



Representing Environmental Issues in Eco-ELT: An Ecocritical Analysis of a Senior High School English Textbook

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Article Info	Abstract
Received: 2026-08-12 Revised: 2026-09-23 Accepted: 2026-09-23 Keywords: <i>Environment;</i> <i>Eco-ELT;</i> <i>English textbooks</i> DOI: 10.24256/ideas.v14i2.11207 Corresponding Author: Tiara Widyaiswara tiarawdya@unisla.ac.id Universitas Islam Lamongan, Indonesia	<i>This study investigates the representation of ecological concepts in the SPLASH English textbook by Anik Muslikah Indriastuti (2022), Erlangga, used by Grade X senior high school students in Indonesia, and considers their relevance to Eco-ELT. Employing a qualitative content analysis approach, this research applies Greg Garrard's (2004) ecocriticism theory to analyze ecological concepts embedded in the four report texts of Unit 6. The six ecocritical concepts examined are Pollution, Wilderness, Apocalypse, Dwelling, Animals, and Earth. A total of 25 data were identified: 5 for Pollution (20%), 3 for Wilderness (12%), 3 for Apocalypse (12%), 5 for Dwelling (20%), 3 for Animals (12%), and 6 for Earth (24%). The findings show that all six ecocritical concepts are represented to varying degrees, with Earth as the most frequent category, followed equally by Pollution and Dwelling. These findings indicate that the SPLASH textbook contains substantial environmental content that has the potential to support ecological awareness in English-language instruction, suggesting the potential of English textbooks as a resource for integrating environmental education into ELT in Indonesian secondary schools.</i>

1. Introduction

Indonesia is one of the world's most disaster prone nations: BNPB recorded roughly 5,400 disaster incidents throughout 2023 alone, and 205 further incidents across 16 provinces within the first month of 2026, affecting an estimated 145,538 people (BNBP, 2026). Combined with severe air pollution affecting an estimated 99.4 percent of Indonesia's urban population (Rosalina et al., 2023), these figures point to a persistent imbalance between human activity and the natural environment, one that directly affects Indonesian communities, including school-age children. Such conditions underscore the urgent need to cultivate environmental awareness among younger generations.

Scholars and educators have argued that education must play a central role in shaping ecological consciousness, and environmental literacy is now considered an essential competency for twenty first century citizens (Webmaster, 2020). Within this context, English Language Teaching (ELT) has emerged as a promising avenue for integrating environmental awareness into the curriculum, supported by theoretical foundations such as ethical development (Hauschild et al., 2012), global responsibility (Mercer et al., 2022), critical ecological thinking (Xiong, 2014), and literary engagement (Beigel, 1196). Building on these foundations, Saiful (2023) developed the concept of Eco-ELT, a framework that positions environmental sustainability at the heart of English language education and envisions teachers as “green” moral agents whose pedagogical choices actively contribute to environmental advocacy.

Garrard (2004) ecocriticism and Saiful (2023b) Eco-ELT serve distinct but complementary functions in this study. Garrard’s six concepts provide an analytical framework for identifying and classifying how ecological ideas are represented in a text, whereas Eco-ELT provides a pedagogical framework for interpreting the relevance of such representations to English language teaching. Garrard’s categories therefore identify what ecological discourse is present in the textbook, while Eco-ELT informs how that discourse might be pedagogically significant; the two frameworks are used together but are not interchangeable in this study.

The integration of environmental content into ELT carries implications for education beyond language acquisition itself. Textbooks that meaningfully embed ecological themes have the potential to support students’ scientific literacy, critical thinking, and civic responsibility toward the environment, competencies increasingly demanded by twenty first century curricula, although realizing this potential depends on how such content is taken up in actual teaching and learning.

In the Indonesian context, where the Merdeka Curriculum’s Pancasila Student Profile includes care for the environment as one of its core character dimensions, an English textbook that represents ecological issues meaningfully can function as a cross curricular resource with potential relevance to environmental education goals beyond the English classroom. Understanding how such content is represented is therefore a matter of both linguistic and curricular relevance, since it can inform how educational materials might support the ecological consciousness of the next generation, without on its own establishing that such an effect occurs.

Among the various tools used in ELT, the textbook occupies a foundational position. As stipulated in Permendikbud No. 8 of 2016, textbooks authorized by the Ministry of Education and Culture serve as the principal learning resource for developing students’ core competencies, shaping what students know, how they think, and what values they internalize (Deepublish, 2020).

