

# CHAPTER I

## INTRODUCTION

This chapter presents the introduction of the study. It consists of the background of the research, research questions, objectives of the research, significance of the research, scope and limitation of the research, and the definition of key terms. The background explains the rationale for investigating pre-service English teachers' experiences in using AI assistance tools to develop reading materials for junior high school students.

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

Developing appropriate reading materials for junior high school students is one of the essential responsibilities of pre-service English teachers during their teaching practicum. As pre-service English teachers, they are expected to design reading materials that are appropriate for students' English proficiency, cognitive development, interests, and curriculum objectives. However, developing effective reading materials is often challenging because pre-service teachers need to select suitable texts, adapt language to students' proficiency levels, create meaningful reading activities, and ensure that the materials support students' reading comprehension. According to Nation and Macalister (2020), effective reading materials should provide comprehensible input with appropriate vocabulary, sentence structures, and text length that match learners' proficiency levels. Likewise, Richards and Schmidt (2019) emphasize that instructional materials for young adolescents should be age-appropriate, meaningful, and relevant to learners' needs. Therefore, developing appropriate reading materials is an essential

pedagogical competence that pre-service English teachers need to acquire before entering the teaching profession.

The rapid development of Artificial Intelligence (AI) has transformed many aspects of education, including English language teaching and learning. AI technologies such as intelligent tutoring systems, automated writing assistants, and AI-based chatbots like ChatGPT have increasingly been used to support teachers and students in completing various academic tasks (Khasawneh, 2024; Dakhi, 2025). In English language education, AI assistance tools support teachers in developing instructional materials by generating reading texts, adapting language, and creating learning activities (Dakhi, 2025). These capabilities have made AI a valuable resource for English material development.

For pre-service English teachers who conduct their teaching practicum in junior high schools, developing appropriate reading materials is an important pedagogical responsibility. To support this process, many of them have begun using AI assistance tools such as ChatGPT to generate reading texts, adapt language to students' proficiency levels, create comprehension questions, and organize instructional materials more efficiently (Dakhi, 2025). Savitri et al. (2025) argue that pre-service English teachers frequently use AI chatbots to overcome difficulties in developing English learning materials, particularly when they lack ideas during the material development process. Although AI offers practical support and improves efficiency, its use also raises concerns regarding creativity, pedagogical decision-making, learning autonomy, and ethical considerations. Therefore, pre-service English teachers need to develop the ability to use AI critically and

responsibly while ensuring that the reading materials they produce meet the learning needs of junior high school students.

In Indonesia, AI has gradually become part of pre-service English teachers' teaching preparation, particularly during teaching practicum in junior high schools. Wulandari and Purnamaningwulan (2024) reported that Indonesian pre-service English teachers commonly use AI applications such as ChatGPT, Copilot, Twee, and Quizizz AI to prepare lessons and develop teaching materials. These tools help them work more efficiently and generate instructional ideas. However, the study also revealed that many pre-service teachers still rely heavily on AI and require further guidance to use these technologies effectively and ethically. Similarly, Hastomo et al. (2024) found that Indonesian pre-service teachers' competence in utilizing AI-powered technologies remains at a moderate level, indicating the need for continuous digital literacy development and pedagogical training.

Although previous studies have investigated the integration of AI among pre-service English teachers, most have focused on perceptions, attitudes, challenges, or general academic use of AI rather than on the practical experience of developing reading materials for junior high school students. Khasawneh (2024) explored EFL pre-service teachers' perceptions of ChatGPT in academic activities and found that while AI supported idea generation and language learning, concerns regarding plagiarism and academic integrity remained. Dakhi (2025) reported that pre-service English teachers primarily used ChatGPT for writing assistance, translation, and organizing ideas. Furthermore, Wulandari and Purnamaningwulan (2024) investigated Indonesian pre-service teachers' experiences in AI-assisted teaching

practicum and found that AI tools were useful for lesson planning and material preparation despite limitations in digital literacy and ethical awareness. Likewise, Hastomo et al. (2024) emphasized that Indonesian pre-service teachers still require further support in integrating AI effectively into teaching practice.

