

THE DISCOURSE OF ENVIRONMENTAL AWARENESS IN ENGLISH TEXTBOOKS

Andira Mumtahanah, Dewi Puspitasari

^{1,2} UIN KH Abdurrahman Wahid Pekalongan

Corresponding Email: dewi.puspitasari@uingusdur.ac.id

Abstract

Through the usage of English textbooks in Indonesian junior high school education, this article explored the environmental awareness discourse that is included in such textbooks. The primary purpose of this study is to assess the effectiveness of this book in delivering environmental awareness discourse to students in the seventh grade of junior high school. We focused our multimodal critical discourse analysis on the topics and discursive capacities of the visuals and texts that were included in the textbook. This study makes use of the kinds of environmental discourse that were established by Curdt-Christiansen (2021) in order to evaluate the extent to which environmental-related literature inspire significant environmental understanding. The outcome of this study underlines the significance of fostering environmentally responsible conduct among Indonesian students and raising their awareness of environmental issues. As a result of the study, recommendations have been made for both the creators of textbooks (authors and publishers) and the consumers of textbooks (parents, teachers, and school stakeholders) to critically increase their environmental knowledge.

Keywords: *Environmental awareness, Discourse analysis, English textbooks, Junior high school, Indonesian education*

A. INTRODUCTION

Instructional materials such as textbooks are utilized by teachers in order to provide pupils with an explanation of various topics. In addition, books might be of assistance in the process of implementing a curriculum (Sulistiyo et al., 2020). One of the distribution channels that the Ministry of National Education uses to implement character education is through the use of books. It is possible for teachers to make use of the resources, activities, and directions that are contained within textbooks in order to assist students in learning (Meliawati & Hamied, 2020). When it comes to molding the character of students, it is one of the most influential factors, alongside the textbook that the teacher uses. (Sulistiyo et al., 2020) It places an emphasis on the fact that the teacher is the one who has the authority to plan learning. As a result, the instructor must pay attention to learning design and be able to connect with textbooks.

Literacy is tied not only to reading and writing activities, but also to other habits, and so it becomes a culture and identity. Literacy is a crucial component in the quest to instill strong character traits in pupils. This is mostly due to the fact that literacy is associated with behaviors that are afterwards anticipated to be literate personal figures, rather than just cognitive-related activities. The environment is one of the worldwide challenges that has yet to be tackled. Current worldwide environmental issues range from climate change issues to garbage issues that have not been appropriately addressed (McClaren, 2019). The prevalence of environmental concerns sparks an environmental literacy movement (Arnon et al., 2014). Environmental literacy is one sort of literacy that is

associated with a positive attitude towards the environment. Environmental literacy is defined as a person's capacity to engage with their surroundings (Goldman et al., 2018). Environmental literacy is defined as an individual's ability to comprehend and evaluate environmental situations, after which suitable actions to protect and improve environmental conditions are determined (Saltan & Divarci, 2017). The significance of increasing environmental literacy stems from pupils' lack of care for the environment. Littering, letting plants dry, stacking up waste in landfills, and unclean classrooms are all examples of this in the school environment (Goldman et al., 2015). Furthermore, environmental literacy is linked to how people care for themselves, such as wearing clean clothes, washing their hands before eating, and eating nutritious food (Frensley et al., 2020).

Environmental issues, particularly garbage, affect practically every country on the planet, including Indonesia. Human activities generate the majority of waste, which is referred to as anthropogenic waste. In Indonesia, waste management is seen as suboptimal trash management is subpar owing to a lack of public awareness or information about trash management (Syakti et al., 2017). An increase in trash consumption that is not controlled by proper waste management will result in waste accumulation. Waste accumulation can lead to environmental damage, which can have a ripple effect on other elements. Most individuals are still unaware of how to properly dispose of rubbish or reduce the quantity of waste they generate. Environmental awareness is an activity that aims to preserve and manage the environment so that it remains pristine. According to Gabriela and Sugiarto (2020), environmental awareness is an activity or attitude that leads to an understanding of the need for environmental protection. Mardiyah et al (2022) Considering the environment plays such a vital part in human life, we must preserve it against pollution and rubbish accumulation. Proper waste management is required to safeguard the environment. Improper garbage management also causes environmental issues. People mismanage their garbage due to a lack of awareness. Individual garbage disposal behavior is the root cause of improper waste disposal. Littering behavior is impacted by a number of reasons, including a refusal to seek for a landfill, a lack of information about environmental consequences, and the generation of a huge amount of garbage. A clean environment is possible if there is a fundamental shift in attitude and human behavior towards minimizing waste and littering (Herdiansyah et al., 2021). Even if they collect, recycle, and treat waste, the environment will remain polluted until there is a drop in the practice of inappropriately disposing of rubbish. An individual must be conscious of the environment and the public's environmental demands in order to limit trash consumption. Therefore, the research was developed to analyze images in English textbooks in order to assist us understand the

