

A Critical Eco-perspective in English Textbook for Indonesian 12th Graders: A Case on Nationally Issued Textbook

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Abstract. Ecological values in textbooks are essential because they help instill environmental awareness and responsibility in students from an early age to support sustainable development. The study addresses how ecological values are portrayed in Indonesian 12th-grade English textbooks. Using a qualitative content analysis framework, this study examines the transitivity system found in the textbook. The analysis emphasizes environmental conservation, sustainable practices, and encouraging cognitive engagement through positively framed language and relatable, contextual examples. Through a thorough exploration of how elements are connected, positive language use, and specific contextual details, the research provides nuanced insights into the representation of ecological values. This research provides valuable insights into the nuanced instructional approach that shapes environmental awareness within the context of these textbooks. These findings suggest that English Language Teaching (ELT) materials for Indonesian students should actively incorporate eco-friendly linguistic elements and emphasize sustainability-oriented pedagogy to cultivate environmental responsibility.

Keywords: Eco-perspective, English Textbook, Ecological Values, Transitivity System

Introduction

Ecological values in English as a Foreign Language (EFL) textbooks are highly relevant and essential in today's educational landscape, particularly in fostering environmental awareness among Indonesian students. By integrating ecological themes into language learning, EFL textbooks enhance language skills and promote a deeper understanding of environmental issues that affect students'

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immediate surroundings and the world (Lehtonen & Karjalainen, 2008). This approach is critical in Indonesia, where students are increasingly facing the consequences of environmental challenges, such as deforestation, pollution, and climate change (Hidayati, 2018). Teaching ecological values through EFL materials equips students with the vocabulary and cultural understanding necessary to discuss and engage with environmental topics, empowering them to become more conscious, responsible citizens who can advocate for sustainable practices in their communities (Cates, 1997). This study seeks to examine the presence and representation of ecological values in Indonesian EFL textbooks for 12th graders, identifying gaps and areas for improvement.

Despite the rise of digital tools, (EFL) textbooks remain crucial. They provide a structured foundation for learning, ensuring consistency and coherence in the curriculum. In Indonesia, they serve as the primary instructional material, guiding teachers and offering a structured learning experience for students. Textbooks go beyond language instruction by fostering cultural understanding and essential values (Berkowitz & Murphy, 2012). Textbooks can also promote intercultural understanding, a vital aspect of the Sustainable Development Goals (SDGs) (Rader, 2020).

The SDGs and EFL textbooks are related since they emphasize incorporating social responsibility and environmental awareness into the classroom. The SDGs advocate for incorporating environmental issues into educational materials (Goal 4: Quality Education) to promote sustainable thinking and global citizenship (United Nations, 2015). Textbooks can also promote intercultural understanding, a vital aspect of the SDGs (Rader, 2020). This is particularly advantageous for language learners, as it offers a clear path to competency development (Seli et al., 2024). By exposing students to diverse cultures and perspectives, textbooks build language skills and foster empathy, tolerance, and a global mindset, encouraging learners to communicate and act on sustainability issues in their local communities and the broader global context. This integration is essential for language learners, as it equips them with the knowledge and awareness needed to engage with pressing global challenges, such as climate change and sustainable development, while also building intercultural competence.

The SDGs highlight the need for education to address global concerns and promote cooperation. They emphasize Education for Sustainable Development (ESD), encouraging innovative teaching methods and incorporating global issues into the curriculum (Allam, 2017). Textbooks can play a significant role by discussing environmental issues and ecological values (Famarzi & Janfeshan, 2021). This helps students develop a deeper understanding of the interconnectedness of human activities and the environment. Research shows that incorporating eco-linguistics into EFL textbooks improves students' knowledge of environmental problems and their ability to express themselves effectively in English (Asgher et al., 2021; Majeed et al., 2022). Additionally, this approach can inspire students to become active citizens committed to environmental sustainability.

Despite the potential of EFL textbooks, a closer examination reveals how effectively current materials integrate these principles. Studies in Morocco and Iran suggest that there is limited focus on environmental issues in textbooks (Milles & Larouz, 2018; Famarzi & Janfeshan, 2021). This represents a missed opportunity

to educate students about our planet's pressing challenges and empower them to take action. Similarly, research on Indonesian EFL textbooks shows a focus on socio-cultural topics but lacks emphasis on environmental issues (Widodo, 2018; Setyono, 2018; Yonata & Mujiyanto, 2017; Setyono & Widodo, 2019). In other words, ecological topics are underrepresented in textbooks. While these topics are essential, incorporating environmental themes can provide students with a more holistic and relevant education. Further research is needed to explore the representation of ecological values in Indonesian EFL textbooks.

