills of seventh-grade students at SMPN 20 Kota Bengkulu. The case examined was limited to the classroom learning process, particularly activities that reflected the stages of Inquiry-Based Learning and their impact on students' ability to read and comprehend visual texts. This delimitation was intended to ensure that the study maintained a clear and in-depth focus, allowing the phenomenon under investigation to be analyzed comprehensively.

2. Determining The Set Of Case Studies

1) Specific questions

This study was designed based on specific research questions to guide the data collection and analysis process. These questions focused on:

1. How is inquiry-based learning implemented in developing seventh-grade students' reading-viewing skills at SMPN 20 Kota Bengkulu?
- 2) What aspects are investigated?

The aspects investigated in this study encompass the phases of Inquiry-Based Learning (IBL), specifically:

- Engagement
- Question Formulation
- Investigation Planning
- Data Collection and Analysis
- Conclusion Formulation
- Communication of Findings
- Reflection
- Collaboration

In addition, this study also examined the development of students' reading-viewing skills, which include the ability to comprehend, interpret, and evaluate written and visual texts.

- 3) What methods are used?

To obtain comprehensive and in-depth data, this study employed a qualitative research design utilizing several data collection techniques, namely:

- Observation to examine the process of implementing Inquiry-Based Learning.

- Interviews with teachers to obtain in-depth information regarding their experiences and perceptions.
- Documentation, including instructional modules and students' work, as supporting data.

The use of these various techniques was intended to enhance the validity of the data through triangulation.

3. Qualitative conceptualization

This study employed a qualitative approach to gain an in-depth understanding of the phenomenon within its natural context.

1) Collecting the data

Data were collected through participant observation, which, according to Romdona et al. (2025), enables researchers to obtain richer data as they are directly involved in the participants' natural activities. This observation was employed to record the interactions between students and teachers, as well as the implementation of the stages of Inquiry-Based Learning (IBL) in classroom activities. In addition, semi-structured interviews were conducted with teachers to explore their experiences, perceptions, and strategies in implementing Inquiry-Based Learning. Documentation was utilized to complement and strengthen the research findings.

2) Data processing

The data obtained were subsequently transcribed and classified into specific themes in accordance with the research focus. This process included coding to categorize the data into relevant categories.

3) Data interpretation and analysis

The data analysis in this study employed the interactive analysis model proposed by Miles and Huberman, which consists of three main stages:

1. Data Reduction
2. Data Display
3. Conclusion Drawing and Verification

Through this process, the data were analyzed systematically to address the research questions and to identify emerging patterns from the findings of the study.

4. Analytical generalization in the form of theorizing on cases / symptoms

This study aimed to achieve analytical generalization. The findings were interpreted by relating them to relevant theories and concepts of Inquiry-Based Learning and reading-viewing skills.

a) Data collection is conducted using the following techniques:

1) Observation

The researcher conducted participant observation during the implementation of discovery-based learning in the seventh-grade. This observation aimed to document the interactions between students and the teacher, as well as the application of the Inquiry-Based Learning model in classroom activities.

2) Interview

Semi-structured interviews were conducted with the teacher. These interviews aimed to explore the teachers' experiences, views, and perceptions of inquiry-based learning. Field notes were supplemented with video recordings that were used during the teacher interview process.

3) Documentation

The researcher collected related documents, such as lesson plans, teaching materials, and records of learning activities used during the inquiry-based learning process. These documents were analyzed to understand the context and implementation of the teaching methods applied in the classroom.

b) Dimensions of Data Records:

1) Fidelity

To ensure data fidelity, the researcher used audio recordings for interviews and observations. Field notes were used as a supplement, not as the main source of data.

2) Structure

Interviews and observations were conducted in a systematic and structured manner. Observations were conducted using a predetermined format, covering aspects to be observed, such as student interaction, use of teaching materials, and application of the inquiry-based learning model.

E. Data Analysis Technique

Data analysis was carried out using the Miles, Huberman, and Saldana model, which includes data reduction, data display, and drawing and verifying conclusions. Findings were analyzed inductively so that they emerged from empirical data, not from rigid hypotheses White & Cooper, (2022). Systematic procedures are also important to ensure the validity and reliability of the data, including the use of various data sources such as documentation, interviews, and observations, as recommended by Miller et al. (2023). Documentation in the form of video recordings, photos, and learning artifacts was collected to support triangulation and increase the credibility of the findings. Triangulation was carried out by comparing observation data on the implementation of IBL, teacher interviews, and analysis of the implementation of learning stages from engagement to reflection, so that the findings could be thoroughly verified Supriandi (2025).