These previous studies demonstrate increasing interest in AI integration within teacher education. However, limited research has specifically explored how pre-service English teachers experience using AI assistance tools to develop reading materials for junior high school students. Understanding these experiences is important because developing reading materials involves not only generating texts but also making pedagogical decisions regarding learners' needs, curriculum alignment, language level, and reading comprehension objectives. Exploring these experiences can provide deeper insights into how AI supports, challenges, and shapes the professional development of future English teachers.

. Therefore, this study aims to explore the experiences of pre-service English teachers in using AI assistance tools to develop reading materials for junior high school students. The findings are expected to contribute to English teacher education by providing insights into the effective and ethical integration of AI in instructional material development and by supporting the preparation of future English teachers who are capable of using AI responsibly in educational settings.

## **B. Research Questions**

1. How do pre-service English teacher use AI Assistance in developing reading materials?
2. What benefit do pre-service English teachers get when using AI Assistance in

developing reading materials?

3. What challenge do pre-service English teachers face when using AI Assistance in developing reading materials?

### **C. Research Objectives**

Based on the provided research questions, the following objectives guide the research:

1. To explore how pre-service English teachers utilize AI Assistance in the development of reading materials.
2. To identify the benefits that pre-service English teachers experience when incorporating AI Assistance into the creation of reading materials.
3. To examine the challenges faced by pre-service English teachers in using AI Assistance for developing reading materials.

### **D. Research Significance**

The findings of this research are expected to help pre-service English teachers improve their skills in developing teaching materials using AI tools:

#### **1. Theoretically**

Theoretically, this research contributes to the growing discussion on the integration of artificial intelligence in education, particularly in English language teaching. This research provides insights into how artificial intelligence can support the creative, efficient, and pedagogically innovative development of reading materials among pre-service teachers.

#### **2. Practically**

This research is expected to provide practical advantages for several stakeholders:

a. For Pre-Service English Teacher

This research can help pre-service teachers understand how to use AI tools effectively in developing teaching materials. It may improve their skills, confidence, and readiness to design innovative reading lessons that meet students' learning needs while maintaining pedagogical and ethical standards.

b. For Educational Institutions

This research provides valuable insight for universities and training centers in designing curricula that prepare pre-service teachers to use AI responsibly and effectively in the teaching process. It may also support institutions in strengthening policies related to digital learning and AI integration.

c. For Teacher Educators

The results of this research can serve as input for teacher educators in integrating AI literacy and digital pedagogy into their training practices. These insights may help educators guide future teachers more effectively in adapting to technological advancements.

d. For Future Researcher

The research can be used as a reference or foundation for further research related to the use of AI in education, particularly in teaching material development and teacher training.

## **E. Scope and Limitation**

The scope of this research focuses on how pre-service English teachers for junior high school utilize AI assistance tools in developing reading materials. This study specifically examines undergraduate English education students who are

being prepared to teach at the junior high school level and explores the ways they make use of AI tools to support the overall process of developing reading materials. The research is limited to reading materials and does not address the development of materials for other language skills. Additionally, the study is situated within the context of Indonesian higher education, particularly in coursework or activities related to material development and teaching practicum.

This research also has several limitations. The findings rely heavily on the participants' self-reported experiences, which may be influenced by their ability to reflect accurately on their use of AI tools. Because the participants come from a limited number of institutions, the results may not fully represent all pre-service English teachers across Indonesia.

## **F. Definition of Key Terms**

To avoid misunderstanding and to ensure clarity throughout this research, several key terms used in this research are defined as follows:

### **1. AI Assistance Tools**

AI assistance tools in this study refer to digital applications supported by artificial intelligence that help teachers during the process of creating learning materials. These tools assist with tasks such as generating ideas, adjusting language, simplifying texts, producing comprehension questions, and organizing content for reading instruction.

### **2. Pre-Service English Teachers**

Pre-service English teachers are undergraduate students enrolled in English education programs who are preparing to become professional English teachers.

They typically participate in coursework, teaching practicum, and training related to English language teaching.

### 3. Material Development

Material development is the process of planning, designing, and producing instructional materials that support classroom learning. In this research, the term refers to how pre-service teachers create reading materials with the assistance of AI tools.

### 4. Reading Materials

Reading materials refer to instructional resources used to support students' reading comprehension development. In this study, reading materials include reading texts, comprehension questions, vocabulary sections, activities, and other reading related learning resources that are developed with the assistance of AI tools.