In conclusion, EFL textbooks remain vital for teaching and learning English. By aligning textbooks with the demands of a sustainable future, we can equip students with the knowledge and skills they need to create a better world. While some progress has been made, more research is needed to ensure EFL textbooks are aligned with the demands of a sustainable future. Hence, the study aims to investigate the extent of ecological values in Indonesian EFL textbooks, identify key ecological themes presented, and analyze these representations through the lens of the transitivity system.

Method

This study employed qualitative text analysis to explore the depth and nuances of eco-perspective representation in EFL textbooks, enabling a detailed examination of ecological themes and values within the text. Thematic, content, and narrative analysis were employed to capture the presence, context, and narrative framing of ecological values in the textbooks. The transitivity system, which identifies different process types in language, was used to reveal the underlying ecological messages embedded in the text. It examines material, relational, mental, verbal, existential, and behavioural processes (Halliday, 2024). Material processes (actions and events) show physical interactions with the environment, illustrating eco-values regarding actions that impact nature. Relational processes (states of being) clarify attributes, identities, and relationships, such as associating positive or negative values with ecological elements. Meanwhile, mental processes (thoughts and perceptions) provide insight into people's attitudes, beliefs, and feelings toward the environment. Verbal processes (communication) capture expressions about nature, revealing what is said and how eco-ideas are shared. Then, existential processes (existence or occurrence) underscore the presence or absence of environmental entities, stressing their importance or scarcity. Lastly, behavioural processes (non-verbal actions) reflect human responses to the environment that align with eco-values. By examining these processes together, we gain a nuanced view of how language choices represent eco-perspectives, illustrating varying levels of engagement, attitudes, and values towards environmental issues. This study also categorized the eco values into five components. Each eco-valuing component—Human Beings, Non-Human Beings, Power and Energy, Environmental Issues, and Partnership—offers unique insights into portraying ecological values (Halliday & Matthiessen, 2004). Human Beings and Non-Human Beings show the relationship between humans and nature, highlighting either respect or exploitation. Power and Energy reflect attitudes toward resource use and sustainability. Environmental Issues reveal levels of concern for ecological challenges, while Partnership emphasizes harmony and collaboration between humans and nature. These components

provide a comprehensive view of how language conveys diverse ecological perspectives and responsibilities. Categorizing these processes enabled the identification of specific language patterns that reflect attitudes, relationships, and values toward environmental sustainability.

Findings and Discussion

Findings

The present qualitative text-analysis case study aims to reveal how ecological values are portrayed in Indonesian 12th-grade English textbooks by analysing their representation through the transitivity system. The analysed data demonstrate a strong emphasis on nature-related topics, resource allocation, and sustainability. This emphasis on nature-related topics and practical content aligns with the integration of ecological and environmental themes in English language teaching textbooks. The nine texts that have been analysed cover addressing environmental consciousness, waste management, preservation of nature, climate change, and global warming. Further, the analysis of transitivity system in relation to ecological values reveals the findings as given below.

Process of Distribution

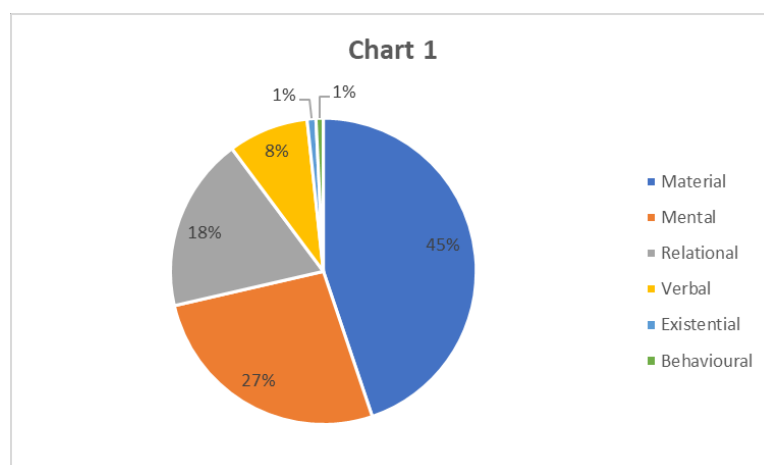


Figure 1. The Distribution of Process Types

Figure 1 reveals the frequency of process types found in the book used as the data source. As shown in Figure 1, the processes encompass material, mental, relational, verbal, existential, and behavioural. The dominant process found in the text of the English textbook is the material process, which accounts for 45%, indicating a significant focus on practical and real-world applications. Further, the mental process accounts for 27% of the text, reflecting a moderate emphasis on cognitive or emotional states. This indicates that across nine texts in English textbooks for Indonesian 12th graders, the content highlights practical uses and explores the thinking and emotional aspects of ecological concerns. Another process type, the relational process, accounts for 18% of the text, providing an emphasis on creating connections, associations, or relationships within the ecological. Further, there is about 8% of the verbal process in the text, reflecting a decreased focus on direct communication or expression. The fifth type of process, existential, contributes only 1%. This implies that the book does not extensively

