CHAPTER I
INTRODUCTION

This chapter introduces the present research by providing the rationale and background of the research on the use of Artificial Intelligence tools in English lesson preparation. It outlines the research questions and objectives that guide the research. In addition, this chapter describes the scope of the research and explains the theoretical and practical relevance of the research.

1.1 Rationale

The rapid development of Artificial Intelligence (AI) has significantly influenced various sectors, including education. Artificial Intelligence refers to computer systems designed to simulate aspects of human intelligence such as learning, problem-solving, and decision-making (Chew & Ngiam, 2025). In the educational field, AI transforms teaching and learning practices and creates new opportunities for improving instructional quality (Garzón et al., 2025). The increasing availability of Artificial Intelligence tools allows teachers to perform instructional tasks more efficiently and systematically.

In Indonesia, the integration of technology in education is supported by national policies such as Law No. 20 of 2003 on the Indonesia National Education System, which emphasizes the importance of adapting education to scientific and technological advancement. Recent initiatives promoting digital transformation in education encourage teachers to integrate innovative technologies into teaching practices (Republic of Indonesia, 2003). These policies indicate that technology integration, including Artificial Intelligence, is aligned with national educational objectives.

In addition to national education policies, the importance of Artificial Intelligence in education has also been emphasized by the Indonesian Agency for the Assessment and Application of Technology (BPPT). Artificial Intelligence is considered an important technology for improving educational quality through the development of multimedia learning content, adaptive assessment systems,

integrated educational data, and personalized learning systems (BPPT, 2020). The application of Artificial Intelligence also supports distance learning and student-centered learning approaches, allowing teachers to provide more flexible and effective learning experiences.

Among various educational contexts, English language teaching represents a field where careful lesson preparation is essential for effective instruction. In English as a Foreign Language (EFL) contexts, teachers are required to prepare lessons carefully before classroom instruction. Lesson preparation includes designing lesson plans, developing teaching materials, creating worksheets or exercises, and preparing assessment tasks that are appropriate for students' learning needs. Effective lesson preparation enables teachers to anticipate classroom challenges and select appropriate teaching strategies based on students' needs and learning contexts (Aljohani & Ahmad, 2025).

In recent years, Artificial Intelligence tools such as generative AI platforms are increasingly used to assist teachers in lesson preparation. Artificial Intelligence tools can help teachers generate teaching ideas, design learning activities, create instructional texts, and develop assessment questions more efficiently. Researrch by Sinaga et al (2025) indicate that Artificial Intelligence supports teachers in organizing instructional components and reducing the time required for lesson preparation. These findings indicate that Artificial Intelligence functions not only as a classroom instructional tool but also as a professional support system during the planning stage of teaching.

Despite the growing use of Artificial Intelligence in education, many studies focus on classroom implementation or teachers' perceptions of Artificial Intelligence rather than on lesson preparation practices. The process of how teachers utilize Artificial Intelligence tools during lesson preparation, particularly in EFL contexts, remains limited, particularly in the context of EFL teaching in Indonesian secondary schools. Understanding this process is important because lesson preparation represents a fundamental stage in instructional planning and pedagogical decision-making.

Therefore, this research aims to explore how EFL teachers utilize Artificial Intelligence tools in preparing English lessons, focusing on how teachers use Artificial Intelligence tools and identifying the types of Artificial Intelligence tools used in lesson preparation. The novelty of this research lies in its focus on the micro-level process of lesson preparation in EFL teaching, which receives less scholarly attention compared to classroom implementation studies.

1.2 Research Questions

1. How do teachers use AI tools in preparing English lessons in EFL classrooms?
2. What AI tools are used by teachers in lesson preparation?

1.3 Research Objectives

1. To explore how teachers use AI tools in preparing English lessons.
2. To identify the AI tools used in lesson preparation.

1.4 Scope of the Research

This research focuses on exploring how EFL teachers use AI tools during the lesson preparation stage in secondary education. Specifically The research conducts at SMA Negeri 1 Kuningan and involves three English as a Foreign Language (EFL) teachers who actively use AI tools in preparing English lessons. The participants are purposively selected based on their experience in integrating AI tools into lesson preparation, as this aligns with the focus of the research. It specifically examines the types of AI tools utilized and how they are integrated into the preparation of lesson plans, teaching materials, worksheets, and assessment tasks. The research is limited to teachers who actively use AI tools in preparing English lessons. It does not examine classroom implementation, students' perceptions, or learning outcomes.

1.5 Weight and Relevance

This research is significant both theoretically and practically. Theoretically, it contributes to the growing discussion on AI integration in education, particularly in the area of teacher professional practices. Practically, the findings may provide insights for teachers on how AI tools can be used effectively and responsibly in lesson preparation. The research is also relevant to current

educational developments that emphasize digital literacy and technological integration in teaching.