

CHAPTER III

RESEARCH METHOD

A. Research Design

This study uses a case study method with a mixed methods approach (qualitative and quantitative) to investigate the impact of tactile learning in drama on English vocabulary acquisition and student engagement in class VIII at SMPIT Khairunnas Kota Bengkulu. According to Heale and Twycross (2018), a case study is an intensive research approach focusing on a specific individual, group, or unit to provide a more comprehensive understanding and generalize several units or variables. In this context, SMPIT Khairunnas Kota Bengkulu serves as the unit of analysis being investigated to understand the effect of the tactile learning method on students. Gerring (2004) explains that the case study approach is used to define the phenomenon or issue under investigation, rather than to model causal relationships. This approach emphasizes developmental factors in relation to the environment affecting students, such as the use of drama in learning and student interaction with the instructional material (Flyvbjerg, 2011).

The qualitative method is used to investigate the depth and richness of context and voices in understanding social phenomena, providing insights into students' subjective experiences in tactile learning (Hignett & McDermott, 2015;

Lim, 2024). Qualitative research allows the researcher to uncover complex phenomena, such as classroom dynamics and student engagement in drama-based learning (Njie & Asimiran, 2014). The data generated from this approach are detailed and rich in information, creating descriptions, patterns of relationships, and interpretations of social meaning that reflect students' experiences during the learning process (Moriarty, 2011).

Meanwhile, the quantitative approach is used to measure and analyze the impact of tactile learning on the improvement of English vocabulary and student engagement in classroom activities. This approach represents phenomena numerically and allows researchers to determine the relationship between two or more variables (Stockemer, Stockemer, & Glaeser, 2019). Therefore, the quantitative data obtained from vocabulary tests and student engagement measurements will provide an objective and systematic view of the impact of tactile learning-based instruction (Watson, 2015).

Overall, the mixed-methods approach used in this study combines the strengths of both qualitative and quantitative analyses to gain a holistic understanding of the impact of tactile learning on vocabulary acquisition and student engagement. The case study at SMPIT Khairunnas Kota Bengkulu provides an in-depth context for studying this phenomenon.

B. Population and Sample

1. Population

This study was conducted at SMPIT Khairunnas Kota Bengkulu, focusing on eighth-grade students as the research population. The eighth-grade students are divided into four classes: 8A, 8B, 8C, and 8D, with the following distribution of students: class 8A consists of 25 students, class 8B consists of 22 students, class 8C consists of 20 students, and class 8D consists of 20 students. Out of the total of 86 students, there are 47 male students and 40 female students.

2. Sample

This study employed a total sampling technique, where all members of the population were included as the research sample. This approach was chosen because the relatively small and homogenous population allowed for the collection of more representative and comprehensive data. Consequently, all 86 eighth-grade students at SMPIT Khairunnas Kota Bengkulu served as the research sample.

Table 3.1
Number of Eighth-Grade Students at SMPIT
Khairunnas Kota Bengkulu

Kelas	Siswa Laki-Laki	Siswa Perempuan	Jumlah Siswa
8A	25 orang	-	25 orang
8B	22 orang	-	22 orang

8C	-	20 orang	20 orang
8D	-	20 orang	20 orang
Jumlah	47 orang	40 rang	87 Orang

By employing total sampling, it is expected to gain a comprehensive and representative understanding of the impact of tactile learning in drama-based instruction on English vocabulary mastery and overall student engagement.

C. Research Instrument

In this study, the researcher employed various instruments for data collection. For qualitative data, semi-structured interviews, classroom observations, and documentation were utilized. These instruments were designed to gain an in-depth understanding of the phenomena being studied and to explore the perspectives and experiences of the research participants in greater detail. Meanwhile, for quantitative data, the researcher used questionnaires and vocabulary tests as data collection tools. These quantitative instruments were systematically designed to measure aspects relevant to the research focus, namely vocabulary mastery and student engagement in tactile learning-based instruction.

1. Focus Group Discussion(FGD)

In this study, the researcher involved students as research subjects and employed Focus Group Discussion (FGD) as one of the primary instruments. The Focus Group Discussion (FGD) consisted of ten questions designed to collect data on students' opinions, experiences, and perceptions of tactile learning in drama. The data gathered included the impact of tactile learning on students' vocabulary mastery, their level of engagement in the learning process, and their emotional and cognitive responses to the learning experience.