Previous studies have examined ecocriticism in ELT contexts, including (Widyaiswara et al., 2024), who investigated Eco-ELT in a junior high school English textbook, and Tatik (2023), who conducted an ecocritical analysis of a children’s novel. While these studies show that Garrardian ecocriticism can be productively applied to educational and literary materials, senior high school English textbooks remain unexamined, and existing work has not systematically addressed how ecological concepts are discursively represented, whether such representation is anthropocentric or ecocentric, which ecological dimensions are emphasized or marginalized, and how textbook environmental discourse might support Eco-ELT pedagogically.

This study addresses these gaps by examining Unit 6 of the SPLASH (Smart Path to Learning English) textbook (Indriastuti, 2022), used by Grade X senior high school students in Indonesia, guided by the following research questions: (1) Which of Garrard (2004)

ecocritical concepts are represented in Unit 6 of SPLASH? (2) How are these concepts linguistically and ideologically represented? and (3) What potential implications do these representations have for Eco-ELT?

Using Garrard (2004) ecocriticism as the primary analytical framework, this study examines how the natural environment is portrayed and how the human-nature relationship is conceptualized within the textbook. Because the analysis is limited to textbook content, the study's findings speak to the representation and pedagogical potential of this content; they do not, on their own, establish how the textbook is actually used, received, or the extent of any resulting ecological consciousness among students, questions that would require research involving teachers, students, or classroom observation.

Garrard's (2004) literary ecocriticism and Saiful's (2023) Eco-ELT framework are integrated in this study through a sequential analytical to pedagogical bridge. While Garrard's six ecocritical concepts (e.g., pollution, wilderness, apocalypse) provide the core textual and ideological toolkit to deconstruct what ecological discourses are present and how the human-nature relationship is represented in the textbook, Eco-ELT serves as the interpretative engine that translates these textual findings into language education practice. Specifically, Garrard's analysis exposes whether the textbook's wheather evaluates how such representations can be leveraged by teachers as "green" moral agents to foster ecological awareness, language acquisition, and civic responsibility simultaneously. Thus, Garrard's framework functions as the diagnostic lens, whereas Eco-ELT provides the practical framework for understanding the pedagogical utility and transformative potential of the textbook's environmental content.

2. Method

This research employs a qualitative content analysis design (Creswell, 2014). The data source is Unit 6 of the SPLASH "Smart Path to Learning English" textbook (Indriastuti, 2022), containing four report texts entitled: "What Is an Earthquake?", "Marine Debris", "What is Flooding?", and "What is Climate Change?". These texts were selected because they engage directly with natural phenomena and environmental issues.

Garrard (2004) ecocriticism theory provides the analytical framework for this study through six interrelated concepts. Pollution refers to anything that appears in the wrong place or in excessive quantity, and is treated as both a scientific and a cultural issue shaped by social values. Wilderness denotes a natural state largely untouched by human civilization, representing nature's autonomy from human control. Apocalypse concerns narratives of environmental catastrophe, and how visions of the future, whether hopeful or fatalistic, shape present day ecological behavior.

Dwelling captures the relationship between human habitation and the land, encompassing both productive engagement with nature and its vulnerability to environmental forces. Animals addresses the cultural and ethical representation of non-human life, including questions of habitat, biodiversity, and moral responsibility. Earth, the final concept, frames the planet as a living, interconnected system rather than a passive backdrop for human activity. Together, these six concepts guided the identification and categorization of ecological content in the four report texts of Unit 6.

In this study, a datum was operationally takes words, phrases, as a sentence, or a set of contiguous sentences expressing a single ecological idea, that could be assigned to one of Garrard (2004) six categories. A single sentence containing more than one distinct ecological idea was counted as more than one datum, while several sentences elaborating a single idea were counted as one datum. This unit of analysis was applied consistently across the dataset. Because several excerpts could plausibly relate to more than one category (for example, ocean pollution simultaneously evoking Pollution, Animals, and Earth), each

datum was assigned to a single primary category based on its most salient ecological focus, following the operational definitions and inclusion/exclusion criteria summarized in Table 1 below.

