

CHAPTER III

RESEARCH METHODOLOGY

In this chapter, the researcher presents the methodology of the research. It consists of research design, research subject, technique of collecting data, technique of analyzing data, and trustworthiness.

A. Research Design

The researcher applied a qualitative approach to conduct this present study. Burns and Groove in Mohajan stated that qualitative is a subjectively and systematically approach to explain experience in daily life, furthermore, to give proper meaning to them.¹ The researcher found this approach suitable to be conducted since its purpose is to highlight an experience in daily life. To be more specific, the researcher employed a case study as the study design.

Fraenkel and Wallen defined a case study as an individual and group study aiming to formulate an interpretation to the specific case to achieve a useful social environment.² In this study, the case was the utilization of the Google Translate in translation course.

¹Haradhan Kumar Mohajan. (2018). Qualitative Research Methodology in Social Science and Related Subject. *Journal of Economic Development, Environment and People*, 7(1), p. 3.

²Jack R, Fraenkel and Norman E. Wallen. (2009). *How to Design and Evaluate Research in Education*, Seven Edition. New York: The McGraw –Hill Companie, p. 13.

B. Research Participant

A research participant is needed because a research participant is an individual that will be participating in the research.³ Thus, a study cannot be done without the existence of the participant. The participants of this study were the fifth semester of PBI 1 of the English Department, State Islamic University of North Sumatra. The researcher chose this class because of the translation course taught in that semester.

Likewise, the researcher chose the PBI 1 because the researcher had found out the phenomenon about the Google Translate utilization in their translation course by conducting the observation. The numbers of students in that class were forty-one students that consisted of thirty-seven females and four males. The forty-one students participated in the questionnaire.

Meanwhile, three of forty-one students participated in the interview session and documentation. To get the three students, the researcher used simple random sampling which has no purpose or no pattern.⁴ In this simple random sampling, the researcher wrote all the forty-one participants' names on paper, rolled them up, and then put them into the box. Furthermore, the researcher took three papers from the box.

³Participating in a Research Study, (n.d.), Retrieved from <https://www.rochester.edu/ohsp/subject/participatingInResearch.html>

⁴Syaukani. (2018). *Metode Penelitian Pendidikan*. Medan: Perdana Publishing, p. 39.

C. Technique of Collecting the Data

Brown and Rodgers in Fitria said the technique of collecting data is the research data that can be useful before anything and this data has to be compiled.⁵ The fundamental methods of data collecting in qualitative research according to Marshall and Rossman are; setting of participation, observation directly, in-depth interviewing, document review.⁶ In this research, the researcher used questionnaire, interview, and documentation as the technique of collecting data.

1. Questionnaire

Arikunto stated that a questionnaire is a written question the research gave to the respondents to get information about their personality.⁷ The researcher used a questionnaire to collect the data of the EFL pre-service teachers' engagement on machine translation and their perception of Google Translate utilization in translation course with the use of the closed-ended question.

Checkland et al, Burchfield, and Anyanwu in Osang, Udoimuk, Etta, Ushie, and Offiong defined a closed-ended question as a question that gives more freedom to answer the question and giving easily coded information provides boxes for the respondent.⁸ In the closed-ended question, the researcher used the Likert Scale. According to Djaali in Helmi, Munjin, and Purnamasari, the Likert Scale is

⁵Tira Nur Fitria. (2018). Translation Techniques Found in English to Indonesian Abstract Translation of Journal Edunomika. *ELITE Journal*, 5(2), p. 154.

⁶ Hardani. (2020). *Metode Penelitian Kualitatif & Kuantitatif*. Yogyakarta: CV, Pustaka Ilmu Group Yogyakarta, p. 121.

⁷Arikunto. (2010). *Prosedur Penelitian, Suatu Pendekatan Praktek*. Jakarta: PT. Rineka Cipta, p. 194.

