

# CHAPTER I

## INTRODUCTION

This chapter provides an overview of the research background, including the underlying issues that led to the development of the study, the research questions and purposes, the scope of the study, and its significance within the field of English language education.

### 1.1. Background of the study

In recent years, the integration of critical thinking skills into educational frameworks has gained increasing global attention. Educators and policymakers worldwide acknowledge that critical thinking plays a pivotal role in preparing students for the demands of the 21st century. However, in the Indonesian context, particularly in English reading materials, this integration remains underdeveloped. Although critical thinking is explicitly included in the national curriculum, it is rarely implemented in classroom practice, especially in English reading instruction (Concilianus Laos Mbato, 2019).

Teaching approaches in many Indonesian schools still focus on memorization and literal comprehension, offering little room for reflective and analytical thinking. This gap between curricular intentions and actual classroom application highlights a significant challenge in achieving meaningful learning outcomes. The lack of emphasis on critical thinking hinders students from analyzing texts, questioning assumptions, and evaluating information critically. As a result, students are less likely to connect their reading with broader real-life issues. ELT practitioners argue that integrating critical thinking into English instruction is essential not only for improving language proficiency but also for fostering students' logical reasoning and decision-making skills (Harits Masduqi et al., 2025).

Indonesia's low reading engagement also exacerbates this issue. According to a study by Central Connecticut State University (2016), Indonesia ranked 60th out of 61 countries in public interest in reading. This is reflected in many Indonesian

high schools, where students show limited engagement with English reading materials—often due to a lack of texts that stimulate critical thinking and incorporate relevant global issues such as ecological sustainability (R. Sukma & Wulandari, 2020). These findings reveal a gap in both the design and the purpose of English reading materials currently used in Indonesian schools.

The scarcity of texts that promote both critical thinking and ecological awareness limits students' ability to engage meaningfully with content and understand broader global challenges (Jake, Ian N. et.al., 2024). This underscores the urgent need to revise and develop English reading materials that not only foster critical thinking but also address issues like sustainability and ecological awareness. This aligns with Indonesia's Kurikulum Merdeka, which emphasizes student-centered learning and environmental responsibility (Kementerian Pendidikan, 2022). However, many existing reading materials continue to emphasize rote learning and passive information intake. This limits students' capacity to engage critically with texts and hinders the development of deeper understanding. Therefore, there is an urgent need for reading materials that challenge students to think critically and encourage meaningful interaction with content.

Critical thinking and ecological awareness issues are interconnected in a way that strengthens students' ability to understand and respond to complex global problems (Gough & Annette, 2019). Ecological awareness issues such as climate change, deforestation, and pollution require not only factual knowledge, but also the ability to evaluate information, assess impacts, and propose sustainable solutions (Shutaleva & Anna, 2023). When students are trained to think critically about ecological awareness issues, they are more likely to develop informed opinions, engage in responsible actions, and make ethical decisions (L. Maghfiroh et al., 2025). Therefore, combining critical thinking and ecological awareness issues in reading materials enables students to grow both cognitively and affectively, promoting deeper comprehension as well as ecological sensitivity.

In addition to fostering critical thinking, integrating ecological awareness into the curriculum is essential, particularly in response to pressing global issues such as climate change and deforestation. For Indonesian students, incorporating ecological themes into English reading materials not only enhances their ecological

awareness but also connects them with global challenges that impact their future (Nadiyah et al., 2024). This integration encourages students to take responsibility for ecological preservation and promotes engagement in sustainable practices (Silvhiany et al., 2025). Moreover, embedding green pedagogy and ecological education into learning materials strengthens students' ecological metacognition (Nur et al., 2024). Incorporating ecological themes into English reading materials allows students to expand their understanding of global issues while simultaneously improving their critical thinking abilities (Barton, 2017).

Critical thinking, encompassing the skills of analysis, evaluation, and synthesis of information, is regarded as a crucial ability for success in the 21st century. Studies suggest that incorporating critical thinking activities into educational materials can significantly improve students' capacity to reason logically and make well-informed decisions (Facione, 2015). When integrated into the context of ecological awareness, critical thinking tasks encourage students to explore the complexities of ecological issues, assess possible solutions, and devise innovative approaches. This process not only supports intellectual growth but also nurtures ethical awareness and responsibility (Gough, 2019).

Reading, one of the four primary language skills, namely listening, speaking, reading, and writing, is categorized as a receptive skill. It plays a foundational role in academic learning (Harmer, 1989; Cunningham & Stanovich, 1997). Students who fail to master reading by the end of third grade often face challenges in learning other subjects, reduced motivation, and poor academic performance (G. Sloat et al., 2007). However, Indonesian reading materials still focus on vocabulary memorization and literal comprehension, offering little space for analytical reflection. These gaps indicate a clear need for well-developed reading materials that combine critical thinking and ecological awareness for tenth grade students.

Therefore, integrating critical thinking and ecological awareness into English reading materials provides students with valuable opportunities to enhance both cognitive skills and ecological understanding. Reading materials that address ecological topics can serve as effective platforms for fostering analytical thinking, as students are encouraged to evaluate problems, question assumptions, and make

evidence-based conclusions. This is in line with findings that emphasize the importance of developing students' critical thinking skills in education (Ramdani et al., 2022 ; Maghfiroh et al., 2022) The integration of critical thinking and ecological awareness is strongly connected, because understanding ecological issues requires more than simply knowing about nature. It involves recognizing the complex relationships between human actions and the natural environment. When students read about topics such as ecosystem imbalance, biodiversity loss, or the excessive use of natural resources, they are encouraged to think critically about the causes, consequences, and possible solutions. This process improves their ecological awareness while also strengthening cognitive skills, such as analyzing, evaluating, and making informed decisions. Ecological issues thus provide meaningful reading content that helps students develop critical thinking through reflective engagement with texts.