Table 1. Operational Coding Framework for Garrard (2004) Ecocritical Categories

Category	Operational Definition	Inclusion Criteria	Exclusion Criteria
Pollution	Substances, waste, or contaminants present in a location or quantity considered harmful or “out of place” in the natural environment.	Explicit mention of contamination, waste, debris, or excessive substances (e.g., plastic, gas emissions) affecting land, water, or air.	General environmental description without reference to contamination or excess (see Earth/Dwelling).
Wilderness	Natural phenomena, spaces, or processes that exist and operate independently of human control or civilization.	Descriptions of geological, oceanic, or planetary processes/spaces not shaped by or directly accessible to human activity.	Natural processes framed primarily through their impact on, or causal link to, human activity (see Apocalypse/Earth).
Apocalypse	Narratives that attribute environmental catastrophe, crisis, or future threat to an identifiable cause, typically human activity.	Explicit reference to catastrophic consequences, crisis trajectories, or future environmental threat (e.g., droughts, sea-level rise, extinction).	Statements of causal fact (e.g., “X causes warming”) without an accompanying catastrophic or crisis framing (see Earth/Pollution).
Dwelling	The relationship between human habitation/settlement and the land, including the vulnerability of homes and communities to environmental forces.	Explicit reference to homes, communities, or human settlement being affected by, or engaging with, environmental conditions.	References to the environment with no connection to human habitation or settlement.
Animals	Non-human animal life, habitat, or welfare, referenced either through direct naming of species or clearly implied impact on animal habitats.	Explicit mention of animals/species, or unambiguous reference to habitats whose primary framing is animal welfare or biodiversity.	References to habitat contamination framed primarily around pollution scale rather than animal impact (see Pollution).
Earth	The planet as an interconnected, dynamic, or self-organizing system operating on geological or planetary scales.	Descriptions of planetary systems, geological processes, or Earth-scale interconnection.	Localized natural description without planetary-system framing (see Wilderness/Dwelling).

Data collection followed a structured four-step procedure. First, Unit 6 was identified as the focused unit of analysis because its four report texts predominantly discuss environmental topics. Second, the unit was read thoroughly and repeatedly, following the qualitative content analysis procedure of Cho & Lee (2014), to identify sentences and passages relevant to the six ecocritical concepts. Third, the identified data were documented systematically in a data inventory table recording the datum code, page number, source text, and the exact sentence or passage in which it appeared. Fourth, each datum was classified according to Garrard (2004) categories and assigned a corresponding code (Poll for Pollution, WD for Wilderness, Apo for Apocalypse, Dwe for Dwelling, Anim for Animals, and Ea for Earth), involving initial coding, categorization, and interpretation. This coding procedure functioned as the primary research instrument, with the researcher

serving as the main tool for identifying, interpreting, and categorizing the data (Abrahamson, 1983 as cited in Hsieh & Shannon, 2005).

Table 2. Coding Table of Garrard (2004) Ecocritical Concepts

No	Code	Page	Source Text	Sentence
1	Poll	191	Marine Debris	"Our oceans are filled with items that do not belong there. This makes marine debris one of the most widespread pollution problems facing the world's oceans and waterways."
2	Poll	191	Marine Debris	"A study by Borrelle et al. estimated that in 2016, as much as 23 million metric tons of plastic waste entered aquatic ecosystems from land around the world."
3	Poll	191	Marine Debris	"Once marine debris is in the ocean, it can be challenging to understand where it came from, where it goes, or how much is there."
4	Poll	204	What is Climate Change?	"Increasing greenhouse gas emissions from human activity act like a blanket wrapped around the earth, trapping the sun's heat and raising temperatures."
5	Poll	204	What is Climate Change?	"These come from burning fossil fuels such as gasoline for driving a car or coal for heating a building. Landfills for garbage are another source. Energy, industry, agriculture and waste disposal are among the major emitters."
6	WD	184	What Is an Earthquake?	"Although the Earth looks like a pretty solid place from the surface, it's actually extremely active just below the surface."
7	WD	184	What Is an Earthquake?	"The lithosphere isn't a continuous piece that wraps around the whole Earth like an eggshell. It's actually made up of giant puzzle pieces called tectonic plates. Tectonic plates are constantly shifting as they drift around on the viscous, or slowly flowing, mantle layer below."
8	WD	185	What Is an Earthquake?	"NASA's InSight mission will carry a seismometer to Mars to study seismic activity there, known as marsquakes. Scientists hope to figure out what materials are found on the inside of Mars."
9	Apo	204	What is Climate Change?	"But today we are experiencing rapid warming from human activities, primarily due to burning fossil fuels that generate greenhouse gas emissions."
10	Apo	205	What is Climate Change?	"The consequences of climate change now include, among others, intense droughts, water scarcity, severe fires, rising sea levels, flooding, melting polar ice, catastrophic storms and declining biodiversity."
11	Apo	205	What is Climate Change?	"Yet the current path of carbon dioxide emissions could increase global temperature by as much as 4.4°C by the end of the century."
12	Dwe	195	What is Flooding?	"Flooding is an overflowing of water onto land that is normally dry. Floods are the most common and widespread of all weather-related natural disasters."
13	Dwe	195	What is Flooding?	"Floods can occur within minutes or over a long period, and may last days, weeks, or longer. Floods are the most common and widespread of all weather related natural disasters."