The Focus Group Discussion (FGD) questions were developed based on five main indicators, with each indicator represented by two questions. The first indicator, *Tactile Learning Experience*, included two questions exploring students' experiences during tactile-based learning. The second indicator, *Impact on Vocabulary Mastery*, comprised two questions assessing the extent to which this teaching method helped students improve their English vocabulary. The third indicator, *Engagement in Learning*, focused on two questions about students' active participation and motivation in the learning process. The fourth indicator, *Benefits of Tactile Learning*, included two questions measuring students' perceptions of the perceived benefits of this method. Finally, the fifth indicator,

Reflection on Tactile Learning, contained two questions encouraging students to reflect on their experiences and provide feedback on tactile-based learning.

All questions were carefully structured to obtain relevant and in-depth data to support the analysis. Through these Focus Group Discussion (FGD), the researcher was able to gain deeper insights into the dynamics of learning that could not be captured quantitatively. The Focus Group Discussion (FGD) instrument grid can be found in Appendix 3.

The Focus Group Discussion (FGD) instrument used in this study was developed based on the aforementioned grid, with questions designed to gather information comprehensively. Each question was tailored to the research focus to ensure the collection of valid and relevant data. The Focus Group Discussion (FGD) instrument can be found in Appendix 4.

This instrument did not undergo formal validation; however, the questions were developed based on relevant literature and practical experience in the field of education, including insights from the article "*State of the Nation: An Interview with Paul Nation.*" This approach ensures the instrument yields accurate and representative data.

2. Observation Checklist

During the learning process, the researcher conducted direct observations of student engagement in drama activities. The data obtained from these observations included several key aspects, such as the level of student participation in various activities conducted. The researcher also observed interactions among students to assess the extent of their collaboration and communication during the learning process. The observation instrument grid can be found in Appendix 8.

Additionally, the use of vocabulary by students in the context of drama was a focal point of observation, aiming to evaluate their ability to apply language appropriately to the given situations. The data gathered from these observations provided insights into the extent to which students were actively engaged and used language effectively in drama-based learning. The observation instrument used can be found in Appendix 9.

The observation instrument used in this study consists of 10 main indicators, with each indicator represented by one question. Thus, the instrument includes a total of 10 questions, specifically designed to collect data in alignment with each predetermined indicator. This approach ensures that each indicator is clearly measurable through relevant questions.

This observation instrument was not subjected to formal validation. Instead, the questions were developed based on relevant literature and practical experience in the field of education, drawing from the instrument designed by Montessori, M. (2013). This method was employed to ensure the generation of accurate and representative data.

3. *Angket*

A Likert-scale questionnaire or closed-ended questions were utilized in this study to measure the extent to which tactile learning influences English vocabulary mastery and student engagement. This instrument was designed to produce numerical data that can be analyzed statistically, enabling the researcher to identify relationships between the variables under investigation. The results from this questionnaire provide critical insights into the impact of the tactile learning approach on students' English vocabulary mastery and their level of engagement in the learning process. Thus, the questionnaire serves as an effective data collection tool for gaining a deeper understanding of the learning process and outcomes.

The questionnaire consists of 30 questions divided into three main indicators, each containing 10 questions. The first indicator focuses on the Impact of Tactile Learning on English Vocabulary Mastery, aiming to measure how tactile learning methods assist students in

improving their vocabulary. The second indicator examines the Impact of Tactile Learning on Student Engagement in English Learning, emphasizing students' participation and involvement during the learning process. The final indicator, Reflection and Personal Experience, explores students' subjective experiences in using the tactile learning approach. Each question was carefully designed to extract relevant data aligned with the focus of each indicator. Through this questionnaire, the researcher can obtain a quantitative understanding of the learning dynamics. The questionnaire instrument Grid can be found in Appendix 12.

Furthermore, the questionnaire used in this study comprises several questions developed based on the aforementioned blueprint. These questions were designed to gather in-depth information, with each question tailored to align with the research focus, ensuring the validity and comprehensiveness of the data collected. The Questionnaire Instrument utilized can be found in Appendix 13.