problem of environmental literacy in Indonesia in depth and to urge us to enhance environmental literacy further.

Many researchers have been studying how environmental issues are discussed in English textbooks. In Brazil, a study by Vera Lúcia Lopes Cristovão, Bruno Sanches, and Graham Smart (2022) looked at how well environmental topics are covered in English textbooks used in public high schools. They found that while these textbooks use additional content to enhance the material, this content does not effectively help students develop critical thinking about environmental issues. The textbooks may raise environmental awareness but do not provide enough educational experiences to foster critical environmental literacy and motivate students to act sustainably in their daily lives.

Similar research has been done in Indonesia. Yonata et al. (2022) analyzed environmental topics in English textbooks for secondary schools and found that while environmental literacy is considered, it is limited and not very effective in raising student awareness or preparing them for sustainable actions. Guskaini et al. (2023) evaluated environmental awareness in descriptive texts of high school English textbooks and found that the values of environmental concern are still insufficient, with only a few relevant texts present. Inayati (2016) compared environmental and non-environmental content in the K13 English textbook for higher secondary schools, suggesting that improvements are needed to make future generations more environmentally conscious.

Apart from English textbooks, Putra (2023) examined environmental discourse in Indonesian language textbooks for high school students. The study found that Engkos Kosasih's textbooks, used in classes X, XI, and XII, are not very effective in discussing environmental issues. The textbooks mostly introduce broad and specialized environmental terms but do not deeply engage students with environmental concerns. The most common type of vocabulary used to promote environmental values in these textbooks is verbs.

B. RESEARCH METHOD

The research approach employed in this study was visual discourse analysis, focusing on analyzing and comprehending messages transmitted by images, illustrations, graphics, or visual elements in various contexts such as mass media, art, literary works, or visual documentation. Specifically, the graphics in an English textbook for Grade 7 Middle Schools produced by a private publisher in Indonesia were examined. The textbook, titled "English for Nusantara," was written by Ika Lestari Damayanti et al. and published by Pusat Perbukuan Jakarta Selatan in 2022. This textbook was selected as the data source due to its variety of significant illustrations about environmental awareness. It was readily available for purchase online through the publisher's website

and was intended for use in Indonesian public schools.

To collect research data, this study utilized Weninger's (2020) notion of multimodality in analyzing language books. This theoretical framework emphasized the importance of considering multiple modes of communication—such as texts (readings, conversations, and speech bubbles) and images—when analyzing educational materials. By employing this approach, the study aimed to identify and interpret the visual and textual elements in the textbook that suggested or promoted environmental awareness. The analysis focused on how these elements contributed to shaping students' understanding and attitudes towards the environment, with the goal of providing insights and recommendations for textbook authors, publishers, and users on how to effectively integrate environmental discourse into educational materials.

C. RESULTS AND DISCUSSIONS

Picture 1



According to the picture, we must place plastic trash bottles in the recycling bin since plastic bottles are one type of waste that may be recycled or changed into a new item that is still beneficial for people while also protecting the environment. A significant amount of the plastic produced each year is utilized to create disposable packaging or other short-lived products that are discarded within a year of creation. These two observations alone show that our present plastic usage is unsustainable. Furthermore, due to the endurance of the polymers involved, large amounts of wasted end-of-life plastics are collected as garbage in landfills and natural environments around the world. Recycling is one of the most essential activities possible to lessen these impacts right now, and it is also one of the most dynamic aspects of the plastics industry today. Recycling gives chances to minimize oil consumption, carbon dioxide emissions, and trash disposal volumes (Cook, 2015). Students should be taught about waste recycling in school from an early age, as it can raise their environmental awareness. Several studies have demonstrated that recycling education can lead to behavioral changes, with participants perceiving recycling more positively and participating more frequently (Aksan & Celikler, 2019).