No	Code	Page	Source Text	Sentence
14	Dwe	195	What is Flooding?	“Areas near rivers are at risk from floods. Embankments, known as levees, are often built along rivers and are used to prevent high water from flooding bordering land. The city of New Orleans experienced massive devastating flooding days after Hurricane Katrina came onshore in 2005 due to the failure of levees designed to protect the city.”
15	Dwe	205	What is Climate Change?	“People are experiencing climate change in diverse ways. It affects our health, ability to grow food, housing, safety and work.”
16	Dwe	205	What is Climate Change?	“Conditions like sea level rise and saltwater intrusion have advanced to the point where whole communities have had to relocate. In the future, the number of ‘climate refugees’ is expected to rise.”
17	Anim	191	Marine Debris	“Our trash has been found in every corner of our ocean, from the most remote shorelines to ice in the Arctic, and even the deepest parts of the sea floor.”
18	Anim	191	Marine Debris	“From local shoreline cleanups to vessel removals, these projects benefit coastal habitats, waterways, and wildlife. Since 2006, the NOAA Marine Debris Program has supported over 160 marine debris removal projects and removed more than 22,500 metric tons of marine debris from our coasts and ocean.”
19	Anim	191	Marine Debris	“Although some of these items may eventually break down, others are made to last a long time. Once they are in the environment, these items may never fully go away.”
20	Ea	184	What Is an Earthquake?	“An earthquake is an intense shaking of the Earth’s surface. The shaking is caused by movements in the Earth’s outermost layer.”
21	Ea	184	What Is an Earthquake?	“This non stop movement causes stress on Earth’s crust. An earthquake is the sudden movement of Earth’s crust at a fault line.”
22	Ea	184	What Is an Earthquake?	“The location where an earthquake begins is called the epicenter. However, the vibrations from an earthquake can still be felt and detected hundreds, or even thousands of miles away from the epicenter.”
23	Ea	204–205	What is Climate Change?	“Greenhouse gas concentrations are at their highest levels in 2 million years and continue to rise. As a result, the earth is about 1.1°C warmer than it was in the 1800s. The last decade was the warmest on record.”
24	Ea	205	What is Climate Change?	“Many people think climate change mainly means warmer temperatures. But temperature rise is only the beginning of the story. Because the Earth is a system, where everything is connected, changes in one area can influence changes in all others.”
25	Ea	205	What is Climate Change?	“Limiting global temperature rise to no more than 1.5°C would help us avoid the worst climate impacts and maintain a liveable climate.”

Note. This table presents the complete coding inventory of all 25 data identified in Unit 6, cross-verified against the coding documentation in the author's thesis (Appendices 1 and 4), including exact page numbers and source texts for each datum.

Notes:

Poll : Pollution
Dwe : Dwelling
WD : Wilderness
Anim : Animal
Apo : Apocalypse
Ea : Earth

To ensure the trustworthiness of the findings, this study applied the four criteria proposed by (Lincoln & Guba, 1985). Credibility was pursued through repeated, independent readings of Unit 6 conducted by the researcher at three different points in time, together with an audit trail documenting the coding rationale for each datum. Because Garrard (2004) framework served as the analytical lens applied to the data rather than as an independent second data source, this study does not claim triangulation in the conventional sense; the absence of second-coder or peer verification of the coding is acknowledged as a limitation (see Limitations in the Discussion).

Transferability was supported by providing thick, detailed descriptions of the data so that the findings could inform ecocritical analyses of other English textbooks or educational levels. Dependability was maintained by consistently applying Garrard's six categories throughout the entire coding process, while confirmability was ensured by grounding all interpretations strictly in textual evidence from the textbook rather than the researcher's personal assumptions.

3. Result

1. Distribution of ECO-ELT Data Across Ecocritical Categories

A total of 25 data were identified across the four report texts of Unit 6 of the SPLASH textbooks. These data were distributed across all six of Garrard (2004) ecocritical categories. The frequency and percentage distribution is presented in Table 3 below, and one representative datum for each category is presented in Table 4.

Table 3. Frequency and Percentage Distribution of Ecocritical Categories in Unit 6 of the SPLASH Textbook

No.	Ecocritical Category	Frequency	Percentage
1	Earth	6	24%
2	Pollution	5	20%
3	Dwelling	5	20%
4	Wilderness	3	12%
5	Apocalypse	3	12%
6	Animals	3	12%
	Total	25	100%

Table 4. Representative Data for Each Ecocritical Category in Unit 6 of the SPLASH Textbook

No.	Ecocritical Category Garrard (2004)	Datum
1	Earth	"An earthquake is an intense shaking of the Earth's surface. The shaking is caused by movements in the Earth's outermost layer."
2	Pollution	"Our oceans are filled with items that do not belong there. This makes marine debris one of the most widespread pollution problems facing the world's oceans and waterways."
3	Dwelling	"Flooding is an overflowing of water onto land that is normally dry. Floods are the most common and widespread of all weather related natural disasters."

