

CHAPTER III

RESEARCH METHODOLOGY

This chapter explores the research approach employed to acquire the necessary information. This chapter comprises four primary areas: research design, research subjects, data gathering processes, and data analysis.

3.1 Research Design

A mixed methods methodology is used in this research to determine Padlet's advantages and disadvantages for EFL writing lessons. According to Pole (2007), mixed methods research leverages both qualitative and quantitative approaches to enhance the advantages and mitigate the drawbacks of each approach alone. Furthermore, mixed techniques refer to qualitative and quantitative research procedures that yield more accurate and complicated data (Digitalcommons@lesley & Ciempa, n.d.). Therefore, using or combining research techniques from the quantitative and qualitative traditions to acquire data for which there is a great deal of complexity in the ways in which these techniques can be combined can be regarded as mixed methods.

Combining quantitative and qualitative methodologies allowed this study to produce more precise data that covered a wide range of topics in detail. To address the issues raised, this research needs data in the form of descriptive opinions and percentages. Quantitative methods expand research by effectively gathering data from various subjects. In the meantime, the qualitative method offers richness of study information in a narrative style according to the specified phenomenon (Dawadi et al., 2021).

To sum up, this research used a combination of methodologies to produce thorough, accurate, dependable, and objective results.

In this research, quantitative data were first collected using the sequential explanatory design, followed by qualitative data. Sequential explanatory design gathers quantitative data first, followed by qualitative data, according to Johnson et al. (2007) and Bergman (2008) in Almeida (2018). Due of the interconnectedness of the resultant word and number data, sequential explanation is applied. The present research examines the advantages and disadvantages of Padlet for EFL students' writing. Besides, strategies are presented to address the vulnerability of Padlet that can prevent pupils from advancing their writing abilities.

3.2 Research Subject

The participants in this research were enrolled students in the 2020–2022 academic year at the University of Muhammadiyah Malang's English Language Education Department (ELED). They were chosen specifically to gather information regarding Padlet's advantages and disadvantages in the EFL writing course. This research focused on particular abilities, attitudes and behaviors using a purposive sample approach (Isaac, n.d.). Thirty students took part in order to complete the questionnaire. Sugiyono (2014) states that a sample of thirty people can be considered representative because the value distribution is closer to the value curve. Students are chosen according to how they interact with the Padlet. Concurrently, three participants were chosen for the interview based on their involvement in the Padlet and higher level of understanding.

3.3 Data Collection

The data gathered in this investigation is categorized as primary data. (Ajayi, n.d.) identifies questionnaires, personal interviews, observations, experiments, and surveys as primary data sources. Secondary data collection sources encompass official papers, websites, books, journal articles, internal records, and similar resources. The main data for this study were obtained through questionnaires and personal unstructured interviews with the research participants.

The researchers employed a close-ended questionnaire for their study. This sort of study is appropriate for examining the advantages and disadvantages of using Padlet in a writing class. By employing this form of inquiry, one can assess the students' perspective on the use of Padlet in the writing class, evaluating both its advantages and disadvantages, while also allowing individuals to freely express their opinions. The questionnaire was designed using the Likert Scale format. Bertram (2007) defines the Likert scale as a psychometric response scale commonly used in surveys to assess participants' preferences or levels of agreement with a proposition or set of statements.

The questionnaire was derived from the literature review theory on the assessment of strengths and shortcomings. The question items presented to students pertain to their perception, opinion, feedback, classroom activities, tools, response, technical issues, and EFL education of Padlet for enhancing writing skills. Each statement from the questionnaire would be assigned its own score. The Likert Scale consists of four pre-established response options, ranging from 1 to 5.

a. The options and scores for positive and negative items

| Options | Scores |
|-------------------|--------|
| Strongly Agree | 5 |
| Agree | 4 |
| Neutral | 3 |
| Disagree | 2 |
| Strongly Disagree | 1 |

Strongly disagree means you didn't agree it at all and would not recommend it to others.

Disagree means you didn't agree it but might recommend it to others.

Neutral means you agreed it, but it wasn't your favorite.

Agree means you really agreed it and would recommend it to others.

Strongly Agree means you agreed it and would definitely recommend it to others.

