



CHAPTER III

RESEARCH METHODOLOGY

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This chapter explains in detail the steps taken to conduct this research. This chapter is also divided into six main parts, namely (1) research design (2) research subjects and background (3) research data (4) research instruments (5) research procedures (6) data analysis.

3.1 Research Design

This study used a qualitative approach to understand teacher' experiences and strategies in teaching vocabulary to hearing impairment students. A qualitative approach was chosen because it was considered most appropriate for exploring complex phenomena in a natural setting and for capturing the depth and nuance of participants' experiences. This method allows the study to explore a deeper understanding of how teacher adapt their teaching methods to meet the learning needs of hearing impairment students and the strategies they employ in the learning process.

This study employed a single-case study design, which allows for in-depth exploration of a specific context or group. Case studies are an effective research method for understanding real-world practices in educational settings, particularly in unique situations such as teaching English to hearing impairment students. Using this approach, this study was able to provide more specific insights into the strategies teacher use in teaching English vocabulary to hearing impairment students, as well as the barriers they face in the learning process.

The case study approach is particularly relevant for exploring dynamics within inclusive or special education settings, as it allows researchers to document classroom interactions, the teaching techniques employed, and students' responses and progress in learning new vocabulary. A single case study was chosen because it focuses on

a single subject, a teacher directly involved in the learning process with hearing impairment students.

Using a single-case study design, this study aims to obtain a comprehensive overview of how a teacher adapts to the needs of hearing impairment students in the process of learning English vocabulary. This research not only explores the teaching methods used, but also how teacher face challenges in delivering the material, and how they measure the effectiveness of the strategies implemented. Through this approach, this study can make a deeper contribution to the development of more inclusive and effective teaching methods for hearing impairment students, as well as provide insights for other educators facing similar situations in the educational world.

3.2 Subject and Research Background

3.2.1 Subjects and sources of research data

This study involved a 32-year-old male English teacher as the primary subject, who has over six years of teaching experience in inclusive education, specifically in teaching vocabulary to students with hearing impairments at the elementary and secondary school levels. The teacher was purposefully selected based on his expertise, professional background, and active involvement in inclusive classroom settings. He currently teaches at a Special Needs School (SLB) in Pekalongan, Central Java, where he directly works with students with varying degrees and types of hearing impairments. He not only has a strong theoretical foundation in inclusive pedagogy but also demonstrates extensive practical experience in designing and implementing vocabulary teaching strategies that meet the visual, tactile, and cognitive needs of students with hearing difficulties. For ethical and transparency reasons, the teacher's full identity is included in the appendix of this study.

In this study, teacher also served as the primary data source. Data were collected through semi-structured online interviews aimed to explore their teaching experiences, teaching approaches, and pedagogical reasoning behind the selection and implementation of specific vocabulary teaching strategies. These strategies included the use of visual aids, technology-based media, sign language, and other alternative communication techniques. The interviews also explored factors influencing their strategy choices, such as the effectiveness of particular methods, the unique needs of each student, their own accumulated teaching experience, and the availability of supporting resources in the learning environment.

In addition to interviews, additional data were collected through document analysis and video observations. More than five instructional videos, originally shared by teacher on their social media platforms, were analyzed to gain insights into classroom dynamics, student-teacher interactions, and the implementation of vocabulary teaching strategies in real-time. These videos provided rich visual evidence that complemented the interview findings and helped researchers build a comprehensive understanding of vocabulary teaching in inclusive education contexts for students with hearing impairments.

3.2.2 Research Background

This research was conducted online by interviewing selected teacher using semi-structured interviews. The school where the research took place was SLB 1 Pekalongan, Central Java, Indonesia. The primary reason for conducting online interviews was to accommodate limited in-person access to the research location while also utilizing digital technology for more flexible observation. Furthermore, this online approach

allowed the researcher to document and analyze interactions between teacher and students by observing several instructional videos.

3.3 Data

3.3.1 Data

This study explores in-depth the teaching strategies teacher use to teach vocabulary to hearing impairment students and the reasons behind their choice of these strategies, for both elementary and secondary school students. Teacher describe the methods they use in their teaching, including communication techniques, the use of visual aids, technology-based approaches, and other strategies specifically designed to meet the needs of hearing impairment students. Furthermore, the study reveals factors that influence teacher' decisions in choosing particular strategies, such as the effectiveness of the method, the needs of individual students, previous teaching experience, and the availability of resources to support the learning process.

3.4 Research Instruments

Based on the previous discussion, data collection in this study used two research instruments: semi-structured interviews and open-ended questions.

3.4.1 Semi-structured interviews

Semi-structured interviews are an interview method that combines pre-designed questions with the flexibility to adjust or add questions based on participant responses. This method allows researchers to delve deeper into aspects that emerge during the interview while also providing space for participants to speak more freely. In this study, semi-structured interviews

were used to explore teacher' experiences teaching vocabulary to hearing impairment students, focusing on the strategies they use, the challenges they face, and the reasons behind their choices.

3.4.2 Open questionnaire survey

A semi-structured interview guide with open-ended questions was used to explore teaching strategies, challenges faced, and the rationale for selecting particular methods. A framework was also developed for analyzing instructional videos to identify strategies and their relevance to observed practice.