No.	Ecocritical Category Garrard (2004)	Datum
4	Wilderness	“Although the Earth looks like a pretty solid place from the surface, it's actually extremely active just below the surface.”
5	Apocalypse	“But today we are experiencing rapid warming from human activities, primarily due to burning fossil fuels that generate greenhouse gas emissions.”
6	Animals	“Our trash has been found in every corner of our ocean, from the most remote shorelines to ice in the Arctic, and even the deepest parts of the sea floor.”
Total		25

As shown in Table 3, the Earth category yielded the highest number of data (6 data, 24%), followed equally by Pollution and Dwelling (5 data each, 20%), and then Wilderness, Apocalypse, and Animals (3 data each, 12%). The presence of all six categories suggests that the SPLASH textbook integrates environmental content across multiple ecological dimensions, which is consistent with the kind of representation Eco-ELT scholarship considers pedagogically relevant, as theorized by (Saiful et al., 2023).

To examine whether the claimed ecological breadth is distributed across the unit or concentrated within particular texts, Table 5 presents the number of data per category attributed to each of the four report texts.

Table 5. Distribution of Ecocritical Categories by Source Text

Source Text	Pollution	Wilderness	Apocalypse	Dwelling	Animals	Earth	Total
What Is an Earthquake?	0	3	0	0	0	3	6
Marine Debris	3	0	0	0	3	0	6
What is Flooding?	0	0	0	3	0	0	3
What is Climate Change?	2	0	3	2	0	3	10
Total	5	3	3	5	3	6	25

Note. Ecological content is not evenly spread across the unit: Wilderness, Apocalypse, and Animals data are each concentrated entirely within a single report text (Wilderness in “What Is an Earthquake?”; Apocalypse and the majority of Earth/Dwelling/Pollution data in “What is Climate Change?”; Animals in “Marine Debris”), while Pollution, Dwelling, and Earth data are each split across two texts. The “What is Climate Change?” text alone contributes 10 of the 25 data (40%), indicating that this single text carries the heaviest ecological load in the unit.

This distribution indicates that the ecological breadth documented in Table 3 is not evenly spread across Unit 6 but is concentrated in particular texts: the “What is Climate Change?” text alone contributes 10 of the 25 data (40%), spanning four of the six categories (Pollution, Apocalypse, Dwelling, and Earth), while “Marine Debris” and “What Is an Earthquake?” each contribute 6 data (24%) concentrated in two or three categories, and “What is Flooding?” contributes only 3 data (12%), entirely within the Dwelling category. This concentration suggests that the Climate Change text functions as the unit's central ecological anchor, while the other three texts each foreground a narrower ecological focus.

Datum EA

“An earthquake is an intense shaking of the Earth’s surface. The shaking is caused by movements in the Earth’s outermost layer.” (Indriastuti, 2022, p. 184)

This datum opens the earthquake text with a foundational statement of the Earth as a dynamic, active system. Garrard (2004) describes the earth concept in ecocriticism as engagement with the planet as a living, self-organizing entity that sustains all life and operates according to its own processes, and the description of an earthquake as caused by movements in the Earth’s outermost layer positions the Earth not as a passive backdrop for

human activity but as a system with its own internal dynamics. This framing represents a shift from an anthropocentric to a more ecocentric view of the Earth, and offers teachers a potential opening for discussing the planet as an active system rather than a static resource (Nandy, 2021).

Datum Poll

"Our oceans are filled with items that do not belong there. This makes marine debris one of the most widespread pollution problems facing the world's oceans and waterways." (Indriastuti, 2022, p. 191)

This datum from the Marine Debris text represents Garrard (2004) pollution concept, which defines pollution as anything perceived to be out of place or present in excessive quantity in the natural environment; the framing of the ocean as "filled with items that do not belong there," together with the enumeration of pollutants such as plastics, metals, and derelict fishing gear, constructs a picture of marine pollution as widespread and systemic. Embedding this content in a Grade X English textbook is consistent with Saiful (2023a) argument that Eco-ELT positions language materials as a means of engaging students with authentic environmental issues, offering a textual resource that teachers could draw on to discuss marine pollution as a shared responsibility.