highlight the presence of elements within the ecological framework being discussed. Like the existential process, the behavioural process, comprises only 1%, signifying a minimal focus on observable behaviour. This implies that the content does not extensively explore explicit behaviours within the ecological context.

Material Process

Further analysis of material processes related to eco-values identified five fundamental components: human actors, non-human actors, power and energy, environmental issues, and partnership, as displayed below.

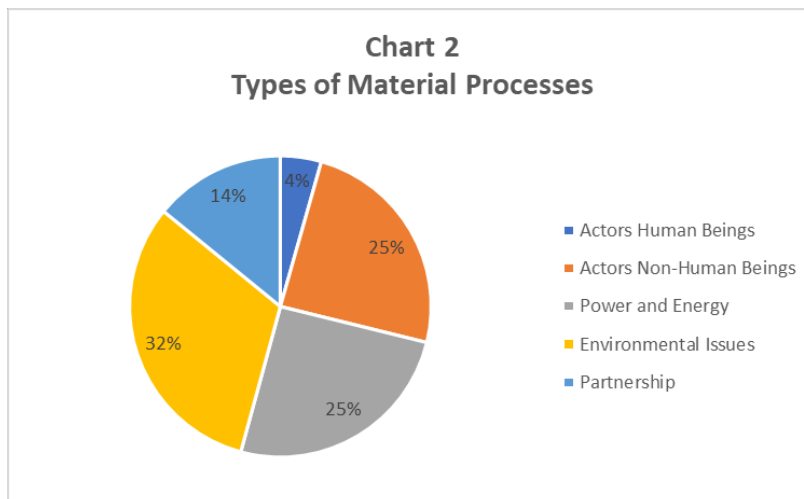


Figure 2. Types of Actors in Material Processes

Figure 2 exposes the types of actors in material clauses. As illustrated in Figure 2, material processes reveal how actions and events are conveyed in the context of environmental impacts. This analysis highlights the significant role of physical actions in understanding consumer behaviour and its consequences on the environment. Environmental issues account for 32%, standing out prominently. This highlights a significant dedication to ecological matters and underscores a considerable emphasis on actions or processes related to environmental concerns. This category contains discussions about pollution, conservation efforts, and the broader impacts of human activities on the environment.

Actors of non-human beings, which make up 25% of the analysis, focus on actions or processes related to non-living entities within the ecological framework. This includes content about natural elements, objects, or other non-living components. Some examples of non-human being actors include the wind, the sun, and natural resources like water and air. Another type of actor, power and Energy, accounts for 25% of the analysis, highlighting processes associated with the generation, consumption, or utilization of power and energy within an ecological context. This involves content about sustainable energy sources, such as solar power or wind power, and the influence of human activities on energy-related processes. The fourth actor category, partnership, comprises 14%, emphasizing instances of actions or processes involving collaboration or partnership within the ecological context. This encompasses content about cooperative efforts for environmental conservation or joint initiatives addressing ecological challenges. The last category of actors, human-being actors, is only 4%. This indicates human

beings' potential involvement in various actions or processes related to the ecological framework. One example of material clauses in the data set is below.