Picture 2



The second image demonstrates how we might recycle our own plastic garbage into something more intriguing and helpful. Individual inventiveness is also required for this task. The co-creation programme is one of the activities available to pupils. The execution of the co-creation programme is planned to result in recycled art pieces employing bottled mineral water as a collaborative production. It uses art as a means to bring human awareness closer to the environment. According to Sugiharto (2014), Scharfstein sees art as a practical tool that helps humans to connect with their surroundings, other humans, and society, and lastly with transcendental reality. Berleant emphasizes a participatory aesthetic, supporting the concept that art is a part of everyday contextual-cultural experiences (Yulianto & Sulisty, 2020).

Picture 3



The picture shows an example of improper domestic garbage sorting. It can be observed that the man is burning rubbish in an open place, with little regard for the surrounding environment or his neighbors. Burning forbidden items, such as rubbish, plastic, and painted or treated wood, is damaging to the environment since these materials emit poisonous compounds that contaminate our air. Polluted air may be absorbed by humans and animals and deposited in the soil, surface water, and on plants. Burning residue contaminates the land and groundwater and can enter the human food chain via crops and livestock. Furthermore, some chemicals generated during combustion can accumulate in animal fats and later in humans as we consume meat, fish, and dairy products. The consequence is that burning waste in the open increases the amount of CO and CO₂ in the atmosphere, which is likely to have a negative health impact on persons living near such places. It is possible to assume that the presence and burning of open garbage dumps contributed to an increase in the values of air quality measures measured around the dumpsites (Daffi et al., 2020).

Picture 4



The picture indicates that sorting trash while disposing of garbage may assist make waste management easier, ease disposal and reprocessing, and reduce waste accumulation by separating organic and non-organic waste disposal. Waste management, according to Sari and Sudarti (2022), is an efficient strategy to address this issue. Plastic waste management is accomplished by reducing mountains of garbage through the implementation of the 3R, namely (Reduce, Reuse, Recycle), so that it is effectively handled. People are restless in sorting their garbage, which should be separated into organic and non-organic categories, due to a lack of information about the management they are familiar with. The influence can harm our environment; pollution caused by improper waste management can have a detrimental impact on our health, leading to the appearance of numerous diseases. Pollution in the environment affects not just people, but also other living things such as animals and plants. Waste is often disposed of in rural regions by burning, hoarding, dumping in rivers, and dumping in gardens or fields. Until recently, most people considered garbage to be nasty, worthless waste that could not be recycled (Arifin et al., 2020).

Picture 5



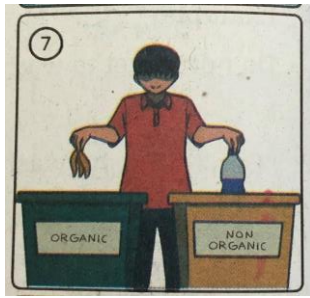
Litter, as seen in the image, is any bit of misdirected solid waste. This can include everything from cigarette butts or candy wrappers to abandoned autos, equipment, and even spaceships. Litter is most usually associated with objects dumped by individuals, however it can encompass any item that is in an inappropriate position, regardless of provenance. This might contain not just the candy wrapper that has fallen to the ground, but also the newspaper that has blown out of a trash can. Over the years, street littering has been recognised as a global issue. Littering severity varies among civilizations and age groups. A substantial link between age and education was also shown to be associated with street littering behavior, whereas environmental variables were found to have a weak relationship. According to the report, authorities should prioritize both immediate and long-term sustainable solutions (Maharroof et al., 2022).

