

CHAPTER I

INTRODUCTION

1.1 Research Background

The rapid advancement of digital technology in the Industrial Revolution 4.0 era has driven a global transformation in various aspects of life. Artificial Intelligence (AI) is becoming one of its most influential innovations. Nowadays, AI is widely adopted in various sectors, including the education sector (Saputra et al., 2023). AI is now used by more than 80% of educators around the world to support various activities in education (Nyudak et al., 2025). In education, AI is not only utilized for administrative and managerial processes, but it is also starting to be used to support the learning process itself (Adams & Thompson, 2025). As stated by Rosdiana et al., (2024); F. Xiao et al., (2025) AI is believed to contribute to English language learning because AI has the ability to understand and process language. In line with that, Aullia & Santosa (2025) found that the use of AI in English language learning contributes significantly to the convenience of the learning process for students.

From the broader development of AI, Generative AI has emerged and is now widely applied in education, including English language teaching. Numerous Generative AI applications have been introduced to support English language learning. One of the most popular Generative AI app in Indonesia is ChatGPT (Rosyada & Taopan, 2025). Additionally, a

study by Kharis et al., (2024) found that 81.6% of the surveyed teachers used ChatGPT in their teaching practices. Moreover, learning English is not easy for EFL learners due to limited interaction with native speakers, as well as cultural and linguistic differences (Utami & Lintang Sari, 2021). In this context, the presence of Generative AI applications, such as ChatGPT, can make the English learning process more convenient. Generative AI refers to AI-based applications developed with advanced language technology to generate text that resembles human writing, and has many benefits in language learning (Y. Xiao & Zhi, 2023).

Several studies, along with the preliminary findings of this research, indicate that Generative AI provides significant benefits for teachers in the context of English language teaching. Generative AI can assist teachers in making lesson plans based on the topic, objectives and specific learning needs, consequently saving teachers time (Koraishi, 2023). Moreover, the teacher used Generative AI to create grammar and vocabulary exercises and to provide reading materials that support comprehension activities (Moorhouse, 2024). In addition to being used in learning, Generative AI can also be utilized to support administrative and managerial processes, such as compiling reports (Adams & Thompson, 2025). Overall, these findings align with the preliminary results of this study, which revealed that teachers in the Buleleng District have also benefited from Generative AI in similar ways.

Numerous studies have shown the benefits of using Generative AI in TEFL, but its application in the classroom is not always optimal. However, the success of integrating AI in teaching is based on whether the teachers are ready or not to utilize it. Teachers are at the front lines of implementing AI in education and are expected to develop an adequate understanding of it. Their readiness to become both educated users and educators is critical for the success of AI-enhanced education (Ayanwale et al., 2022; Wang et al., 2023a). The ready teachers tend to be more confident in using digital tools, able to adapt teaching strategies, and responsive to students' learning needs (Alshorman, 2024). Readiness can also help teachers build an adaptive mindset as they face technological advances (Yue et al., 2024). It is clear that teacher readiness is a key foundation in the successful integration of AI in education. Without teacher expertise, the use of AI in education is becoming ineffective and could even have a negative impact on learning outcomes, despite its promising potential (Budiarta & Kusuma, 2024). Therefore, researching teacher readiness is a must for meaningful and sustainable use of AI.

A number of previous studies have examined the readiness of EFL teachers to adopt AI in various countries, with varied results. A study by Ghiasvand et al., (2024) reported that all EFL teachers in Italy were ready, while in Iran only 10% were ready, with the majority struggling with facilities and understanding of AI. In Hong Kong, Moorhouse (2024) found

that first-year teachers were generally ready to use AI, while beginning teachers were not ready due to their lack of experience. Meanwhile, EFL teachers in Turkey are considered sufficiently ready to utilize AI in teaching (Ozdemir & Mede, 2024). In Indonesia context, Priantini et al., (2024) found that lecturers in Indonesia and India have a high level of readiness in integrating AI. Additionally, Prihatin (2025) conducted a literature review on curriculum and instructional readiness in Indonesian primary and lower secondary schools. In the context of North Bali area, a study by Purnama et al., (2025) examined the readiness of 73 teachers from various subjects in North Bali to integrate AI into education. The results showed that teacher readiness was influenced by technical factors, institutional support, and infrastructure, with teachers in urban areas being more prepared than teachers in rural areas.

Previous research on readiness to use AI has been conducted extensively on EFL teachers abroad, such as in Italy, Iran, Hong Kong, and Turkey. Meanwhile, in North Bali, existing research has only examined teachers from various subjects and has not specifically focused on English teachers. Moreover, a study conducted at the junior high school level was still in the form of a literature review and did not involve direct analysis of teachers. Therefore, this study aims to address this gap by investigating the readiness of EFL teachers in the Buleleng district in using Generative AI.