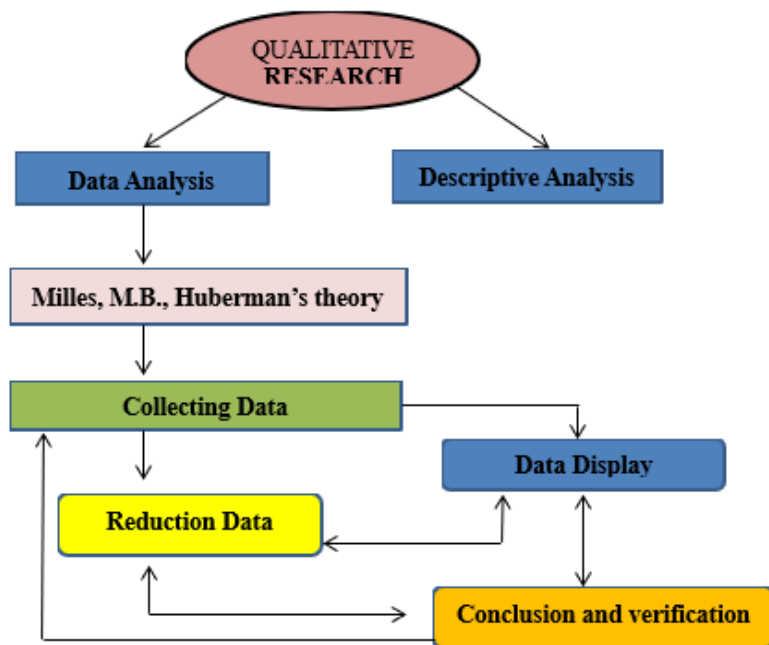


Figure 3. 1 Milles, M.B., Huberman's, A.M. and Saldana, J.,2014

This model consists of three main steps:

1) Data Reduction

The researcher sorted the data obtained from interviews, observations, and documentation, then selected the parts that were directly related to the research focus. The selected data were focused on aspects of Inquiry-Based Learning. Subsequently, the data were organized into specific themes, categories, or codes to ensure they were more structured and easier to analyze. Lengthy and complex data were summarized without eliminating their essential meaning, making them more systematic and

comprehensible. Information that was not relevant to the research questions was excluded from the analysis. Thus, data reduction assisted the researcher in organizing the data systematically, thereby facilitating the analysis process and the drawing of conclusions to address the research questions.

2) Data Presentation

The researcher presented the data in the form of tables or matrices to clarify comparisons, patterns, and relationships among categories. In qualitative research, direct quotations from informants were also included to strengthen and clarify the research findings. Through this systematic presentation of data, the researcher was able to identify emerging patterns, relationships, and trends, thereby facilitating further analysis and the process of drawing conclusions.

3) Conclusion Drawing/Verification

The researcher interpreted the findings based on the patterns, themes, and relationships that emerged from the processes of data reduction and data display. Based on the analysis results, preliminary conclusions were formulated in relation to the research focus, particularly concerning the implementation of Inquiry-Based Learning in improving students' reading-viewing skills. The findings were then linked to relevant theoretical frameworks and previous studies to strengthen the validity of the interpretation and to

ensure that the conclusions drawn were firmly supported by the data and consistent with the field findings.

Furthermore, the researcher reconfirmed the findings or interpretations with the informants (e.g., teachers or students) to ensure that the interpreted data accurately reflected their intentions and experiences. Through this stage, the researcher not only drew conclusions but also ensured that these conclusions were valid, accurate, and scientifically accountable.

F. Triangulation

To ensure the reliability of the findings, source and technique triangulation were applied. Triangulation is a multi-method approach employed by researchers in data collection and analysis, involving the combination of various methods to examine related phenomena from different perspectives. The purpose of using triangulation is to examine and establish the validity of the data so that the phenomenon under investigation can be better understood and a higher level of accuracy can be achieved compared to relying on a single method Nurfajriani & Ilhami (2024).

1. **Data Credibility:** The researcher used triangulation techniques to ensure data credibility, namely by comparing data obtained from three main sources: interviews, observations, and documentation.