The carbon footprint also goes up. Data 32-9

Relational Process

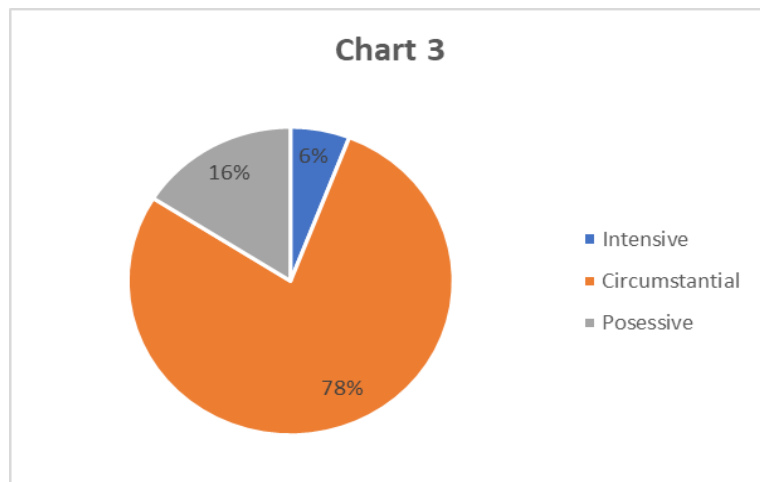


Figure 3. Types of Relational Processes

Figure 3 portrays the specific types of relational processes: intensive, possessive, and circumstantial. As displayed in the chart above, three categories of relational processes are found in English textbooks for Indonesian 12th graders. This analysis significantly focuses on how entities relate to one another and their characteristics, emphasizing the connections underpinning ecological and social concepts. The analyzed data from Figure 3 reveals that circumstantial relational processes are the most common, constituting 78% of the total. This indicates a significant focus on providing background information in ecological narratives. The high frequency of circumstances indicates an effort to offer students a complete perspective, ensuring a thorough understanding of the detailed context of ecological values.

Apart from circumstantial relational processes, possessive relational processes contribute 16%. This reflects a focus on illustrating ownership or possession within the ecological context. This involves portraying responsibility related to ecological elements and fostering awareness of individual and collective roles in environmental conservation. Additionally, at 6%, intensive relational processes show a bit of attention to making connections between ecological things stronger. The limited presence of intensive relationships suggests that the impact of specific ecological aspects might not be highlighted much in the analyzed texts. One of the relational clause occurrences used in the book is given in the following extract.

The Arefu village.. was located in Raja Ampat Islands, Data 47-4

Mental Process

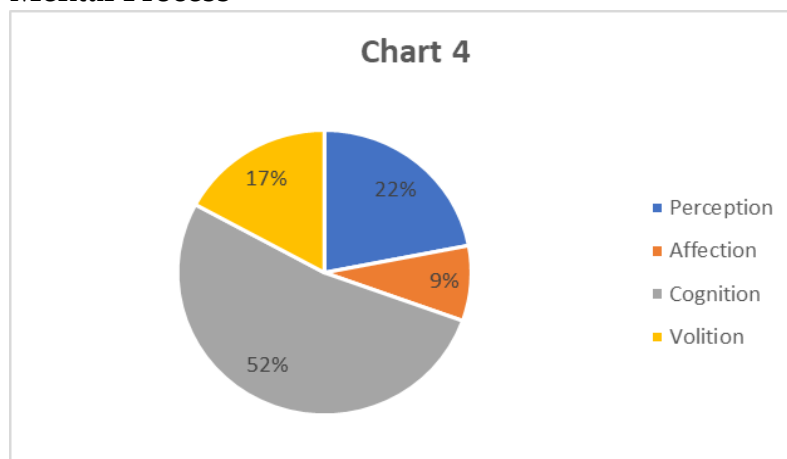


Figure 4. Types of Mental Processes

Figure 4 displays the types of mental clauses: cognition, affection perception, and volition. All four categories from Lock's classification are identified within the mental processes domain. As illustrated in figure 4, the category of cognition is the most prominent, making up 52% of the total. This significant percentage strongly emphasizes conveying information, understanding, or knowledge related to ecological concepts in the educational content. It underscores the dedication to fostering a deep understanding of the presented ecological values. Apart from cognition, perception makes up 22% of the total mental clauses. This indicates an emphasis on portraying sensory aspects within the ecological context. This involves how individuals perceive and interpret their surroundings to ecological values. The representation of this category in the textbooks underscores the recognition of the significance of sensory and perceptual elements in comprehending ecological values.

Further, volition contributes at 17% to the total mental clauses, emphasizing a focus on processes linked to determination and intention. This highlights that the nine texts reflect decision-making, and purposeful actions related to ecological values, prompting contemplation on roles and responsibilities in the context of environmental stewardship. Additionally, at 9%, Affection represents a relatively lower emphasis on emotional or affective processes within the ecological narratives. One example of mental clauses can be seen in the following excerpt.

when he realized that Arefu village had a Solar Power Plant (SPP) for electricity, Data 25-4