Picture 6



The picture show that female characters stereotype bad habits, namely throwing garbage in the gutter. This bad habit is very often done by Indonesians. The picture also explains the people's indifference to the dirty surrounding environment. The problem lies within the community itself. This ditch is a place to dispose of garbage for residents whose houses directly face the ditch. They throw garbage in the gutter so that the trash can quickly disappear from around the house (Shinta et al., 2019). Marpaung et al. (2022) states that behavior in littering is caused by the unavailability of facilities and infrastructure and the lack of support from the government. Environmental health behavior is a behavior that includes defecating in the latrines, disposing of trash in its place, using clean water for cooking, bathing and washing.

Picture 7



This picture shows the correct example of sorting waste. Dispose of plastic waste in the non-organic waste bin and banana peel waste in the organic waste bin. However, awareness about the behavior of sorting waste properly is still low in Indonesia. This is because individuals with low education and low income are more likely to sort their waste than individuals with high education and high income. Zakianis et al. (2017) stated that knowledge about waste management is an important factor in separating household waste. Households with low education and income but large surface area and luxury building types have waste sorting behavior. Households, which have these characteristics, usually live in rural areas. Solid waste in rural areas is used for compost and feed. Meanwhile, solid waste from most households in urban areas will be transported to Landfill.

Picture 8



The picture above shows a man cleaning and making his bed. Keeping your bedroom clean is very important for your health (Ningrum, 2019). In addition, there is a significant relationship between a well-maintained home and an individual's motivation to engage in physical activity. This suggests that keeping living spaces tidy can encourage people to be more physically active, highlighting the importance of the home environment in encouraging a healthy and active lifestyle (Indiana University, 2013).

D. CONCLUSION

According to the findings of this study, increasing students' environmental awareness through educational literacy is critical for addressing environmental concerns. It emphasizes the necessity of teaching pupils about waste management, recycling, and environmentally responsible behaviors from an early age. This study also emphasizes the importance of effective trash management, litter reduction, and garbage sorting in order to safeguard the environment and human health. This study also cites different elements that contribute to littering behavior, such as a lack of facilities, infrastructure, and government assistance. Overall, this study emphasizes the need of increasing environmental knowledge among Indonesian students and encouraging healthy environmental behaviors.

The study focuses on the function of English textbooks in developing environmental consciousness and literacy in Indonesia. It emphasizes the significance of including environmental issues into textbooks, using photos from a specific seventh-grade English textbook to demonstrate the need for improved awareness and proper waste management. The conclusion reached is that while the importance of incorporating environmental education into textbooks is recognised, there are also noted flaws in how these materials address important environmental literacy and behavior change, particularly in the Indonesian context.

REFERENCES

- Aksan, Z., & Celikler, D. (2019). Recycling awareness education: its impact on knowledge levels of science teacher candidates. *International Electronic Journal of Environmental Education*, 9(2), 81-105.
- Arifin, B., Ihsan, T., Tetra, O. N., Nofrita, N., Goembira, F., & Adegustara, F. (2020). Pengelolaan bank sampah dalam mendukung go green concept di Desa Ulakan Tapakis Kabupaten Padang Pariaman. *Jurnal Hilirisasi Ipteks*, 3(2), 161-170. [doi:10.25077/jhi.v3i2.423](https://doi.org/10.25077/jhi.v3i2.423)
- Arnon, S., Orion, N., & Carmi, N. (2014). Environmental literacy components and their promotion by institutions of higher education: an Israeli case study. *Environmental Education Research*, 21(7), 1-27. [doi:10.1080/13504622.2014.966656](https://doi.org/10.1080/13504622.2014.966656)
- Bennett, E. M., & Alexandridis, P. (2021). Informing the public and educating students on plastic recycling. *Multidisciplinary Digital Publishing Institute (MDPI): Recycling*, 6(4), 69. [doi:10.3390/recycling6040069](https://doi.org/10.3390/recycling6040069)
- Cook, A. (2015). *Plastic recycling, in case studies for developing globally responsible engineers*, GDEE (eds.), Global Dimension in Engineering Education, Barcelona.
- Cristovão, V. L. L., Sanches, B., & Smart, G. (2022). Environmental discourse in Brazilian English-as-a-foreign-language textbooks: socio-discursive practices and their implications for developing students' critical environmental literacy. *Environmental Education Research*, 28(1), 75-94.
- Curd-Christiansen, X. L. (2021). Environmental literacy: raising awareness through Chinese primary education textbooks. *Language Culture and Curriculum*, 34(2), 147-162. [doi:10.1080/07908318.2020.1797078](https://doi.org/10.1080/07908318.2020.1797078)
- Daffi, R. E., Albert, N. C., & Meshach, I. A. (2020). Environmental impact of open burning of municipal solid wastes dumps in parts of jos metropolis, Nigeria. *Journal of Engineering Research and Reports*, 12(3), 30-43. [doi:10.9734/JERR/2020/v12i317083](https://doi.org/10.9734/JERR/2020/v12i317083)
- Damayanti, I. L., Febrianti, Y., Nurlaelawati, I., Suharto, P. P., Fellani, A. J., & Rahmadhani, R. (2022). *English for nusantara*. Jakarta: Pusat Perbukuan.
- Frensley, B. T., Stern, M. J., & Powell, R. B. (2020). Does student enthusiasm equal learning? The mismatch between observed and self-reported student engagement and environmental literacy outcomes in a residential setting. *The Journal of Environmental Education*, 51(3), 1-12. [doi:10.1080/00958964.2020.1727404](https://doi.org/10.1080/00958964.2020.1727404)

