

## **CHAPTER I**

### **INTRODUCTION**

This chapter focuses on several aspects of this research, such as the research background, research questions, research purposes, research significances, research scope, conceptual framework, and previous study.

#### **A. Research Background**

English education in Indonesia is experiencing rapid growth. Especially in technology, the integration of artificial intelligence (AI) embodies a new vision in language learning to enrich learning English outcomes and experiences, making education more straightforward for teachers and students. This makes students and teachers feel that learning is easier Suprpto (2012). Williams and Beam (2019) said that the use of technology to help the students produce the quality in academic texts, such as English writing. This is used by almost every student in learning activities.

Academic text quality can be assessed as a statistical measure, for instance by analytic (scoring based on a variety of subjective categories). Assess writing quality using analytical scoring. Freedman (1979) is an example of this type of research, which used a variety of indices to determine which elements influenced analytic scores, including content, organization, sentence structure, and mechanics. Thus, a correlation between analytic and also statistical measures can be applied as indicator of text quality such as objectivity and readability, validity can be seen critical, and also content and coherence (Crossley and McNamara, 2011). The other things regard to syntactic and lexical realization, and correct use of grammar, spelling and punctuation are aspects that are typically considered when assessing text quality Grabowski et al. (2014) in terms of quality academic writing context.

Students often face significant difficulties when writing in the English language. Writing in English poses substantial challenges for EFL students, particularly in producing quality in academic texts, including language barriers, difficulties expressing complex ideas, and the need for precise choosing formal vocabulary

based on academic contexts (Lesmana and Ariffin, 2020). According to Manik and Suwastini (2020) grammatical or structural errors are common challenges for students composing English texts. Many students struggle with language proficiency, which affects their ability to express ideas clearly and coherently. Integrating technology, such as translation tools, has been suggested to alleviate some challenges by supporting language translation and enhancing writing quality (Shadiev et al., 2024). Several final semester English education students who wrote the English thesis background stated that they had difficulties in writing (Azizatuzzahroh and Solikhah, 2018). This is because English vocabulary in academic contexts and everyday English language are often different. Language used in academic writing should be clear and exact so that the reader understands the content without bias or ambiguity (Pratiwi, 2016;Fadhel, 2019).

For Students, DeepL and Google Translate are two of the most popular machine translation tools used today. Based on preliminary observations during their thesis writing, particularly in the context of the English Education Department at UIN Sunan Gunung Djati Bandung, some English Education students utilize writing aids like DeepL and Google Translate for machine translation to aid in their academic texts. As described by Asmara and Kembaren (2024), "Machine translation is the application of computers to the task of translating texts from one natural language to another". These platforms enable students to express themselves more clearly and precisely, particularly in writing, and also assist in selecting the perfect words, refining sentence structure, and correcting grammar. This provides students with a resource to write in a foreign language, enabling them to refine and improve their writing accuracy.

Zhang et al. (2022) this research examines how technology-enhanced writing instruction can significantly improve EFL students' writing skills and confidence, providing a strong case for integrating such approaches in language education. Next, Bahri and Mahadi (2016) examined students' perceptions of these tools, DeepL and Google Translate especially for supplementary tools learning vocabulary, writing, and reading in the Indonesian academic purpose. Later, Mukti et al. (2024) this

research is strikingly high: 96.6% of students routinely employ AI translation tools, and many find them outstandingly helpful. One of the reasons some students choose using translate platforms is that it has superior translation quality and can also string sentences naturally.

Both platforms DeepL and Google Translate rely on Neural Machine Translation (NMT) technology, which uses artificial neural networks to produce translations. Google Translate performs well for basic translation tasks but has some weaknesses when translating complex language structures, idiomatic expressions, and culturally nuanced content. As noted by Aiken and Balan (2011) these limitations can lead to inaccurate or unnatural translations. In comparison, DeepL is often praised for its ability to produce more context-aware and natural-sounding translations, especially for academic and professional texts. Research by Sabrina et al. (2025) confirms that DeepL handles complex sentence structures and idiomatic phrases more effectively than Google Translate, making it a better option for formal writing. However, Toral and Way (2018) caution that DeepL still has limitations, particularly with highly specialised vocabulary or technical translation strategies. At UIN Sunan Gunung Djati Bandung, DeepL has gained popularity among students and researchers, especially for translating legal documents. This research showed that users find DeepL more accurate and acceptable in terms of translation quality and readability.

This research differs from the three studies and the results of the pre-observation above. According to the previous research, it frequently depended on more general evaluations of tool efficacy or attitudes toward technology rather than going in-depth with the experiences of specific students. The current research focuses on students' perspectives on using the DeepL and Google Translate platform as an AI machine for students' writing thesis backgrounds, offering a more comprehensive view of the students' experience in the academic writing context at the university level. That research was conducted at Sunan Gunung Djati University, and the subject is Indonesian EFL students in the final semester of their English education department major. As a result, this research aims to evaluate students' experiences, perspectives,

and writing quality toward using these platforms to help students in their English writing thesis background.

## **B. Research Questions**

From the previous explanation, the researcher can formulate the problems as follows:

1. How do Indonesian EFL students perceive the use of DeepL and Google Translate in facilitating the writing of their English thesis background?
2. What is the quality of the three students' thesis backgrounds after using both DeepL and Google Translate?