Verbal Process

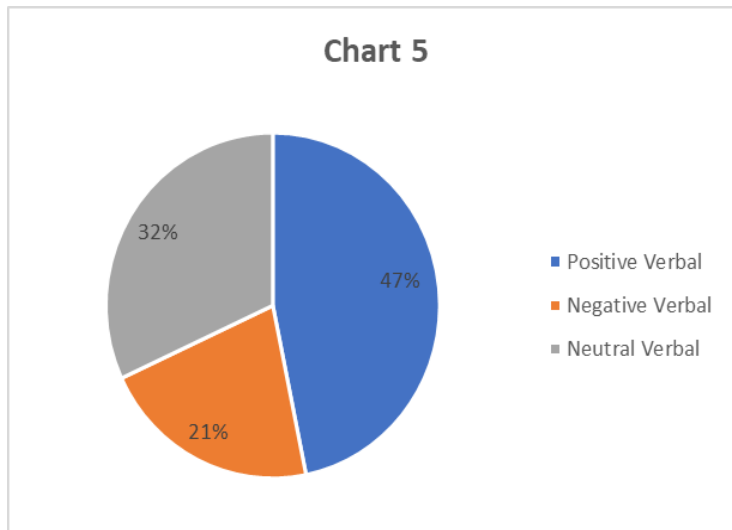


Figure 5. Types of Verbal Processes

Figure 5 displays the types of verbal clauses in terms of their content: positive, neutral, and negative. Figure 5 shows that positive verbal processes constitute 47% of the text. The substantial proportion of positive verbal processes indicates a notable emphasis on conveying affirmative perspectives related to ecological values. The neutral verbal processes, comprising 32%, indicate a significant presence of expressions that are neither explicitly positive nor negative. This contributes to a balanced and factual representation of ecological concepts in the analyzed texts, encompassing descriptions of ecological processes neutrally, without any explicit positive or negative connotations. On the other hand, 21% of negative verbal processes indicate a deliberate attention to expressing critical viewpoints related to ecological values. Including negative verbal processes in the examined texts implies acknowledgment of the significance of critical perspectives in comprehending ecological values. The following extract shows one of the verbal clauses found in the data.

I guarantee. Data 13-1

Behavioural Process

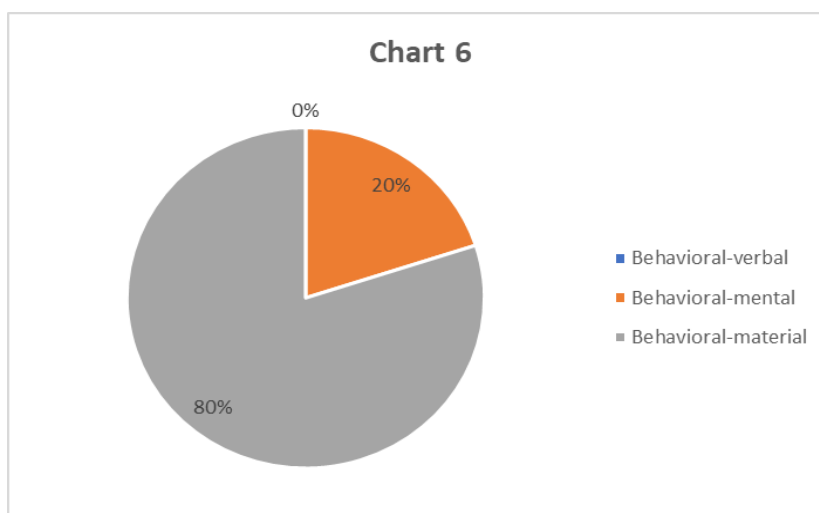


Figure 6. Types of Behavioural Processes

Figure 6 illustrates the types of behavioural clauses: material-like, mental-like, and verbal-like. In reference to figure 6, the findings of this study reveal that behavioural-material (material-like) processes are the most dominant, constituting 80%, while behavioural-mental (mental-like) processes account for 20%. The prevalence of material-like behavioural processes in the analyzed content indicates a pronounced emphasis on semi-practical and tangible behaviour towards ecological values. In contrast, 20% of behavioural-mental processes indicate comparatively lower attention to behaviours associated with cognitive or emotional states. One of the phenomena of behavioural clauses found in the book used as the data set can be seen in the following excerpt.

As the doubters clapped. Data 85-3

Discussions

Material Process

As found by the present study, the dominant process is the material clauses. Material-process prevalence suggests that the content extensively centers on actions, operations, and tangible aspects of eco-values. This type of clause (Halliday & Mathiessen, 2004), in a simple way, represents the process of doing. In reference to the empirical studies of Manar (2024, 2016), Manar & Mulyati (2022), and Manar & Purwaningrum (2021), when experience is realized in the form of material clauses, the meaning built on the targets is more concrete for the expectation that the goal brought by the text can be achieved more functionally.