- Gusnaini, U., Prasetyo, T. H., Afriani, I. H., & Rohmah, S. S. (2023). Analysis the value of environmental awareness in descriptive text in secondary school English books. *International Journal of Educational Review, Law And Social Sciences*, 3(2), 512-522.
- Goldman, D., Ayalon, O., Baum, D., & Weiss, B. (2018). Influence of 'green school certification' on students' environmental literacy and adoption of sustainable practice by schools. *Journal of Cleaner Production*, 183, 1300-1313. [doi:10.1016/j.jclepro.2018.02.176](https://doi.org/10.1016/j.jclepro.2018.02.176)
- Goldman, D., Pe'er, S., & Yavetz, B. (2015). Environmental literacy of youth movement members: is environmentalism a component of their social activism? *Environmental Education Research*, 23(4), 486-514. [doi:10.1080/13504622.2015.1108390](https://doi.org/10.1080/13504622.2015.1108390)
- Herdiansyah, H., Brotosusilo, A., Negoro, H. A., Sari, R., Zakianis, Z. (2021). Parental education and good child habits to encourage sustainable littering behavior. *Sustainability*, 13, 8645, 1-18. [doi:10.3390/su13158645](https://doi.org/10.3390/su13158645)
- Inayati, N. (2016). *Environmental awareness raising contents in K13 English textbooks published by the Indonesian ministry of education*. Conference: Seminar Nasional II, Biologi, Pembelajaran dan Lingkungan Hidup Perspektif Interdisipliner at Universitas Muhammadiyah Malang, 1.
- Indiana University. (2013, October 10). Tidier homes, fitter bodies? *IU News Room*. Retrieved from <https://newsinfo.iu.edu/web/page/normal/14627.html>
- Maharoor, Z., Samanmalee, D. K., & Sachi, D. I. (2022). Critical factors affecting street littering behavior of youth. *Journal of Contemporary Governance and Public Policy*, 3(2), 135-150. [doi:10.46507/jcgpp.v3i2.84](https://doi.org/10.46507/jcgpp.v3i2.84)
- Mardiyah, A., Jaya, A., Uzer, Y. (2022). Students' Speaking Ability Through Small Group Discussion. *Esteem: Journal of English Study Programe*, Vol.6 No. 1, p.81.
- Marpaung, D., Iriyanti, Y., & Prayoga, D. (2022). Analisis faktor penyebab perilaku buang sampah sembarangan pada masyarakat Desa Kluncing, Banyuwangi. *Preventif: Jurnal Kesehatan Masyarakat*, 13(1), 47-57. [doi:10.22487/preventif.v13i1.240](https://doi.org/10.22487/preventif.v13i1.240)
- McClaren, M. (2019). Revisioning environmental literacy in the context of a global information and communications ecosphere. *The Journal of Environmental Education*, 50(4-6), 416-435. [doi:10.1080/00958964.2019.1687408](https://doi.org/10.1080/00958964.2019.1687408)
- Meliawati, M., & Hamied, F. A. (2020). Analisis konten pada buku teks Bahasa Inggris untuk kelas X berjudul Bahasa Inggris untuk SMA/MA/SMK/MAK kelas X. *Jurnal Penelitian Pendidikan*, 20(1), 83-90.