Although the questionnaire did not undergo a formal validation process, the instrument was adopted from relevant expert references in the field of education, specifically Astin (2012). This approach is expected to yield accurate and representative data that aligns with the objectives of the study

4. Vocabulary Test

The vocabulary test is conducted before and after the implementation of tactile learning to measure changes in students' vocabulary mastery. The first step in this study is to design a vocabulary test consisting of 60 questions, divided into three types: 20 multiple-choice questions, 20 fill-in-the-blank questions, and 20 matching test questions. This test instrument is used to assess students' understanding of the vocabulary they have learned, focusing on words taught during drama activities (pre-test). The first test is administered before the implementation of tactile learning to determine students' initial vocabulary mastery, while the second test is administered after the drama activities to measure changes in their vocabulary mastery (post-test). The results of these tests serve as the main indicator for understanding the impact of tactile learning on vocabulary mastery and provide a solid foundation for further analysis.

The vocabulary test in this study consists of 60 questions covering five indicators, each drawn from the drama texts used in meetings 1 through 5. In each meeting, there are four drama groups that form the basis for dividing the sub-indicators. Group 1 is used as a sub-indicator with multiple-choice questions, Group 2 with fill-in-the-blank questions, and Groups 3 and 4 with matching tes t

questions. Each sub-indicator consists of four questions, making the overall test designed to assess students' vocabulary mastery comprehensively based on the drama texts used in the lessons.

Through this vocabulary test, the researcher can gain deep insights into the learning dynamics that cannot be measured quantitatively. The vocabulary test grid for the vocabulary test can be seen in (Appendix 17). Furthermore, the vocabulary test used in this study consists of a set of questions designed based on this blueprint. These questions are crafted to explore information in depth, with each question tailored to the focus of the study to ensure the validity and comprehensiveness of the data obtained. The vocabulary test instrument used can be seen in (Appendix 18). Although this questionnaire did not undergo formal validation, it was adopted from relevant experts, namely Nation & Meara (2013). This article serves as the basis for validating the research instrument as it presents effective vocabulary acquisition strategies, such as the keyword technique, the use of word parts, and word cards, as well as outlining various internationally validated vocabulary test formats. These strategies and test formats are relevant to be adapted in the context of drama-based tactile learning, ensuring strong content validity for the instrument and enabling accurate measurement of both vocabulary

improvement and student engagement. In addition, the methods described in this article are well-suited for young learners as they are interactive, utilize visual and kinesthetic associations, and encourage active participation, which is essential for their language development.

with the expectation that it will produce accurate and representative data in line with the research objectives.

5. Documentation

Additional data collection in this study includes various sources aimed at documenting the learning process, as well as the development of student engagement and vocabulary mastery. This additional data includes lesson notes that track the progression of learning over time, video recordings of the drama activities that capture student interactions during the activities, and tasks completed by students as evidence of the application of vocabulary in the context of drama. This data collection helps provide a more comprehensive view of the effectiveness of tactile learning, enriches the analysis of the main data, and strengthens the validity of the research findings regarding student engagement and the development of their English vocabulary. The documentation of activities is compiled in Appendix 28.

D. Data Collecting Technique

Data collection in this study aims to answer the research questions in depth and comprehensively through the use of primary instruments, including interviews, observations, documentation, questionnaires, and vocabulary tests, carried out systematically as follows:

1. Scheduling interviews with students and the English teacher involved. Conducting face-to-face interviews to explore the experiences and perspectives of students/teachers. Recording detailed responses and documenting the interviews with a recording device (if necessary). The instrument used is a semi-structured interview guide. The data obtained includes students' perceptions of tactile learning, their experiences, and the teacher's views on the effectiveness of this method.
2. Conducting observations during drama rehearsals and performances in the classroom. Noting student engagement and the use of vocabulary within the context of drama. Documenting activities with photos or videos as supporting evidence. The instrument used is an observation checklist. The data obtained includes the level of student engagement, vocabulary mastery, and student interactions during the drama activities.
3. Documenting student activities through photos, videos, or notes. Reviewing relevant documents related to the

implementation of tactile learning in the classroom. The instruments used are learning documents, photos, and videos. The data obtained includes evidence of tactile learning implementation, including drama rehearsal photos and student works.