Further, the use of material clauses indicates a hands-on and applied approach, aligning with Timothy and Obiekezie's (2019) assertion that such a focus prepares pupils to continue with actions essential for a sustainable future. This involves learning practices that benefit, repair, and sustain our natural resources. Therefore, the textbooks' predominant use of material processes reflects a concerted effort to equip students with the skills and knowledge needed for environmentally sustainable practices.

Moreover, delving into the analysis of material processes, it is revealed that a high percentage of material clauses are linked specifically to environmental issues. Chowdhury (2014) highlights that understanding the causes, effects, and long-term consequences of environmental issues is essential. This shows promise in cultivating a generation proficient not just in language skills but also dedicated to environmental care. It aligns with the goals advocated by Jacobs and Kip (1999), who propose that acquiring a second language can heighten awareness of environmental issues and motivate individuals to safeguard them actively.

In terms of participants, the coverage of non-human being actors including the nature in the English textbooks for Indonesian 12th graders promotes balance in the ecosystem. This is in accordance with eco-efficiency principles, emphasizing de-materialization and increasing the use of renewable inputs, energy minimization, and product recyclability (Schot, 1997). Another indispensable philosophy in ecology is that humans are not superiors in nature. Rather they are part of it.

Further, the analysis of English textbooks for Indonesian 12th graders indicates a focus on collaborative actions and processes within the ecological context. This finding indicates that addressing environmental challenges and

promoting sustainable development still requires efforts and cooperation among various entities. The inclusion of contents highlighting cooperative endeavors for environmental conservation and joint initiatives addressing ecological challenges in the textbooks suggests a deliberate effort to instill the value of collective responsibility among students.

In relation to English textbooks, it has been recommended by Inayati (2016) that improving English textbooks for Indonesian 12th graders should involve a greater emphasis on environmental issues, evident in the higher percentages of other categories. Significantly, the ongoing advancements in Indonesian education already signify progress in addressing these concerns. This development not only underscores a specific focus on environmental issues but also subtly communicates a broader pedagogical emphasis on energy-related processes, ecological considerations, non-living elements, and collaborative efforts. In the English textbook, as the data source of the present study, functional material clauses have played the effort to take a stance on the ecology mentioned.

Mental Process

Another frequent type of process in the English textbook of the present study refers to mental clauses. According to Halliday & Matthiessen (2004), mental clauses construe the experience of sensing-based, thinking-based, and feeling-based. Mental clauses allow to establish evaluation or to create judgment. In the context of English textbooks, this type of clause can be used to create ecological values subjectively by involving humans, especially as thinkers or 'feelers'. The emphasis on mental processes in English textbooks may not solely aim to convey information explicitly but also to prompt cognitive and emotional engagement. This strategic emphasis is interpreted as an intentional effort to cultivate a more profound and nuanced interpretation of ecological values among learners.

Further exploration into mental processes reveals a strong focus on cognition. This is in line with the emphasis by Inayati (2016) on the importance of incorporating factual information and fostering a clear understanding of environmental issues in textbooks with a cognitive focus. The frequent use of cognitive-based mental clauses signals a deliberate strategy to equip students with factual knowledge and the analytical skills needed to comprehend and engage with environmental challenges. This emphasis on cognition aligns with Sauve's (1994) view, suggesting that the 'cognitive' approach helps students understand the environment because it shapes attitudes and strengthens the senses and motivations to take action. By prioritizing cognition, the textbooks aim to instill a deeper awareness of environmental issues by influencing attitudes and fostering a sense of motivation for proactive environmental stewardship.

In addition, the frequent perceptive clauses in the analysis signal a perspective that emphasizes valuing perceptual elements within the ecological context. This perspective underscores that Indonesian education recognizes the importance of perceptive engagement in environmental issues for a deeper connection with the environment and fostering rational actions within society.

Apart from the frequent cognitive and perceptive processes, the less frequent mental process type is emotive processes. This means ecological narratives' emotional or affective aspects are less salient than the cognitive ones. This intentional choice indicates that Indonesian education aims to avoid an overly

emotional response that could potentially hinder rational decision-making and action. Instead, the priority is on conveying factual information and fostering a clear understanding of environmental issues. The goal is to enable individuals to make informed decisions based on knowledge rather than emotional reactions.