- Ningrum, W. (2019). Benefits of maintaining a clean room [Blog post]. Retrieved from https://www.kompasiana.com/amp/won_ningrum/5de2eaa8d541df7b765a33c2/benefits-of-maintaining-a-clean-room-a-brief-note
- Porter, L. (2020). The psychology behind tidying your bedroom [Blog post]. Retrieved from <https://www.dreams.co.uk/sleep-matters-club/psychology-behind-tidying-bedroom>
- Putra, D. A. K. (2023). Ecolinguistic study on environmental discourse in senior high school (MA/SMA) Indonesian textbook. *KEMBARA: Jurnal Keilmuan Bahasa Sastra dan Pengajarannya*, 9(1). [doi:10.22219/kembara.v9i1.22561](https://doi.org/10.22219/kembara.v9i1.22561)
- Saltan, F., & Divarci, O. F. (2017). Using blogs to improve elementary school students' environmental literacy in science class. *European Journal of Education Research*, 6(3), 347-355. [doi:10.12973/eu-jer.6.3.347](https://doi.org/10.12973/eu-jer.6.3.347)
- Sari, I. K., & Sudarti. (2022). Analisis berbagai metode pengolahan sampah sebagai solusi permasalahan sampah di Kabupaten Lumajang. *Jurnal EnviScience*, 6(2), 82-95. [doi:10.30736/6ijev.v6iss2.361](https://doi.org/10.30736/6ijev.v6iss2.361)
- Shinta, A., Gaho, B., Araafi, N. H. A., & Susilo, Y. (2019). *Community ignorance on public waste facilities*. Proceedings of the National Seminar: Results of Research and Community Service IV "Resource Development towards a Civil Society with Local Wisdom". Purwokerto, Indonesia. (pp. 399-404). Retrieved from <https://seminaslpmp.ump.ac.id/index.php/seminaslpmp/article/view/66/66>
- Sugiarto, A., & Gabriella, D. A. (2020). Kesadaran dan perilaku ramah lingkungan mahasiswa di kampus. *Jurnal Ilmu Sosial dan Humaniora*, 9(2), 260-275.
- Sugiharto, B. (2014). *Seni dan dunia manusia*. Bandung: Matahari.
- Sulistiyo, U., Supiani, S., Kailani, A., & Lestariyana, R. P. D. (2020). Infusing moral content into primary school English textbooks: A critical discourse analysis. *Indonesian Journal of Applied Linguistics*, 10(1), 251-260.
- Syakti, A. D., Bouhroum, R., Hidayati, N. V., Koenawan, C. J., Boulkamh, A., Sulisty, I., Lebarillier, S., Akhlus, S., Doumenq, P., & Wong-Wah-Chung, P. (2017). Beach macro-litter monitoring and floating microplastic in a coastal area of Indonesia. *Marine pollution bulletin*, 122(1-2), 217-225. [doi:10.1016/j.marpolbul.2017.06.046](https://doi.org/10.1016/j.marpolbul.2017.06.046)
- Yonata, F., Rukmini, D., Suwandi, S., & Fitriati, S. W. (2022). *Environment discourses for sustainability development in English language coursebooks*. International Conference on Science, Education and Technology. (pp. 646-653). Retrieved from <https://proceeding.unnes.ac.id/index.php/iset>

- Yulianto, N, & Sulisty, E. T. (2020). *Plastic waste-based recycle art co-creation to enhance the school's resident creative culture*. Social Science, Education and Humanities Research, Proceedings of the 4th International Conference on Arts Language and Culture (ICALC 2019), 421, 200-206. [doi:10.2991/assehr.k.200323.024](https://doi.org/10.2991/assehr.k.200323.024)
- Zakianis, Sabarinah, & Djaja I. M. (2017). The importance of waste management knowledge to encourage household waste-sorting behaviour in Indonesia. *International Journal of Waste Resources*, 7(4), 1-4. [doi:10.4172/2252-5211.1000309](https://doi.org/10.4172/2252-5211.1000309)