## **C. Research Purposes**

According to the mention in the research questions, this research has primary research purposes:

1. To determine students' views on using DeepL and Google Translate as a machine translation on their English writing thesis background.
2. To investigate the quality of students' thesis backgrounds after using both DeepL and Google Translate platform.

## **D. Research Significances**

By exploring how students interact with these platforms. This research is likely a source of further information on students' perspectives of the Google Translate and DeepL platform in English writing thesis background. Ultimately, this research holds significance for the following:

1. Theoretical Significance

By exploring students' perspectives on using the DeepL and Google Translate platform, this research can gain valuable insight into students' experience into the benefits between using these platforms. Exploring in the aspect of writing process

and outcomes for their writing thesis background by implementing these platforms in writing for further research.

## 2. Practical Significance

By elaborating on students' perspectives on using these platforms. This research provides valuable information about the quality using DeepL and Google Translate platform as a machine translation as a writing tools to help students writing their thesis background, especially for EFL students.

### **E. Research Scope**

This research reveals the students' perspectives on using these platform to write an English thesis background. This research highlights the students so they can understand the use of the DeepL and Google Translate platform clearly. This research was conducted in the final semester of English Education Department students who were still preparing an English writing thesis background, and who would participate in this research. Selected participants used the triangulations of the data, questionnaires, interviews, and document analysis to conduct this research with the students using these platform.

### **F. Conceptual Framework**

This research explores the perspectives of final semester EFL students at UIN Sunan Gunung Djati Bandung in the major of the English Education Department regarding technology, their experiences with the DeepL and Google Translate platform, and their English writing thesis background. The research begins by highlighting that writing a thesis background is critical to academic research, contextualizing the study and justifying its relevance. A well-structured background should identify the subject area of interest and establish context by providing a balanced review of relevant literature. This helps readers understand the significance of the research question.

The challenges students face in their English writing thesis background, such as producing quality academic texts, include language barriers, expressing complex

ideas, and the need for precise vocabulary. This research focuses on understanding students' experiences and perspectives toward translation tools to help students in their English writing thesis background. Understanding these perspectives is vital for assessing how students perceive the quality of DeepL and Google Translate as writing aids and how they influence their writing process. The independent variable in this framework utilizes the translate platforms, while the dependent variables include students' perspectives on its quality for their writing thesis background.



Figure 1. 1 Conceptual Framework

This research seeks to answer two primary research questions. The first research question is to determine students' perspectives on using these platforms as a machine translation in their English writing thesis background process. The students' perspectives will be highlighted to clarify how to use these platforms in the final semester of the English Education Department.

The second is to answer a second research question about their English writing thesis background quality using both the DeepL and Google Translate platform. Evaluating students' writing is essential, as students interacting with these platforms

can shape the quality their English writing regarding their thesis background using these platforms.

From students' perspectives, the conceptual framework can comprehensively understand these platforms as a machine translation tool for their thesis background. In general, research can be described in the following diagram.

### **G. Previous Study**

This research is to examine the perspectives of final-semester EFL students at UIN Sunan Gunung Djati Bandung on using the DeepL and Google Translate platform to support their English writing thesis. This previous research to understand this topic comprehensively on using translation tools and their impact on writing quality. Previous research has explored in the various aspects such as translation tool effectiveness, machine translation accuracy, and comparing two machines.

The first previous research was conducted by Kol et al. (2018), this research explore the possible benefits of using Google Translate (GT) at various tertiary English for Academic Purposes (EAP) course levels, i.e., to see if the use of GT affects the quantity and quality of student writing. The results showed that when using GT students wrote significantly more words. They wrote longer sentences with longer words and the vocabulary profile of their writing improved.

The second research was conducted by Asmara and Kembaren (2024), this research determines students' perceptions of DeepL Translator when writing academic theses or journals. The findings of this research show that students frequently use DeepL translators for their theses or journals. Students use DeepL Translator to translate their Indonesian thesis or journal into English, paragraph by paragraph; it is more accurate and practical than other translation machines.

The third investigation was conducted by Mukti et al. (2024), this research focuses on assessing the effectiveness of AI-driven translation tools among English Literature students at UIN Sunan Gunung Djati Bandung, focusing on translation accuracy, usability, and impact on language learning. The findings of this research



are strikingly high: 96.6% of students routinely employ AI translation tools, and many students find them outstandingly helpful. AI tools can improve learning, but human oversight guarantees accuracy and contextual relevance. Contextually accurate translations, improved vocabulary databases, and the integration of human input are included among recommendations for improving AI tools.

The fourth research was conducted by Yulianto and Supriatnaningsih (2021), this research focuses on comparing between DeepL and Google Translate in A quantitative evaluation of close-language pair translation (French to English). DeepL is more accurate at translating French text into English than Google Translate. Additionally, based on some readability formulas, the research demonstrates that DeepL provides better readability than Google Translate. However, the study also identifies a few domains in which both machine translation systems require further development, including domain knowledge and the capacity to resolve lexical and structural ambiguities.

The current research, however, differs from previous research. According to the earlier research, it frequently depended on more general evaluations of tool efficacy toward technology rather than going in-depth with the experiences of specific students. The current research uses qualitative methods to discover students' perspectives on these platforms. It offers a more comprehensive view of the student experience. It also seeks the quality of these platforms by using them as a machine translation tools for their English writing thesis background in final semester English Education students at UIN Sunan Gunung Djati Bandung.