⁸Osang J. E.A, Udoimuk A B B , Etta EBA, Ushie POA, and Offiong NE. (2013), Methods of Gathering Data for Research Purpose and Applications Using IJSER . Acceptance Rate of Monthly Paper Publication (March 2012 Edition-May 2013 Edition), *IOSR Journal of Computer Engineering (IOSR-JCE)*, 15(2), p.62.

a scale that can be used to measure individual or group attitudes and perceptions about an educational phenomenon.⁹

In this Likert scale, the researcher used 1 – 5 choice points of twenty questions to the forty-one participants, where; 1 for strongly disagree, 2 for disagree, 3 for undecided, 4 for agree, and 5 for strongly agree.¹⁰ The questionnaire was given on 1st August and collected on 7th of August 2021.

Further, the questions of the questionnaire were adapted from Yanti and Meka's research.¹¹ In this research, the researcher used Google Form as a media to avoid meeting directly in order to follow the health procedure during, this Covid 19 Pandemic. The question's transcript can be seen in Appendix 1.

In this case, after collecting all the data from a questionnaire, the researcher processed the data by reading all the data from the participants' answers, and then the researcher classified all the same themes. After that, the researcher calculated it. In calculating the data, the researcher used descriptive statistics for quantitative data. A descriptive statistic is a statistic used to analyze the collected data without making any general conclusions.¹² The researcher used descriptive

⁹Tedi Helmi, R. Akhmad Munjin, and Irma Purnamasari. (2016). Kualitas Pelayanan Publik Dalam Pembuatan Izin Trayek Oleh Dllaj Kabupaten Bogor. *Jurnal Governansi*, 2(1), p. 51.

¹⁰Weksi Budiaji. (2013). The Measurement Scale and The Number of Responses in Likert Scale. *Jurnal Ilmu Pertanian dan Perikanan*, 2(2), 128.

¹¹Maria Yanti and Lesly Martha C. Meka. (2019). Ibid, p.130.

¹²Farida Fitriani Ismail and Dedy Sudarmadi. (2019). Pengaruh Sistem Informasi Akuntansi dan Pengendalian Internal Terhadap Kinerja Karyawan PT. Beton Elemen Persada. *Jurnal Akuntansi, Audit dan Sistem Informasi Akuntansi*, 3(1), p. 6.

statistics aim to find out ELF pre-service teacher engagement on machine translation and their perception with the formula below:¹³

$$P = \frac{F}{n} \times 100\%$$

Where:

P = Percentage

F = Total respondents who choose the same degree of agreement

N= Number all of the respondents

Moreover, the researcher had obtained and compiled the questions based on the answers in the same theme. Thus, the results also showed that most of the EFL pre-service teachers have a positive perception. The following is an example of a question which in the same theme about "Google Translate enriches their vocabulary and word synonym":

Table 3.1
Example of Question in Questionnaire

No.	Statements	Score				
		SA (5)	A (4)	U (3)	D (2)	SD (1)
1.	Google Translate Helps to Enrich the Vocabularies	32	2	3	3	0
2.	Google Translate Helps to Enrich the Word Synonym	31	4	4	2	0
Total		63	6	7	5	0

¹³Abdul Rabbi Arrasul. (2017). *Students' Perspective towards Internet in English Language Learning at SMPN 1 Bunta*. Luwuk: Muhammadiyah University of Luwuk, p. 70.

2. Interview

Moleong defined an interview as an activity of two people, each one of them as an interviewer who gives the question and the other one as a person who answers the question with the aim to exchange information through the question and answer section about the topic.¹⁴ Therefore, the researcher used the interview because the researcher can get more information clearly and deeply from the research participants about the topic.¹⁵

In this case, the researcher conducted a semi-structured interview because it is understandable and neutral than close-ended questions or yes/no questions to the research subject.¹⁶ Besides, Cook in Datko defined a semi-structured interview as the interview where the researcher has more instruction over the direction of the conversation and discusses the topic.¹⁷

The researcher interviewed three participants to reduce the excess of respondents, the researcher chose them randomly. The researcher interviewed those participants with ten semi-structured questions after the preliminary analysis of the data collected through the questionnaire in order to dig further information that the researcher found still unclear from the questionnaire responses.