3.3.1 Technique and Instrument

The methodical approach to data collecting is used to compile pertinent details from a range of sources about the strengths and weaknesses of Padlet as a learning tool. Questionnaires and interviews with students who satisfied the research's subject requirements were used to gather data. According to (Ajayi, n.d.), the main methods for gathering data include questionnaires and interviews. The primary tool for this type of observation is a questionnaire made up of several questions. On the other hand, conducting interviews serves as an additional tool to comprehend the rationale and incentives that behind individuals' beliefs, inclinations, or actions.

The questionnaire was created using Likert scales. The questions on the questionnaire form are all closed-ended. In contrast, pupils are given the option to select from a variety of responses. Based on a research of the literature, questionnaires about the advantages and disadvantages of the Padlet were created. The questionnaire consists of 15 questions adapted from previous research. Questions number 1-3 are adapted from Lestari., et al (2018) which stated that students were motivated to complete their English language project after using Padlet. Meanwhile, questions number 4-7 are adapted from Fuchs (2014) regarding the use of Padlet in various ways. The questions 8-15 are taken from Fiester and Green (2016), who said that students can use Padlet to discuss class material with both their teacher and fellow students.

Interviews with a semi-structure were the next research tool. An instrument for gathering qualitative data that delves deeper into the advantages and disadvantages of the Padlet in the EFL writing class is the semi-structured interview.

While the questions in this kind of interview are pre-planned, it is still possible that more questions will come up while conducting research. (Ahlin, 2019) states that this semi-structured interview technique can be tailored to meet research goals and is not restricted to interview standards. Hence, based on their experiences with the Padlet, students are able to openly and verbally offer comments.

3.3.2 Research Procedure

In order to combine data from one approach with another, this research employs a mixed sequential method strategy. According to Creswell & Creswell (2018), this technique is implemented in two stages: first, quantitative data collecting, and then qualitative data collection. In order to solve the problem formulation, quantitative data is gathered and analyzed in the first step. This research was conducted in order to identify the shortcomings of using Padlet in EFL writing lessons for students enrolled in the English Language Education Department (ELED) at the University of Muhammadiyah Malang for the 2020–2021 academic year. Research participants received questionnaires as part of the quantitative data collection process.

Furthermore, the acquired quantitative data was examined for potential application in the context of participant interviews. Purposively chosen participants were asked questions about the benefits and drawbacks of using Padlet for learning writing skills. Interview requests for students who are willing to participate will be sent out. In addition, the data from the questionnaire will be gathered along with the interview data. The Miles and Huberman (1994) theory which focuses on data reduction, data presentation, and conclusion will be used to the analysis of the data.

3.4 Data Analysis

This research utilizes a mixed method that collects data through quantitative and qualitative methods. The research data was analyzed by segmenting it based on the methods used to acquire the data (Creswell & Creswell, 2018). A quantitative method was used to assess the data obtained from questionnaires, with an emphasis on statistical data. In the meantime, descriptive qualitative analysis was used to examine interview data.

The research methodology employed is descriptive analysis, with the goal of producing a description or description of the characteristics, attributes, and relationships between the phenomena under investigation (Leavy, 2022). The steps for data analysis that follow are taken from Miles & Huberman (1994):

1. Data Reduction

Data reduction is the first stage in the process of analyzing data. Data reduction is the systematic process of selecting and transforming data to enhance comprehensibility. The act of consolidating data into a unified table that adheres to the analysis criteria is referred to as the tabulation approach. Problem identification is based only on information from closed questions. Furthermore, the interview data will be computed in order to bolster this study.

2. Data Display

Presenting the data is the next stage. Table format will be used to display quantitative data. Furthermore, representative phrases will be used to demonstrate qualitative data. In order for the data that is shown to be only a portion of what is asked. The researcher will then present the table and statement results. The presenting of data facilitates the drawing of study results.

3. Conclusion Drawing

Summarizing the outcomes is the last stage. This conclusion emphasizes how effective Padlet is for writing skills. In addition, this conclusion offers suggestions for overcoming writing skills challenges from the viewpoint of University of Muhammadiyah Malang EFL students