1.2 Problem Identification

The development of Generative AI has helped EFL Teachers in Buleleng District in supporting daily teaching. It is ideal for teachers to have an adequate level of readiness in applying AI to the learning process. Their readiness to become both educated users and educators is critical for the success of AI-enhanced education (Ayanwale et al., 2022; Wang et al., 2023). Teachers who are ready are more confident, adaptive in their teaching strategies, and responsive to students' needs (Alshorman, 2024; Yue et al., 2024). Without readiness, the use of AI risks being ineffective or even having a negative impact, despite its great potential (Budiarta & Kusuma, 2024). Therefore, research on teacher readiness is important to ensure meaningful and sustainable use of Generative AI.

Based on preliminary studies, it was found that 85.71% public junior high school English teachers use Generative AI in their daily teaching. Interviews also revealed that they frequently utilize it to prepare test items as well as lesson plans, and consider Generative AI to be a very helpful and practical tool. However, there has been no research highlighting their readiness to use it. A study by Purnama et al., (2025) only discusses teachers of various subjects in general, not specifically English teachers. Moreover, a study by Prihatin (2025), It is a literature review on curriculum readiness and teaching methods in the context of junior high schools, rather than directly examining teacher readiness.

Based on the description above, there is a noticeable research gap, which is the absence of studies that specifically highlight the readiness of junior high school English teachers in using Generative AI, particularly in the Buleleng District. However, preliminary studies indicate that EFL teachers at junior high schools are already using Generative AI. It is essential to close this gap to have a better idea about the readiness of teachers to employ AI technology in education. Hence, this study attempts to examine the readiness of junior high school English teachers in the Buleleng District for integrating Generative AI in their teaching process.

1.3 Limitations of the study

Several weaknesses have been identified in this research. For instance, this research only targeted EFL teachers in Buleleng Junior High Schools. Consequently, the conclusions made from this study may not be applicable to teachers working in other regions, other educational stages, or teaching different subjects other than English language. In addition, this research mainly considered the aspects of teachers' readiness and ethical use of Generative AI and overlooked some issues, which would affect the adoption of AI technology among the educators.

Second, the research lacks an examination of teachers' AI literacy and AI competency levels. Even though the results highlight teachers' readiness for applying Generative AI, they do not tell about the degree of knowledge and skills that teachers possess in terms of artificial intelligence.

Therefore, it is impossible to state if there is a link between teachers' readiness level and their AI literacy/competency level.

Third, this research did not make use of observations from within the classroom on how AI is implemented. This is because the results that were obtained came out of self-reporting in surveys and interviews. Thus, the research was unable to confirm how AI is being implemented within the classroom and if the teacher's readiness levels are reflected in their behavior.

1.4 Research Questions

In light of the identified problems, the research questions for this study are:

1. What is the level of Junior High School English teachers' readiness in using Generative AI for TEFL in Buleleng District?
 - a. What is their readiness level in terms of technology self-efficacy?
 - b. What is their readiness level in terms of student interaction?
 - c. What is their readiness level in terms of ethical awareness?

1.5 Purpose of the Study

Based on the research questions above, the purpose of the study in this research are:

1. To measure the level of Junior High School English teachers' readiness in using Generative AI for TEFL in the Buleleng District
 - a. To examine their readiness in terms of technology self-efficacy

- b. To examine their readiness in terms of student interaction
- c. To examine their readiness in terms of ethical awareness

1.6 Significance of the Study

1.6.1 Theoretical Significance

The contribution of the study in terms of developing research on TEFL includes studies regarding the incorporation of the use of AI in education. The current research adds to the body of literature regarding readiness when using AI in education. Moreover, the Readiness for AI Applications Scale (RAIS) used in this study can serve as a theoretical basis for future research on readiness of educators for the use of AI in learning.

1.6.2 Practical Significance

1.6.2.1 Teachers

The study will also be very beneficial for teachers because they will have a better comprehension of the preparedness for using Generative AI for English language acquisition purposes. The findings from this study may assist teachers in becoming better at their job by increasing classroom efficiency.

1.6.2.2 School

For schools, the results of the study provide insights that can act as a foundation for thinking about any policy-making or training program

concerning the implementation of Generative AI in schools. Through this, schools will enable teachers to prepare themselves better with the use of AI technology in teaching and learning.

1.6.2.3 Future Research

Another contribution made by this study to further research is that it gives some preliminary information about teachers' readiness to use Generative AI in TEFL. This study may serve as a basis for developing further research by introducing additional variables and conducting further explorations