From a practical and personal perspective, the choice of this topic was inspired by the researcher's own teaching experiences at SMA Negeri 54 and SMA Islam PB Sudirman in Bekasi. In both schools, it was observed that students often struggled to engage critically with English reading texts. The materials commonly used emphasized vocabulary memorization and literal comprehension, leaving little room for analysis, reflection, or discussion. Moreover, the reading topics were often disconnected from students' real-life concerns, particularly ecological awareness issues such as pollution, climate change, and deforestation, which are highly relevant to their daily surroundings. These classroom experiences motivated the researcher to develop English reading materials that are not only aligned with curriculum demands, but also responsive to students' cognitive and emotional development by integrating critical thinking skills and ecological awareness.

## **1.2. Research Question**

Based on the background, this study attempts to answer the following research questions:

1. To what extent have the critical thinking skills and ecological awareness indicators been infused in the existing English reading learning materials for tenth-grade of senior high school?

2. How are critical thinking skills and ecological awareness indicators infused in English reading learning materials for tenth-grade of senior high school?
3. How is the design of critical thinking skills and ecological awareness indicators -infused English reading learning materials for tenth-grade of senior high school?
4. How is the readability of the critical thinking skills and ecological awareness indicators-infused English reading learning materials for tenth-grade of senior high school?

### **1.3. Research Purposes**

Aligned with the research questions, the research purpose of this study are follows:

1. To reveal the critical thinking skills ecological awareness indicators in the existing English reading learning materials for tenth-grade of senior high school.
2. To present the procedures of critical thinking skills and ecological awareness indicators infused in designing English reading learning materials for tenth-grade of senior high school.
3. To present the design of critical thinking skills and ecological awareness indicators-infused English reading learning materials for tenth-grade of senior high school.
4. To validate the readability of the designed reading materials from the perspectives of degree of difficulties for tenth-grade of senior high school.

### **1.4. Research Scope**

The scope of this research is limited to the development of English reading materials for tenth-grade senior high school students. The materials are designed to integrate critical thinking skills and ecological awareness issues through a variety of reading topics. This research focuses on analyzing the presence of those two elements in the existing materials, designing new English reading materials based on an integration framework, and validating their effectiveness. The developed English reading materials are compiled in a digital format and intended as

supplementary resources aligned with *Kurikulum Merdeka* and CEFR level B1. The content development follows the stages of the Successive Approximation Model (SAM) within the Research and Development (R&D) framework.

### **1.5. Research Significance**

This study is expected to contribute to English language education by providing reading materials that integrate critical thinking and ecological awareness, particularly for tenth-grade students. For students, the developed materials are intended to foster their ability to think critically and become more aware of environmental issues through engaging and relevant texts. For teachers, the English reading materials can serve as an alternative or supplementary resource that supports the development of students' cognitive and environmental competencies, in line with curriculum demands. Additionally, for future researchers, this study offers a reference and foundation for further exploration into the integration of interdisciplinary elements, such as critical thinking and environmental education within English language teaching materials.

Theoretically, this study contributes to the body of literature in English Language Teaching (ELT) by integrating critical thinking and ecological awareness into reading materials. It also offers a conceptual reference for future development of interdisciplinary English reading content and supports the application of the Research and Development (R&D) approach, particularly the Successive Approximation Model (SAM) in material design.

### **1.6. State of the Art**

In today's education system, integrating critical thinking skills and ecological awareness into English language learning has become increasingly important. Critical thinking enables students to analyze, evaluate, and construct logical arguments, while ecological awareness fosters a sense of responsibility toward environmental sustainability. The inclusion of critical thinking in learning helps students develop essential skills such as interpretation, analysis, evaluation, inference, and self-regulation. At the same time, incorporating environmental topics into educational materials enhances students' understanding of ecological

challenges and encourages them to take an active role in addressing environmental issues.

Although critical thinking and ecological awareness have been widely studied separately, limited research has combined both aspects into English reading materials for tenth-grade students. Learning resources that simultaneously promote environmental consciousness and higher-order thinking skills remain underdeveloped, particularly in the Indonesian educational context. This study aims to fill this gap by developing English reading materials that integrate critical thinking skills and ecological awareness. This approach is expected to improve students' reading comprehension while fostering their ability to think critically and become more environmentally conscious, ultimately leading to a more meaningful and relevant learning experience. As noted by Noto, G.M et al. (2022), incorporating climate change topics into senior high school reading materials can enhance students' environmental awareness and promote more meaningful language learning—yet critical thinking aspects were not explicitly addressed in their study.

### 1.7. Clarification of Key Terms

In order to avoid misinterpretation, the technical terms used throughout this study are defined as follows:

1. **Ecological Awareness:** Refers to understanding and consciousness of the relationship between humans and the environment. It involves recognizing environmental issues, including the impact of human activities on ecosystems, and promoting sustainable behaviour for the future.
2. **Critical Thinking:** Refers to the ability to analyze, evaluate, and consider information or arguments in a rational, objective, and reflective manner in order to make sound decisions or solve problems effectively.
3. **Infused:** Refers to the process of integrating or incorporating an element, in this case, environmental conservation and critical thinking, into existing instructional materials, such as English reading materials, to provide a broader impact.

4. **English Reading Material:** Refers to texts or reading materials used in English language learning aimed at enhancing reading skills, text comprehension, and overall language proficiency.
5. **Tenth Grade Students:** Refers to students in the 10th grade of the secondary education system as the target learners in this study are students in the first year of senior high school, which prepares students for specific careers and professions.
6. **Research and Development(R&D):** Refers to a systematic research method used to design and develop educational products through iterative stages of analysis, design, development, validation, and revision.

