

CHAPTER III

RESEARCH METHOD

This chapter discusses some research methods related to this study's topics. The researcher focuses on four sections: Research Design, Research Object, Data Collection, and Data Analysis.

3.1 Research Design

Research design is crucial because it determines the reliability and validity of a study's results. A well-designed research study ensures that the data collected can be analyzed and interpreted accurately, leading to meaningful conclusions and practical applications.

In this study, the researcher used descriptive qualitative research. According to Patrick A. Regoniel (2023), Descriptive qualitative research is a study that aims to comprehend a phenomenon by analyzing its features and attributes. Rather than elucidating an event's fundamental reasons or mechanisms, descriptive qualitative research examines its characteristics. The author Patrick A. Regoniel (2023) also explained that descriptive qualitative research aims to present a thorough and comprehensive description of the phenomena being studied. By doing this, we can formulate new research topics. The exercise will also assist in guiding practice or policy.

In this case, the researcher used a descriptive qualitative to know the use of ChatGPT as a teaching medium in learning TEFL reading. Researchers took data from several students in TEFL B classes who used ChatGPT as subjects in the study. The data collection instrument was carried out by researchers using interviews.

3.2 Research Participants

This part refers to the person who participates in the research. The research participants are University of Muhammadiyah Malang (UMM) students. The researchers selected several students from the Teaching

English as a Foreign Language course in the VI semester. According to (Taherdoost et al., 2016), Sampling can be employed to draw conclusions about a population or to extrapolate findings in alignment with established theory. Essentially, this is contingent upon the selection of the sampling method. In general, sampling techniques can be divided into two types:

- Probability Sampling:

With probability sampling, there is an equal chance for each item in the population to be included in the sample. Creating a sampling frame beforehand and selecting a sample from it using a computer program that generates random numbers is one method that researchers can employ to conduct random sampling. There exist multiple varieties of probability sampling:

- Simple random sampling

With a basic random sample, each case in the population has an equal chance of being included in the sample.

- Systematic sampling

In systematic sampling, each n th case following a random start is chosen. For instance, if you were surveying a sample of customers, you may choose to interview every fifth customer. This sampling strategy has the benefit of simplicity.

- Stratified sampling

Using stratified sampling, a random sample is drawn from each subgroup after splitting the population into strata, also known as subgroups. Natural groups of items are called subgroups. Sub-subgroups may be based on occupation, gender, or the firm's size. When there are many variances within a population, stratified sampling is frequently employed. Its goal is to guarantee that each stratum is fairly represented.

- Cluster sampling

In cluster sampling, all population members are separated into groups or clusters. Then, a random sample is selected from each cluster, and this sampling is used in its entirety. Because it reduces time and money, cluster sampling is helpful for researchers whose subjects are dispersed over broad geographic areas.

- Multi-stage sampling

Multi-stage sampling is a systematic method that involves moving from a large to a small sample.

- Non-probability Sampling:

Non-probability sampling is frequently connected to qualitative research and case study research designs. Concerning the latter, case studies focus on small samples and aim to investigate a real-world occurrence rather than draw statistical conclusions about the general population (Yin, 2003). It is not necessary for a sample of participants or cases to be representative or random, but there must be a good reason why some cases or individuals should be included but not others

- Quota sampling

Quota sampling is a non-random sampling strategy that selects participants based on preset qualities. This ensures that the sample as a whole has the same distribution of characteristics as the general population.

- Snowball sampling

Using a few instances to persuade other cases to participate in the study, snowball sampling is a non-random sampling technique that increases sample size. This strategy works best with small communities that are hard to reach because of their closed character, such as secret societies and exclusive occupations.

- Convenience sampling

Convenience sampling involves choosing participants based on their availability and ease of use. Students generally prefer convenience sampling because it is less expensive and simpler to use (Ackoff, 1953). Convenience sampling frequently aids in overcoming some research-related constraints. For instance, using friends or relatives as a sample is simpler than targeting strangers.

- Purposive or judgmental sampling

Purposive sampling, or judgmental sampling, is a technique where specific contexts, individuals, or events are purposefully chosen to offer crucial information that cannot be found through other options (Quote from Maxwell, 1996). This occurs when a researcher chooses certain instances or individuals to include in the sample because they are worthy of it.

In this study, the researcher chose a purposive sampling method. According to (Palinkas et al., 2016) Deliberate sampling is a technique frequently employed in qualitative research to find and choose instances with a lot of information and make the most of the limited resources available (Quote by Patton, 2002). This entails locating and choosing individuals or groups of individuals who possess a particular level of expertise or familiarity with a topic of interest (Quote by Cresswell & Plano Clark, 2011).

3.3 Data Collection

Data collection gathers information for research, strategic planning, commercial decision-making, and other goals. It is a crucial part of research initiatives and applications involving data analytics: Effective data collection provides the information needed to evaluate business performance or other outcomes, estimate future trends, activities, and

circumstances, and answer queries. The researcher collects the data using qualitative data, which is collected using an interview.

To obtain data from this study, researchers used semi-structured interviews with several grade B students of the TEFL in Practice course. A semi-structured interview is a qualitative research technique used to thoroughly understand a respondent's sentiments and ideas about specific themes. When the interviewer prepares the questions, they might change the order, skip any repetitions, or invent new ones.

3.4 Research Procedure

To collect the data researcher used several steps. The following steps are the procedure that the researcher used:

1. Students from class B of Teaching English for Foreign Language at the University of Muhammadiyah Malang.
2. Ask grade B students of TEFL in Practice courses that use ChatGPT
3. Explain the purpose of the observations made to obtain data from this study and ask students who use ChatGPT if they are willing to participate in this study.
4. In the interview process, students will be asked about the effectiveness of using ChatGPT, and the interview results will be recorded.
5. Finally, researchers will pour the results of interviews on the data collection page.

3.5 Data analysis

The results of the data on the implementation of this study will be explained according to the events taken from the data collected in this study. This study uses qualitative research that focuses on descriptive qualitative. Descriptive qualitative research usually contains explanations and arguments rather than numbers. After the data is collected, the next step is to analyze the data. In data analysis, researchers use several procedures as follows:

1. Defining the question
2. Collecting the data
3. Cleaning the data
4. Analysing the data
5. Sharing the result of data
6. Describe the data