4. Distributing questionnaires to students after the drama activities. Collecting and analyzing questionnaire results to assess student engagement and the effectiveness of tactile learning. The instrument used is a Likert-scale questionnaire. The data obtained includes the level of student engagement and their opinions on the effectiveness of the tactile method.
5. Conducting a pre-test before the lesson to measure students' initial vocabulary. Conducting a post-test after the drama activities to measure vocabulary improvement. Analyzing the test results to compare students' scores before and after the lesson. The instrument used is a vocabulary test (multiple-choice, fill-in-the-blanks, matching). The data obtained includes changes in students' vocabulary scores before and after tactile learning through drama.

Table 3.2
Instruments and Data Collected.

Jenis Data	Instrument	Data yang Diperoleh
Students' and Teachers' Perceptions	Interview Guide	Experiences, views, and perceptions of students/teachers.
Student Engagement	Observation Checklist	Level of participation, interaction, and vocabulary mastery.
Evidence of Implementation	Documentation	Photos, videos, and learning documents.
Changes in Vocabulary Mastery	Questionnaire	Students' opinions about the tactile method in drama.
Changes in Vocabulary Proficiency	Pre-test and Post-test Vocabulary	Students' vocabulary scores before and after the drama activities

These steps ensure that the collected data is comprehensive, covering both qualitative and quantitative aspects.

E. Data Analysis

The collected data is analyzed using a systematic and structured analysis method, including organizing, processing, and interpreting the data to generate relevant findings that support the objectives and research questions of this study.

1. Quantitative Data

The quantitative data analysis in this study is carried out systematically using a 4-point Likert scale to assess

student responses. The data obtained from the questionnaires and vocabulary tests are tabulated, their percentages calculated, and analyzed to provide a clear picture of students' attitudes, opinions, and levels of engagement.

The first step is to assign scores to the respondents' answers on the questionnaire and vocabulary tests. Each response option on the Likert scale is assigned a specific weight: "Strongly Agree" (4), "Agree" (3), "Disagree" (2), and "Strongly Disagree" (1). The average score is calculated by multiplying the weight by the frequency of responses and then summing it up for all items.

The percentage of student responses is calculated using the formula (Gay,2012):

$$P = \frac{F}{N} \times 100$$

Keterangan:

P	: Percentage
F	: Frequency of responses
N	: Total number of respondents

After the data is tabulated, it is presented in a structured table to facilitate reading and understanding. The response percentages are analyzed based on interpretation

categories adjusted to the Likert scale, following Creswell's (2004) guidelines.

Table 3.3 Score Interpretation

Presentase (%)	Interpretasi
0%	: Tidak Ada
1–25%	: Sebagian Kecil
26–49%	: Hampir Setengah
50%	: Setengah
51–75%	: Sebagian Besar
76–99%	: Hampir Seluruhnya
100%	: Seluruhnya

The data obtained from the vocabulary test (pre-test and post-test) were analyzed using the Paired Sample t-Test formula is as follows (Sugiyono, 2017): $t = \bar{D} / (SD / \sqrt{n})$

D = The average difference between pre-test and post-test scores

SD = Standard deviation of the score differences

n = Number of paired data (number of participants)

t = t-value to be compared with the critical value in the t-table

Result Interpretation

If the Sig. (2-tailed) value is less than 0.05, it indicates that there is a significant effect from the different treatments given, namely the pre-test and post-test. After the data is tabulated, it is presented in a structured table to facilitate easier reading and understanding. The response percentages are analyzed based on interpretation categories adjusted to the pre-test and post-test results, following the guidelines of Arikunto, Suharsimi (2008).

Table 3.4
Interpretation Score

Score	Interpretation
85-100	Excellent
70-85	Good
55-70	Fair
40-55	Weak
0-40	Very Weak

2. Qualitative Data

The data analysis technique in this study uses a qualitative analysis approach. Qualitative analysis is a systematic process aimed at describing, classifying, and interpreting data in the form of text or visuals by grouping the data into specific categories or codes (Creswell & Poth, 2016). This process is carried out through five main stages, which are:

