

**INFUSING GREEN EDUCATION AND SCIENTIFIC LITERACY SKILLS INTO
ENGLISH LEARNING READING MATERIALS FOR 8TH GRADERS**



**Submitted in Partial Fulfilment of the Requirements for Master Degree Program of
English Language Education**

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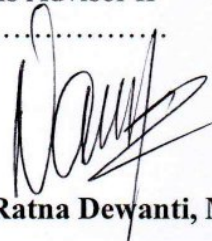
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ABSTRAK

Ramadhani, Desyrianti (2025): Mengintegrasikan Pendidikan Hijau dan Keterampilan Literasi Sains ke dalam Materi Bacaan Pembelajaran Bahasa Inggris untuk Siswa Kelas 8. Tesis. Jakarta: Program Magister Pendidikan Bahasa Inggris, Fakultas Bahasa dan Seni, Universitas Negeri Jakarta.

Tantangan lingkungan dan kebutuhan akan literasi sains merupakan isu global yang mendesak dan memerlukan inovasi dalam dunia pendidikan. Meskipun Green Education (GE) dan Scientific Literacy (SL) telah banyak dikaji secara terpisah, penerapannya dalam pembelajaran bahasa Inggris masih kurang berkembang, khususnya di Indonesia. Materi bacaan bahasa Inggris untuk siswa kelas 8 juga belum banyak mengintegrasikan GE dan SL secara komprehensif, sehingga membatasi kemampuan siswa dalam memahami isu lingkungan dan sains secara kritis. Penelitian ini bertujuan untuk mengevaluasi dan mengembangkan materi multimodal bacaan bahasa Inggris yang menggabungkan topik lingkungan dari GE dan keterampilan SL, disesuaikan dengan kebutuhan siswa kelas 8 di Indonesia. Dengan menggunakan metode Design and Development Research (DDR), penelitian ini terdiri dari empat tahap: analisis kebutuhan, perancangan, evaluasi, dan revisi. Materi yang dikembangkan berhasil memadukan tema-tema lingkungan seperti Cuaca dan Iklim, Gas Rumah Kaca, Siklus Karbon, Siklus Air, Pencegahan Polusi dan Pelestarian Sumber Daya, serta Energi Terbarukan, dengan keterampilan literasi sains seperti mengingat pengetahuan sains, menerapkan prinsip sains dalam konteks nyata, membedakan pertanyaan yang dapat diuji, dan menafsirkan data. Penelitian ini memberikan kerangka bagi guru dan pengembang kurikulum untuk mengintegrasikan GE dan SL dalam pembelajaran bahasa Inggris secara efektif.

Kata Kunci: Pendidikan Hijau, Literasi Sains, Pengajaran Bahasa Inggris, Materi Bacaan Pembelajaran Bahasa Inggris, Materi multimodal, Kesadaran Lingkungan.

ABSTRACT

Ramadhani, Desyrianti (2025): Infusing Green Education and Scientific Literacy Skills Into English Learning Reading Materials For 8th Graders. Thesis. Jakarta: Master Program of English Language Education, Faculty of Language and Arts, Universitas Negeri Jakarta.

Environmental challenges and the need for scientific literacy are pressing global concerns that necessitate innovative design in education. While Green Education (GE) and Scientific Literacy (SL) have been explored individually, their infusion into English language learning remains underdeveloped, especially in Indonesia. Existing English learning reading materials for 8th-grade students also lack comprehensive frameworks that combine GE and SL, limiting students' ability to engage critically with environmental and scientific issues. This study aimed to address these gaps by evaluating and developing multimodal English learning reading materials infused with GE environmental topics and SL skills, tailored to 8th-grade students in Indonesia. Employing a Design and Development Research (DDR) methodology, the study comprises four phases: need analysis, design, evaluation, and revision. The designed materials successfully incorporate key environmental themes—Weather and Climate, Greenhouse Gases, Carbon Cycle, Water Cycle, Pollution Prevention and Conserving Resources, and Renewable Energy—alongside essential scientific literacy skills such as recalling scientific knowledge, applying principles to real-life contexts, distinguishing testable questions, and interpreting data. This research provides a framework for teachers to infuse green education and scientific literacy into English language instruction, benefiting both teaching effectiveness and student development. It also offers a model for curriculum developers to create integrated materials, influencing future educational practices.

Key words: Green Education (GE), Scientific Literacy (SL), English Language Teaching (ELT), English learning reading materials, Multimodal materials, Environmental Awareness

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DECLARATION OF AUTHENCITY

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Jakarta, 25 Juni 2025



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