Triangulation of This Research

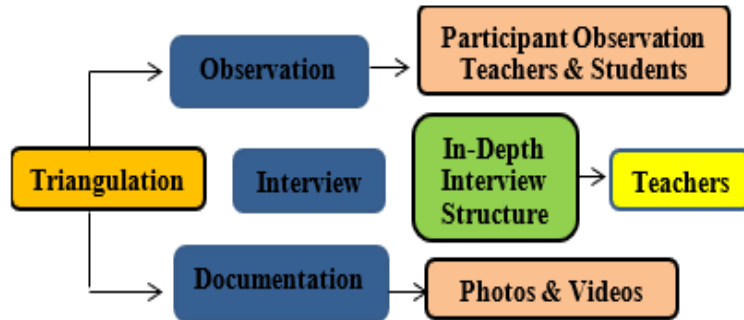


Figure 3. 2 Triangulation of Research

1.1 Observation: The findings from observations will also be cross-checked against existing documentation, such as activity reports or official records. If discrepancies arise between what is observed and what is recorded in the documents, the researcher will conduct further investigation to determine the cause of the inconsistency.

Research Observation Diagram:

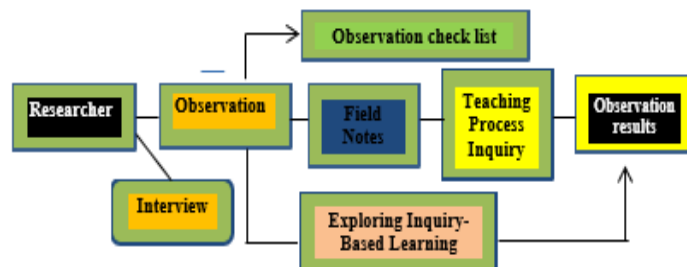


Figure 3. 3 Research Observation

1.2 Interview: Information obtained from interviews with key informants will be compared with direct field observations. For instance, if an informant claims that a program is running effectively, the researcher will observe the program's implementation to verify whether the observation supports the informant's statement

1.3 Documentation: Additionally, the researcher will assess whether the information in the documentation supports or contradicts the interview data. For example, if the documents indicate a policy change that was not mentioned by the informant during the interview, this will become a point of focus for further analysis.

In addition, the researcher also conducted member checking, where the results of interviews and observations were confirmed back to the informants to ensure the accuracy of the information obtained.

2. Transferability: The researcher provides a detailed description of the research context, the characteristics of the subjects, and the processes undertaken. With enough information, readers can assess whether the findings can be applied in other contexts.
3. Dependability: The process of data collection and analysis is systematically documented, allowing other researchers to follow the trail of this study and assess its consistency.

4. Confirmability: All data, including interview transcripts, field notes, and documents collected, were stored and accessible for verification. The researcher also sought to minimize personal bias in the interpretation of the data.

G. Stages of the Research

This study was conducted through several interrelated stages that were systematically organized to align with the processes of data collection and analysis. The stages of the research are described as follows:

1. Preparation Stage

At the preparation stage, the researcher developed learning materials and research instruments based on the eight aspects of Inquiry-Based Learning, namely engagement, question formulation, investigation planning, data collection and analysis, conclusion formulation, communication of findings, reflection, and collaboration. The lesson plans were designed to integrate reading-viewing skills through the use of written texts and visual media. In addition, the researcher prepared observation guidelines and interview protocols to identify students' engagement and the teacher's role during the learning process. Coordination with the English teacher was conducted to determine the observation schedule and the implementation of learning activities in accordance with the context of Grade VII at SMPN 20 Kota Bengkulu.

2. Implementation Stage

The implementation stage involved the application of Inquiry-Based Learning in English language teaching activities. At this stage, students were actively engaged in reading texts and observing visual media, after which they were guided to formulate questions, plan simple investigations, and collect and analyze information collaboratively. The learning process was directly observed by the researcher to document the implementation of each aspect of Inquiry-Based Learning. The data obtained at this stage served as the primary basis for the presentation of the observation results.

3. Data Collection and Analysis Stage

At this stage, the researcher collected data through classroom observations, in-depth interviews with the teacher, and documentation in the form of students' work and classroom activities. The collected data were analyzed using the Miles, Huberman, and Saldana model, which consists of data reduction, data display, and conclusion drawing and verification. The analysis focused on the attainment of each aspect of Inquiry-Based Learning and its impact on the development of students' reading-viewing skills.

4. Interpretation and Reporting Stage

The final stage of the research was the interpretation and reporting of the findings. The analyzed data were

interpreted by relating them to the theories of Inquiry-Based Learning and reading-viewing skills. The research findings were then presented in the form of tables, descriptions of observation results, and excerpts from teacher interviews, which were discussed in depth in Chapter IV. Based on these findings, conclusions were drawn, and recommendations were formulated and presented in Chapter V.