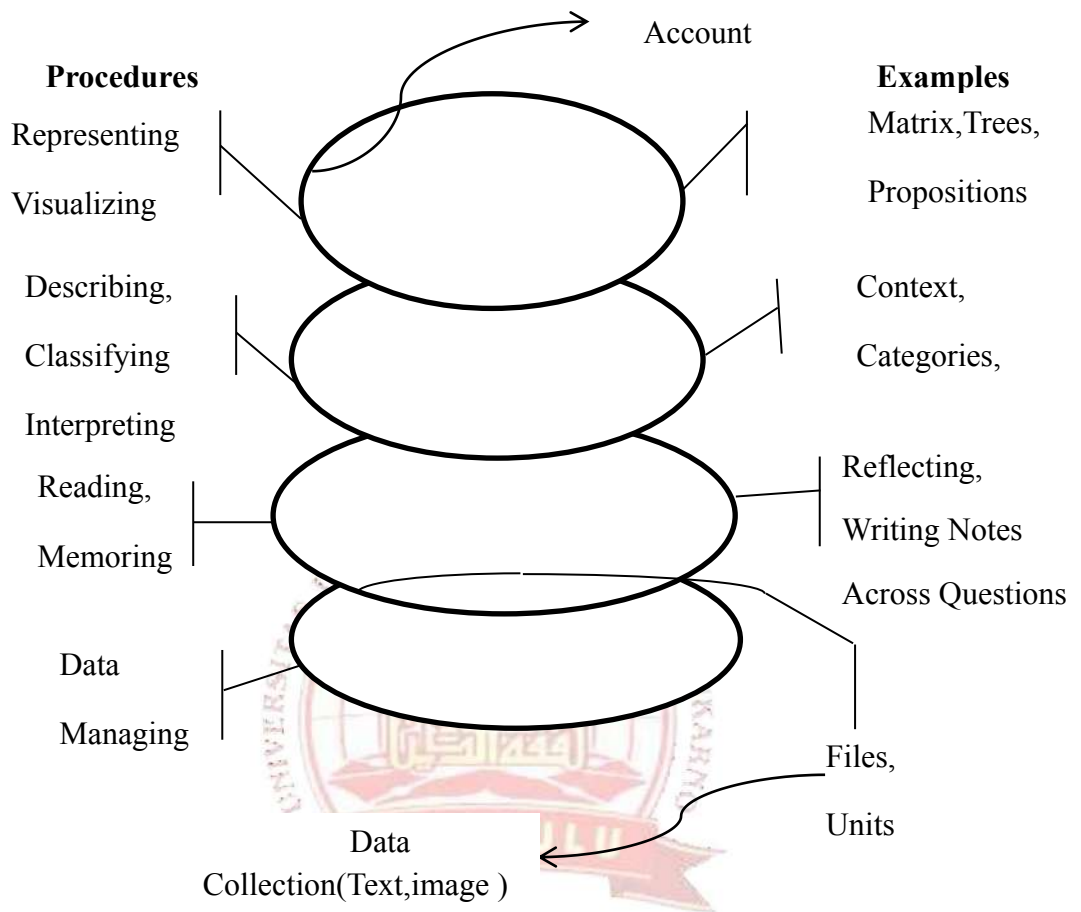


Figure 3.1

Spiral Model Data Analysis Technique

The data analysis process in this study follows the Spiral Data Analysis approach, which includes the following systematic stages.

1. Data Collection

In the first stage, data is collected through various techniques, such as semi-structured interviews,

observations, documentation, as well as text and image analysis. Relevant data is sourced from materials related to *Tactile Learning in Drama: Its Impact on English Vocabulary and Student Engagement*.

2. Data Processing

The collected data is processed into structured text units that are ready for analysis. This processing includes transcribing interview results, organizing observation notes, and documentation. This process is carried out in detail to ensure the accuracy and relevance of the data.

3. Reading and Noting (Memoing)

This stage involves a thorough reading of the processed data. The researcher notes initial findings and reflects on the responses provided by the participants, in relation to the research questions about tactile learning and its impact on vocabulary and student engagement.

4. Describing, Classifying, and Interpreting

The data is analyzed through the processes of description, classification, and interpretation. Description is used to outline the general findings, classification involves grouping the data into relevant categories, and interpretation aims to link the data to the research context and answer the research questions.

5. Presenting and Visualizing.

The final stage involves presenting conclusions in the form of visualizations, such as matrices, tree diagrams, or charts. Propositions relevant to the research findings are systematically arranged to provide a clear picture of the impact of tactile learning on English vocabulary and student engagement.

Each step in this spiral data analysis is repeated until comprehensive and accurate findings are achieved. This process ensures that the analysis is conducted systematically, academically, and thoroughly.