Datum Dwe

"Flooding is an overflowing of water onto land that is normally dry." (Indriastuti, 2022, p. 195)

This datum from the Flooding text represents Garrard (2004) dwelling concept through its portrayal of human habitation as vulnerable to natural forces; the disruption of dwelling that floodwater causes is, in Garrard's terms, a key indicator of ecological crisis in environmental writing. For students in Indonesia, a country that regularly experiences severe flooding, this datum connects a global discourse of environmental risk to a lived local reality, which (Saiful et al., 2023) identify as important for making Eco-ELT content personally meaningful.

Datum WD

"Although the Earth looks like a pretty solid place from the surface, it's actually extremely active just below the surface." (Indriastuti, 2022, p. 184)

This datum from the earthquake text introduces wilderness through the Earth's hidden geological interior. Garrard (2004) defines wilderness as a natural realm that exists and operates independently of human civilization; while wilderness is often illustrated through visible landscapes, this datum extends the concept to a form of geological wilderness vast, powerful, and entirely non-human that is inaccessible to direct human observation. This classification is offered as one plausible reading within Garrard's framework rather than a settled fact, and the interpretation is treated with appropriate caution given the boundary-case nature of geological, as opposed to landscape-based, wilderness.

Datum Apo

"But today we are experiencing rapid warming from human activities, primarily due to burning fossil fuels that generate greenhouse gas emissions." (Indriastuti, 2022, p. 204)

This datum establishes the human origin of the current climate crisis, which Garrard (2004) treats as a defining feature of apocalyptic environmental narrative: such narratives are distinguished from ordinary descriptions of natural disaster by their attribution of catastrophe to human agency and their orientation toward future consequence. The word "rapid" conveys urgency and historical rupture, and the datum is read here as apocalyptic primarily because of this future-oriented, crisis-implying framing rather than the causal statement alone; this classification, too, is treated as an interpretive judgment rather than

an uncontested fact (see Limitations).

Datum Anim

"Our trash has been found in every corner of our ocean, from the most remote shorelines to ice in the Arctic, and even the deepest parts of the sea floor." (Indriastuti, 2022, p. 191)

Although no animal or species is explicitly named in this datum, it is classified under Garrard (2004) animals concept because ecocritical treatment of animals often proceeds through habitat: the statement that human trash has reached the Arctic and the deepest sea floor implies that no marine habitat, and therefore no marine species, is unaffected by human contamination. This is an inferential reading rather than a direct textual reference to animal life, and a more conservative alternative would classify this datum primarily as Pollution; both readings are defensible, and the classification adopted here is flagged as a limitation of single-researcher coding.

Comparisons between these findings and those of related studies on Eco-ELT and ecocritical textbook analysis (e.g., Nadhlah, 2024; Apriati, 2013; Gorden & Poems, 2021) are discussed together in the Discussion section, rather than repeated after each datum, to avoid redundancy.

2. Pollution

Five pollution related data were identified from the Marine Debris and Climate Change texts. These data collectively portray pollution as systemic, globally pervasive, and human caused. In the Marine Debris text, pollution is established through descriptions of debris reaching even the most remote ocean corners, while the Climate Change text extends pollution into the atmospheric domain through the metaphor of greenhouse gases acting as a thermal blanket around the Earth. Quantitative evidence such as 23 million metric tons of plastic waste entering aquatic ecosystems in 2016 models evidence-based environmental reasoning, offering a potential resource for developing students' ecological literacy alongside their language skills (Saiful, 2023a).

3. Wilderness

Three wilderness data were found in the earthquake text, portraying the Earth's geological interior as a vast, autonomous realm beyond human control. The tectonic plates are described as giant puzzle pieces drifting on a viscous mantle, conveying a natural realm operating entirely on its own terms. One datum extends the wilderness concept to a planetary scale through reference to NASA's InSight mission studying marsquakes on Mars. These data offer a potential resource for cultivating geological humility in the classroom and align with Garrard (2004) argument that wilderness ultimately reveals the limits of human understanding and control over the natural world.

4. Apocalypse

Three apocalyptic data were identified in the Climate Change text. The most comprehensive datum presents eight distinct consequences of climate change: intense droughts, water scarcity, severe fires, rising sea levels, flooding, melting polar ice, catastrophic storms, and declining biodiversity, conveying the systemic and cascading nature of the crisis. Notably, the textbook employs conditional language rather than absolute predictions, which models responsible, evidence-based environmental communication and may help preserve, rather than foreclose, students' sense of ecological agency (Saiful et al., 2023).