The interview has been held for about 45 minutes to one hour on the 9th of August 2021. The interview aimed to get the information about EFL pre-service

¹⁴Lexy J Moleong. (2002). *Metodologi Penelitian Kualitatif*. Bandung: PT. Remaja Rosdakarya, p. 5.

¹⁵Ibid, p. 214.

¹⁶PGill, KStewart, E Treasure, and BC Hadwick. (2008). Methods of Data Collection in Qualitative Research: Interview and Focus Group. *British Dental Journal*, 204(6), p. 292.

¹⁷Juraj Datko. (2015). Semi-structured Interview in Language Pedagogy Research. *Journal of Language and Cultural Education*, 3(2), p. 142.

teachers' perception of Google Translate utilization in translation course in more detail and deeply through WhatsApp video call as a media to avoid meeting directly in order to follow the health procedure during, this Covid 19 pandemic. The interview transcript can be seen in Appendix 2.

In the interview, the participants were questioned individually and the responses were recorded using a mobile phone application, then the audio record was transcribed verbatim. Then, the researcher classified the data result by distinguishing the different perceptions from the research participants. These interview results showed the same and related results as in the questionnaire results. It can be seen in the following table:

Table 3.2
The Results of Interview

No.	The Results of Interview
1.	Google Translate Helps Increase Their Enthusiasm in Translating Text
2.	Google Translate Enriches Their Vocabulary and Word Synonym
3.	Google Translate Makes Text Translation Easier To Do
4.	Google Translate Improves Their Translation Products

3. Documentation

Riyanto stated that documentation is a data collection technique by recording data in the form of documents containing past events.¹⁸ The researcher conducted documentation to analyze their works by translating a journal introduction entitled "The roles of teachers' work motivation and teachers' job satisfaction in the organizational commitment in extraordinary schools" by

¹⁸Yatim Riyanto. (2010). *Metodologi Penelitian Pendidikan*. Surabaya: SIC, p.103

Tentama and Pranungsari.¹⁹ In this stage, the participants translated the text that they had never translated before in one paragraph on the 10th of August 2021.

Furthermore, in assessing students' translation products, the researcher compared the research participants' translation products with the translation product from the author of the journal itself and assessed the quality of students' translation products by using translation quality assessment proposed by Nababan.

The results of this documentation indicated that the EFL pre-service teachers' translation products have complied with the elements of translation quality assessment proposed by Nababan. It means that they have good translation products which show the results of the questionnaire and interview related to the documentation. Further, the translation quality assessment transcript can be seen in Appendix III.

D. Technique of Analyzing Data

Marshall and Rossman defined that technique of analyzing data as a general statement searching about the data categories relationship.²⁰ In this stage, the researcher employed Miles and Huberman' framework in analyzing data. According to Miles and Huberman, there are three steps to analyzing data. Following are three steps of analysis data based on Miles and Huberman:²¹

¹⁹Fatwa Tentama and Dessy Pranungsari. (2016). The Roles of Teachers' Work Motivation and Teachers' Job Satisfaction in the Organizational Commitment in Extraordinary Schools. *International Journal of Evaluation and Research in Education (IJERE)*, 5(1), p. 39.

²⁰Tira Nur Fitria, (2018), Ibid, p. 154.

²¹Miles MB and Huberman M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook*. California: SAGE Publication, inc., p. 10 – 11.

1. Data reduction

Data reduction is summarizing, choosing the principal things, and focusing on the important thing with the search theme and the pattern of the data.²² In this stage, in the questionnaire, the researcher chose the important questionnaire answers and coded it with color to distinguish the different answers, for example; yellow is the color that indicated EFL pre-service teachers' engagement on machine translation which can be seen in the questionnaire transcript in Appendix I. Then, the researcher calculated the number of each questionnaire's answers.