Open-ended questions are a type of question that allows respondents to provide broad and in-depth answers without being limited to specific answer choices. This type of question is used to encourage participants to share their experiences, opinions, and reflections more freely and in detail. Open-ended questions are listed in the appendix.

The type of questions given to teacher not only focused on their experiences teaching hearing impairment children but also covered the strategies they used. Twenty questions were presented, all in Indonesian. The open-ended questions and semi-structured interviews followed the same format. The questions in this study were validated by an English language education lecturer.

3.5 Research Procedures

3.5.1 Preparation Stage

1. Obtaining ethical consent and permission from participants.

This step is carried out to ensure that the research process is conducted in accordance with ethical research principles.

Researchers need to explain to participants (in this case, teacher or data sources) the purpose of the research, data collection procedures, participant rights, and guarantees of confidentiality of the data provided.

2. **Developing research instruments (interview guide, document review template)**

The research instruments were developed in accordance with the research focus and objectives. In this study, the researcher developed a semi-structured interview guide containing a list of questions to gather information related to vocabulary teaching strategies for students with hearing impairments. Furthermore, a format or template was developed for reviewing supporting documents, such as learning media and learning activity videos, to ensure the data collected aligns with the research questions.

3. **Research Instrument Validation:**

Before being officially used, a research instrument needs to be validated to ensure that the questions or format it contains are capable of uncovering relevant and in-depth data. In this study, validation was conducted by an English language education lecturer at Muhammadiyah University of Surabaya. The validation results were used to revise and refine the instrument before the full data collection process was implemented.

3.5.2 **Data Collection Stage**

1. **Sending open-ended questions via Google Form for participants to complete independently**

Data collection began with sending an open-ended questionnaire via Google Form to the research subject, an English teacher at a Pekalongan State Special Needs School. The questionnaire questions were designed to explore the vocabulary teaching strategies used by teacher in teaching students with hearing impairments. This method allowed

teacher to respond reflectively and independently, providing in-depth written explanations of the approaches used in the learning process.

2. **Conducting semi-structured interviews with selected teacher.**

After the questionnaires were collected, the researchers continued with semi-structured interviews to further explore the information provided by the teacher in the questionnaires. Interviews were conducted online via Zoom and lasted approximately 30 minutes. Interview questions focused on the teacher's reasons for using certain strategies, their personal experiences teaching students with hearing impairments, and the obstacles and solutions encountered during the learning process. All interviews were recorded for transcription and thematic data analysis.

3. **Conducting observations during learning sessions to document strategies through simple observation through video documentation**

. As a form of direct observation, researchers analyzed more than five learning video documentation shared by teacher through their social media accounts (Instagram). These videos show direct interactions between teacher and students, the use of visual media, multisensory techniques, and phonetic approaches applied in vocabulary learning. These observations are important for seeing real-life practices in the classroom, so researchers can confirm and complement information from interviews and questionnaires.

4. **Collecting and reviewing video content, teaching materials, and evaluations to triangulate data.**

The final step was collecting supporting documents, such as learning materials (images, visual media, interactive whiteboards), and written student evaluations. Researchers reviewed the content to verify consistency between the teacher's claimed strategies and their actual implementation in the field. Data triangulation was conducted by comparing

the results of interviews, questionnaires, video observations, and teaching documents to ensure the validity and accuracy of the research findings .

3.6 Data analysis

Content analysis is a research method used to understand the meaning, patterns, and characteristics of various types of content, such as text, images, or other media. This method allows researchers to systematically and objectively identify specific themes or concepts within the analyzed data. Content analysis is research that examines the content of written or printed information presented in mass media (Sitasari, 2022) . Content analysis in this study includes:

1. **Determining the research objectives and questions**

This study aimed to identify and describe the teaching strategies used by an English teacher in teaching vocabulary to students with hearing impairments, as well as to understand the reasons behind the use of those strategies. The research focused on addressing two main questions: (1) What strategies are used? and (2) Why are those strategies chosen?

2. **Selecting the sample or materials to be analyzed**

The subject of this research was a male English teacher at a Special School (SLB) in Pekalongan, Central Java. He was selected purposively based on his teaching experience of more than six years and his active role in inclusive education. In addition to interviews, more than five videos of his teaching activities were also selected as supporting materials for analysis.

3. **Developing categories or codes**

The data from interviews, open-ended questionnaires, and teaching videos were categorized based on recurring themes related to teaching strategies. These included visual strategy, multisensory approach, individual approach, thematic

teaching, and phonetic-based techniques. Each theme was then given a specific code to assist in analysis.

4. Collecting data

Data were collected through semi-structured interviews, open-ended questionnaires, and documentation, including teaching materials and classroom videos. These methods allowed the researcher to gather in-depth insights into the teacher's experiences and practices in teaching vocabulary to students with hearing impairments.

5. Conducting analysis and interpretation

The data were analyzed using content analysis to identify patterns and themes related to the use of teaching strategies and the reasons for selecting them. Observations from the videos and responses from the interviews and questionnaires were interpreted in light of existing theories discussed in Chapter II.

6. Drawing conclusions and compiling the report

The research findings were presented in a narrative form, describing how the teacher implemented different vocabulary teaching strategies and why those strategies were considered effective. The report also highlights both the theoretical relevance and practical implications of the findings.