Another phenomenon of mental clauses is associated with volition. This perspective can be linked to the work of Ahtziger and Gollwitzer (2008), which underscores the importance of volition in the course of action. The frequent volition in the analysis signifies a sense of responsibility in students. This intentional approach encourages students to make purposeful choices and take action, contributing to sustainable practices. Such effort is in accordance with the idea that fostering a sense of agency empowers individuals to participate in environmental conservation efforts actively.

The English textbook, which is the data source of the present study, has been dominated by functional mental clauses that attempt to take a stance on ecology. These functional strategies, for example, use dominant cognitive-based mental processes.

Relational Process

As found by the present study, relational processes were also frequently found after material and mental clauses. Relational clauses, in a simple way, are viewed as the process of 'being' and 'having' (Halliday & Matthiessen, 2004). This type of clause has been claimed and proved as a linguistic strategy for establishing values (Manar, 2024, 2016; Manar et al., 2021; Manar & Mulyati, 2022; Manar & Purwaningrum, 2021) towards things objectively, without explicitly involving the human being as the first participant. Relational clauses prove particularly beneficial by directing attention towards values (García et al., 2020). In the context of ecology, relational clauses ponder the interdependencies among various ecological elements.

Furthermore, the exploration of relational processes in the present study reveals that the focus is on circumstantial processes. Wanodyatama (2019) points out that things like time, place, and manner are all connected in these circumstantial processes. This provides detailed insights into how different parts of nature work together. Understanding these connections among various elements in nature gives students the ability to make decisions, contributing to shaping environmentally aware individuals.

Verbal, Existential, and Behavioural Processes

As reported in the findings, the verbal processes used in the textbook are the positive ones, followed by neutral verbal processes and negative verbal processes. According to Halliday & Matthiessen (2004), the verbal process can be understood as the process of saying. The use of positive, neutral, and negative processes of saying addresses the complex nature of ecological issues, maintaining a balanced representation, including discussions on challenges, critical viewpoints, and potential solutions. The positive, neutral, and negative saying processes are linguistic strategies for representing the complex nature with the aim of promoting the ideal ecological values.

Further, in terms of existential processes, as reported in the finding, this type of clause was quite rare. This can be due to the practical and interactive sides of environmental issues. As it has been known, the existential process can be seen as the clause that shows the existence of a thing (Halliday & Matthiessen, 2004), and this type of process is rather abstract and not dynamic. It also does not function to establish values between entities because it only involves one-side participant. The last rare process found in the present study is behavioural clause. Behavioural clauses represent observable behaviour as the effect of mental reactions (Halliday & Matthiessen, 2004). The phenomenon of rare behavioural processes found in the present study can be linked to the fact that behaviour, in this sense, is implicit and does not affect nature directly. It also does not represent a deep psychological inner process as in a mental process. In other words, this process is between mental and physical experience. In line with this status, the psychological side is not as complex as the mental process, while the physical side has less impact than the material process.

Based on the findings from the analysis of an English textbook designed for Indonesian 12th graders, there is an emphasis on topics related to nature. The book cultivates local environmental consciousness within the Indonesian educational context and concurrently aligns with broader initiatives dedicated to addressing global ecological challenges. The deliberate educational initiatives reflect a commitment to preparing students for a world where environmental awareness and responsible action are crucial. As Ali et al. (2023) indicated, various studies have emphasized the imperative of integrating ecological values into educational systems to promote environmental responsibility and sustainability. The promotion of ecological values in the book used as the data source of the present study has employed functional linguistic strategies. This has been proved by the process type distribution as well as by the specific exploration of different processes. The insight into the functional linguistic strategies for promoting ecological values has proved that systemic functional linguistics can be applied to addressing humans' growing complex problems, especially ecology. This is in line with the study of Manar (2022), exposing that one linguistic field that can be mixed with other fields is the Hallidayan functional grammar. In particular, it is expected that systemic functional linguistics can sustain to work hand in hand with the field of ecology.

Conclusion

The study aims to investigate the extent of ecological values in Indonesian EFL textbooks, identify key ecological themes presented, and analyze these representations through the lens of the transitivity system. The analysis of the English textbook for Indonesian 12th graders reveals that the material process is the most dominant, comprising 45% of the content, emphasizing practical applications of ecological concerns. The mental process follows at 27%, focusing on cognitive and emotional states, suggesting that the texts also consider students' thoughts and feelings about environmental issues. The relational process makes up 18%, highlighting connections and relationships within ecological contexts. The verbal process is less prominent at 8%, indicating a limited focus on direct communication. Both the existential and behavioural processes are minimal, accounting for only 1% each, showing that the texts do not heavily emphasize the presence of entities or observable behaviours within ecological discussions. The

study further identifies five core eco-value components within the material processes: Human Beings, Non-Human Beings, Power and Energy, Environmental Issues, and Partnership, underscoring the eco-values discussed in the textbooks. This analysis strongly focuses on practical environmental applications but suggests room for deeper exploration of ecological issues' emotional, relational, and behavioural dimensions.