5. Dwelling

Five dwelling data were found across the Flooding and Climate Change texts, portraying human habitation as fundamentally vulnerable to natural forces. The data progress from the immediate disruption of flooding to the ultimate dissolution of communities forced to relocate as climate refugees. The flooding text is particularly relevant

for Indonesian students, connecting their lived experience of natural disasters to a global discourse of environmental risk. The concept of climate refugees offers a further potential entry point for developing students' ecological empathy and understanding of environmental justice (Saiful et al., 2023).

6. Animals

Three animal related data were identified in the Marine Debris text. The data move from the broad geographic reach of marine pollution across ocean habitats, to the positive human response through the NOAA Marine Debris Program, to the long term irreversible threat of synthetic materials to marine life. Crucially, everyday consumer objects such as cigarette butts, plastic bags, and food wrappers are identified as among the most harmful marine debris, offering a potential entry point for framing ecological responsibility as personally relevant to students (Saiful et al., 2023).

7. Earth

Six Earth related data, the highest count across all categories, were found in both the earthquake and climate change texts. These data portray the Earth as a dynamic, self organizing system whose processes operate on geological timescales beyond human experience. The most explicit articulation presents the Earth as an interconnected system in which changes in one area can influence changes in all others (Indriastuti, 2022, p. 205). The data also situate the current climate crisis within geological deep time, noting that greenhouse gas concentrations are at their highest in 2 million years, which offers a textual resource for cultivating the long-term ecological thinking that Saiful et al., (2023) identify as a key Eco-ELT outcome.

4. Discussion

The findings of this study show that all six of Garrard (2004) ecocritical concepts are represented, to varying degrees, across the four report texts of Unit 6 in the SPLASH textbook, addressing the first research question. This result is broadly consistent with Nadhlah (2024), who similarly found diverse Eco-ELT-relevant content in a junior high school English textbook using Garrardian analysis; the present study extends this line of inquiry by examining a senior high school textbook and by attending more closely to how, not only whether, ecological concepts are represented.

The present study's application of Garrard (2004) framework to a pedagogical textbook context also complements literary applications of the same framework, such as Apriati (2013) ecocritical reading of the human-nature relationship in a children's novel and Gorden & Poems (2021) analysis of human/nonhuman relationships in poetry; together, these studies suggest that Garrard's six concepts travel productively across genres ranging from literary fiction and poetry to expository textbook prose, though the pedagogical stakes of representation are distinctively foregrounded in an educational text intended for classroom use.

Before interpreting the category frequencies, it is important to distinguish frequency from pedagogical significance. That Earth occurs more often than, for instance, Wilderness or Apocalypse indicates textual prominence the concept appears more frequently across the four texts but it does not by itself indicate that Earth carries greater ideological weight or educational importance than the less frequent categories. A concept represented only three times but consistently across multiple texts, as Wilderness, Apocalypse, and Animals are here, may be pedagogically significant in ways that frequency counts alone do not capture.

With this distinction in mind, the dominance of the Earth category (6 of 25 data, 24%) reflects a holistic, systems-level framing of ecological phenomena in the SPLASH textbook: rather than presenting environmental issues in isolation, the textbook consistently situates

them within interconnected planetary systems, from earthquakes to climate change. This framing is consistent with the systems thinking that Saiful et al., (2023) identify as a cornerstone of Eco-ELT and with Mercer et al., (2022) argument that ELT has a responsibility to address the environmental crisis through content that supports students' critical ecological understanding. Such systemic framing may be particularly relevant in the Indonesian context, where direct exposure to earthquakes, floods, and other geological hazards makes systemic environmental understanding a matter of practical, lived relevance (Bangay & Blum, 2010).

The strong representation of Pollution and Dwelling (5 data each, 20%) together reflects a dual focus on the human causes of environmental degradation and its consequences for human communities. This pairing is pedagogically suggestive: by presenting pollution not as an abstract global issue but as something that affects the places where students live, the textbook offers material that teachers could use to develop discussion of ecological empathy and agency, outcomes Saiful et al., (2023) identify as central to Eco-ELT, although whether such discussion actually develops these outcomes would need to be examined through classroom-based research rather than textbook analysis alone. The explicit quantification of pollution, such as the figure of 23 million metric tons of plastic waste, models the kind of evidence-based environmental discourse that Hauschild et al., (2012) argue is valuable for environmentally engaged EFL learners.

The less frequent categories Wilderness, Apocalypse, and Animals (3 data each, 12%) nonetheless appear consistently across the four texts, suggesting that the textbook's ecological narrative, while centered on Earth as a system and its human-facing consequences, does not entirely neglect non-human and speculative dimensions of ecocritical thought. The Wilderness data, rooted in geological description and an extraplanetary comparison with Mars, offer material that could be used to challenge anthropocentric assumptions about scale and control. The Apocalypse data, framed through conditional rather than fatalistic language, avoid the kind of alarmist rhetoric that Xiong (2014) cautions can induce resignation rather than motivate action. The Animals datum grounds ecological impact in everyday consumer behavior, though, as noted above, its classification under Animals rather than Pollution is an interpretive judgment rather than a settled fact.