In the interview, the researcher chose the important data which indicated the same positive perception with questionnaire results. Further, different colors mean different perceptions, for example, grey is the color that indicates Google Translate enriches their vocabulary and word synonyms and blue is the color that indicates Google Translate improves their translation products. To be more detailed, it can be seen in the questionnaire transcript in Appendix 1.

Thus, in the documentation, the research assessed the research participants' works by using Nababan's model. After that, the researcher classified the translation quality assessment into three, namely accuracy, acceptability, and readability in the form of tables. This documentation supported the EFL pre-service teachers' statements in the questionnaire and interview in the form of their works which employed Nababan's translation quality assessment, it showed that their translation products have a good score. To be more detailed, it can be seen in documentation in Appendix III.

²²Nuning Indah Pratiwi. (2017). Ibid, p. 216

2. Data Display

Miles and Huberman stated that data display is the data that contains an explanation that has been classified and grouped based on the data reduction that as a conclusion leading.²³ In this stage, after reducing the data, the researcher presented the data display from all the results of the data from a questionnaire, interview, and documentation and classified them systematically to make it easier for the researcher to analyze it.

In this case, the researcher presented the data from the chart and then described it in narrative form. In addition, the researchers presented the EFL pre-service teachers' translation products which related to the questionnaire and interview results to strengthen them. The data display can be seen in research findings.

3. Conclusion Drawing and Verification

Conclusion is the last or the final part of the research as the form of the answer to the formulation problem.²⁴ In this stage, the researcher presented the conclusion and verification to show the result of the research based on the data analysis that has been obtained.

²³Miles MB and Huberman M. (1994). Ibid, p. 65.

²⁴Ibid, p. 216.

E. Trustworthiness

Lincoln and Guba in Santoso and Ginting defined that trustworthiness has played an important role to evaluate its worth and aims of trust-worthiness to support the argument the researcher found.²⁵ Besides, Lincoln and Guba said that there are four criteria to establishing trustworthiness in qualitative data, namely credibility, dependability, conformability, and transferability.²⁶ In this research, the researcher conducted credibility as a criterion in trustworthiness. Further, the researcher conducted triangulation and expert debriefing as the technique in credibility.

1. Triangulation

According to Santoso and Ginting, triangulation is a data collection technique as a way for improving the validity of the data.²⁷ The aim of using triangulation is to increase the methodological, theoretical, and interpretative power of the research.²⁸ In this stage, the researcher compared the data from a questionnaire, interview, and documentation to get cross-validation of the data. Thus, the data did not take from one source only. Moreover, the results of this triangulation showed that all the techniques of collecting data have a relation to each other.

²⁵Didik Santoso and Pirman Ginting. (2015). Ibid, p. 54 – 55.

²⁶Ibid, p.55.

²⁷Didik Santoso and Pirman Ginting. (2015). Ibid, p. 56.

²⁸Arnild Augina Mekarisce. (2020). Teknik Pemeriksaan Keabsahan Data pada Penelitian Kualitatif di Bidang Kesehatan Masyarakat. *Jurnal Ilmiah Kesehatan Masyarakat*, 12(3), p. 150.

2. Expert Debriefing

According to Palmer and Bolderston, expert debriefing is thematic independent review by peer(s) not involved the researcher.²⁹ In this expert debriefing, the researcher needed two experts, namely qualitative and translation experts. In this case, firstly, the researcher consulted the first advisor who is an English lecturer of State Islamic University of North Sumatra, and also as an expert in qualitative research to check all of the stages in this research.

Secondly, the researcher consulted a translation lecturer of State Islamic University of North Sumatra and also as an expert in translation to check the result of translation quality assessment from the research participants' works that the researcher has assessed. Moreover, it showed that the researcher's translation quality assessment has been validated by the translation expert.

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²⁹Catheryne Palmer and Amanda Bolderston. (2006). Ibid, p. 18.