The study also found that while some eco-values are present, there are significant gaps in how these themes are addressed, particularly in terms of promoting sustainable environmental attitudes and practices. The textbooks tend to focus minimally on eco-values, with limited discussion on the roles of individuals and communities in environmental conservation and stewardship. This gap highlights the need for more eco-conscious material in ELT, as language education uniquely shapes student attitudes toward environmental issues. By addressing this gap, the study contributes to eco-linguistics by providing insights into how Indonesian ELT resources might better incorporate ecological perspectives, thereby promoting sustainable development and environmental literacy. This research underscores the importance of integrating eco-values more thoroughly into educational materials, supporting the broader goal of fostering ecological awareness and responsibility among students.

The findings highlight how the material process dominates the content, focusing on practical environmental applications. However, there are gaps in addressing eco-values, particularly in fostering sustainable attitudes and behaviours, which are critical for SDG 4 (Quality Education) and SDG 12 (Responsible Consumption and Production). By incorporating eco-values such as Human Beings, Non-Human Beings, Power and Energy, and Partnership, the textbooks can better contribute to SDG 13 (Climate Action) and SDG 15 (Life on Land). The study emphasizes the importance of integrating ecological perspectives into education to enhance environmental literacy and support sustainable development. This reinforces the role of language education in shaping responsible, eco-conscious attitudes among students.

The findings also suggest that emphasizing material processes and practical activities in ELT textbooks can enhance students' ecological literacy by connecting real-world environmental issues to classroom learning. By focusing on tangible aspects of sustainability, such as Power and Energy or Environmental Issues, students gain hands-on experience with ecological challenges, helping them understand the impact of individual actions on the environment. Additionally, incorporating mental processes fosters critical thinking about ecological issues while representing non-human beings, and partnerships build a sense of interconnectedness. These approaches not only promote sustainable behaviours but also empower students to make responsible decisions, supporting SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Action), and SDG 17 (Partnerships for the Goals). Integrating these eco-values into pedagogy equips students with the knowledge and motivation to contribute to sustainable development (Hidayati, 2018; Lehtonen & Karjalainen, 2008; Zygmunt, 2016).

Furthermore, Indonesian ELT textbooks do not adequately depict collaboration and partnership, especially concerning ecological issues. While the textbooks address individual components like human beings, non-human beings, and environmental issues, they lack a focus on how collective action and

partnerships can contribute to environmental sustainability. To address this gap, future textbooks should incorporate more collaborative narratives, such as case studies of successful environmental partnerships and activities encouraging group projects focused on ecological challenges. By emphasizing collective responsibility, these additions would help students understand the importance of cooperation in tackling environmental problems, aligning with the goals of SDG 13 (Climate Action) and SDG 17 (Partnerships for the Goals), and fostering a sense of shared accountability for sustainability (Lehtonen & Karjalainen, 2008; Zygmunt, 2016).

Future research should assess the impact of curriculum enhancements on students' ecological understanding and behaviour by conducting longitudinal studies, using pre-and post-assessments to measure shifts in knowledge, attitudes, and actions related to environmental issues. Experimental studies comparing traditional textbooks to those enriched with eco-values can evaluate the effectiveness of specific curriculum improvements, such as case studies or collaborative group projects on sustainability. Additionally, research should explore the role of teacher training in integrating eco-linguistic principles and examine how digital resources, like eco-focused online platforms, influence students' ecological literacy. This research will help refine ELT materials and practices to foster sustainability better and support broader educational goals.

ELT textbooks are pivotal in shaping the next generation's ecological awareness and fostering sustainable practices. Textbooks can significantly influence students' attitudes and behaviours toward the environment by incorporating eco-values and sustainability themes into English language instruction. Integrating real-world applications, collaborative activities, and discussions on environmental issues can empower students to actively engage with ecological challenges and adopt sustainable practices in their daily lives. As educational tools, ELT textbooks have the potential to instill long-term environmental responsibility, contributing to global sustainability efforts and aligning with the broader goals of SDGs. By continuing to enhance textbooks with eco-linguistic principles and collaborative narratives, we can ensure that future generations are better equipped to address the pressing environmental issues of our time.

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