Taken together, these findings suggest that the SPLASH textbook contains textual resources that could support discussion of environmental values and ecological citizenship when pedagogically mediated by teachers, rather than that the textbook, by itself, functions as "a vehicle for ecological value transmission and environmental citizenship education." This more cautious formulation better reflects the evidentiary basis of a content analysis of textbook material, and is consistent with Bowden (2020) broader argument that green issues in ELT are not peripheral but central concerns a claim about the field's priorities rather than about what any one textbook achieves on its own. The textbook's use of report texts as the primary genre for ecological content is also noteworthy, since this genre supports academic literacy skills, including scientific vocabulary, logical organization, and evidence-based argumentation, that are relevant to engaging with environmental discourse beyond the classroom.

Presence and Absence in the Textbook's Ecological Representation

Because the title of this study frames the analysis as "critical," it is important to examine not only what ecological content is present in Unit 6 but also what is absent or underrepresented, addressing the second research question. The four report texts predominantly frame environmental issues scientifically and informationally, in keeping with the report-text genre, with comparatively little attention to social, cultural, or political dimensions of environmental problems. Indigenous and local Indonesian ecological

perspectives are notably absent; the texts draw on globalized scientific framings (e.g., NASA data, generic climate statistics) rather than local ecological knowledge, despite the textbook's Indonesian context.

Solutions and human agency appear mainly in the Apocalypse-related content of the Climate Change text, in the form of conditional statements about mitigating future consequences, but concrete or collective avenues for action are not elaborated in detail. Environmental justice issues are only implicitly present, primarily through the Dwelling data linking flooding to vulnerable communities, without explicit discussion of unequal exposure to environmental harm. Finally, non-human species are consistently discussed through the lens of human impact rather than granted agency or ecological standing in their own right illustrated by the Animals datum discussed above, in which impact on marine life is inferred from human waste rather than described directly. These absences suggest directions for a more genuinely ecocentric and critical reading of the textbook in future work.

Language and Discourse: An Illustrative Observation

Beyond thematic classification into Garrard's six concepts, a few linguistic features of the analyzed excerpts are worth noting, though a systematic discourse analysis was beyond the scope of this study. The recurrent use of the possessive pronoun "our" in the Marine Debris text (e.g., "our oceans," "our trash") implies a collective, shared responsibility for environmental harm rather than attributing it to a distant or unspecified actor. The Apocalypse datum's use of conditional rather than absolute language, and the Earth data's framing of geological processes in agentive terms (the Earth as something that "shakes" and is "active," rather than a passive backdrop), point toward a broadly ecocentric orientation in places. A more systematic analysis of transitivity, modality, and human/non-human agency across the full dataset, following approaches used in ecolinguistics and critical discourse analysis, would allow these observations to be tested more rigorously and is recommended as a direction for future research building on this study.

Regarding contribution, the primary novelty of this study lies less in the shift from junior high to senior high school textbooks per se, and more in demonstrating how environmental discourse is structured within an Indonesian EFL textbook and in identifying the pedagogical opportunities and limitations that arise from this structuring, including the absences discussed above.

5. Conclusion

This study examined the representation of Garrard (2004) ecocritical concepts in Unit 6 of the SPLASH "Smart Path to Learning English" textbook Indriastuti (2022) and considered their relevance to Eco-ELT. All six ecocritical concepts Pollution, Wilderness, Apocalypse, Dwelling, Animals, and Earth were represented across the unit's four report texts, with a total of 25 data identified. Earth was the most frequent category (6 data, 24%), followed equally by Pollution and Dwelling (5 data each, 20%), and then Wilderness, Apocalypse, and Animals (3 data each, 12%), reflecting a systems-oriented framing of environmental phenomena that situates issues such as earthquakes and climate change within interconnected planetary processes rather than as isolated events.

These findings indicate that the SPLASH textbook contains substantial and varied environmental content, offering textual resources that could support ecological awareness and environmental discussion within English-language instruction. Given the study's scope one textbook, one unit, and single-researcher coding these findings should be read as evidence of representation and pedagogical potential rather than of actual classroom impact.

Future research should extend the analysis to other units and textbooks, incorporate second-coder verification and systematic discourse analysis, and examine how Eco-ELT content of this kind is taken up by teachers and students in actual classroom settings.

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