

Environment discourses for sustainability development in English language coursebooks

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Abstract. This article analyzes environmental discourses in English as Foreign Language textbooks used nationwide in senior secondary school education in Indonesia. Published by a recommended private publisher, the textbook serves as the supporting teaching material for a compulsory English subject for senior high school students. We focused our multimodal critical discourse analysis on themes and discursive affordance of the texts and images depicted in the textbooks. Anchoring in the type of environmental discourses proposed by Curdt-Christiansen (2021), this study scrutinized to what extent environment-related texts promote profound environmentalism. The study's conclusion is that the textbook authors consider environmental literacy though still in 'shallow' form, and limitedly provide an educational experience that would possibly enhance students' environmental awareness and, by that means, prepare them to act by sustainability development.

Keyword: Coursebook, Environment discourse, multimodal critical discourse analysis, sustainability development

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INTRODUCTION

Recent concerns of people worldwide worry about the sustainability of the planet due to the increasing global warming and degradation of natural perseveration. Leaders from 80 countries and thousands of educational stakeholders gathered virtually to discuss the urgent action needed to deal with the recent environmental crisis. This meeting was organized by UNESCO (UNESCO Declares Environmental Education Must Be a Core Curriculum Component by 2025, 2021). The result of this meeting transformed learning objectives at all educational levels to integrate environmental issues into education practices. Despite the tremendous efforts to cultivate environmental awareness in classroom activities (UNESCO, 2021), learning materials might potentially provide environmental discourses that promote environmental awareness. In recent years, some scholars have reported studies on how learning materials could positively develop learners' pro-environmental behaviour, and most of them were situated in science education (Iversen & Jónsdóttir, 2019; Littledyke, 2008). However, literature on the extent to which environmental awareness could be brought into print learning materials (i.e., coursebooks) in the language studies domain, for instance, English as a foreign language (EFL), is limited (Cristovão et al., 2022).

This article examines environmental issues in EFL coursebooks for senior secondary schools in Indonesia. In the past years, Indonesian English coursebooks for secondary English education have been focused on exposure to socio-cultural issues, including moral values (Widodo, 2018), gender equality (Setyono, 2018; Yonata & Mujiyanto, 2017), and multiculturalism (Setyono & Widodo, 2019), but little is known to environmental concerns. The traditional view might perceive language education only on the mastery of linguistics components and their uses. Looking at it from the lens of transformative pedagogy could go beyond its definite role since a coursebook can be a tool to impart environmental knowledge as an ideologically laden learning source (Curdt-christiansen & Weninger, 2015). Thus, a critical investigation is needed on how coursebooks facilitate resources on environmental issues for learners to engage in language education. Examining what themes are involved in coursebooks depicted in textual and visual materials that introduce EFL learners to environmental literacy is necessary.

The interest in representing environmental knowledge in language coursebooks is not new. To the authors' knowledge, after navigating the related papers in peer-reviewed journals, so far, two studies have been found. Firstly, Curdt-Christiansen (2021) examined how

environmental literacy offered in textbooks can develop Chinese primary learners' environmental awareness. Anchored in content analysis to discover text types, lexical choices, grammatical aspects, and generic structures, the study revealed the textbooks represented aspects relating to environmental literacy including knowledge of the environment, attitude in encountering environmental issues, and cognitive skills in finding solutions for environmental problems. Cristovão et al. (2022) focused on the outside discourses incorporated into coursebooks' content. Though the effort of integrating outside materials would enhance the environmental contents, the presentation was unsuitable as they only offered surface environmentalism. These previous studies reported the study of environmental discourses in language materials, but none of them focuses on various modes in the coursebook which may potentially impart environmental literacy.

A coursebook comprises a set of pedagogical discourses which may be elicited from social discourses in daily life, and environmental discourse is no exception. The intense exposure to the discourse may shape learners' perspectives and impact their decisions to act toward environment-oriented issues encountered in their real-life society. Bearing this crucial role of the coursebook in mind, this article examines the authors' discursive constructions to promote environmentalism covertly embedded in environmental-related discourses represented in the textual and visual coursebook contents. Thereby, the study strives to decompose the type of environmental discourses by anchoring in the categories and parameters proposed by Curdt-Christiansen (Curdt-Christiansen, 2021), namely: knowledge (ecological principles), attitudes (ethics, sense of responsibility, affection), behavior patterns (consumption, conservation), and cognitive skills (analytical ability to solve problems). All these components are elements to help learners build their environmental awareness for sustainable world development. Following multimodal critical discourse analysis (MCDA), we critically describe 'the kind of ideas, absences, and taken-for-granted assumptions' behind specific visual and verbal texts (Machin & Mayr, 2012, p. 9). Also, our multimodal lens may make visible the role of different modalities in conveying hidden meanings in language materials.

To conclude the introduction section, this study aims to evaluate to what extent

environmental literacy has been integrated into coursebooks in the form of environmental discourses. We once again revisit the role of language education as an instrument to instill social values and literacies needed for sustainability development. The study may be a reference for language educators to base a critical lens as the fundamental theory in pedagogical practices. This also serve as a scientific report for coursebook's authors and publishers who play important roles to produce and publish pedagogical materials. Moreover, as methodological contribution, the multimodal critical discourse analysis MCDA may inspire other textual and document analysis to discover multimodal texts from socio-semiotic perspectives.

METHODS

This study employed multimodal critical discourse analysis (MCDA), informed by Fairclough (2013) and Kress and van Leeuwen (2006), to utilize the visual element within critical discourse analysis. The linguistic and visual aspects construct discourses that reflect the world and may have multiple interpretations depending on groups of social actors (Fairclough, 2013). The representation of discursive texts, whether they appeared in written or visual form, may be superficially viewed as neutral or normal but may capture certain ideological meanings (Machin & Mayr, 2012). The use of MCDA would scrutinize how semiotic modes, not only textual language but also images, charts, diagrams, etc., potentially compose discourses that may shape and be shaped by power relations of society.

The data source in this study is garnered from an EFL published-by-private-company coursebook widely used in Indonesian senior high schools. The focal coursebook entitled "Pathway to English 2: Revised edition" was written by Theresia Sudarwati and Eudia Grace and was published by Penerbit Erlangga in 2017. Indonesian teachers and learners of English in the eleventh grade of senior high school use this book as a mandated learning material due to its relevant contents to the curriculum supported by the decree of the Ministry of Education and Culture of the Republic of Indonesia number 148/P/2016 in 2016. This is one reason for choosing this book besides its utilization among Indonesian teachers.

At the outset of data collection, we look into the coursebook content thoroughly by observing

page-by-page the discourse of the environment represented in the verbal texts and visual images and diagrams. This preliminary analysis resulted in a report that one chapter (chapter 9: It would be better if...) of ten chapters consists of several environment-related texts. Thus, the focus was pointing to this chapter to demystify the ideological meaning of their representation. For the sake of specific data, we only captured monologue texts or reading-related passages accompanied by pictures. We manually recorded the selected texts and classified them into the types of environmental discourses.

The data garnered were analyzed with MCDA. Using the principle of systemic functional linguistics (Halliday, 1973), we employed transitivity analysis to deal with written language. Halliday (1973, p. 134) asserted that 'transitivity is the set of options whereby the speaker (the writer) encodes his experience of the process of the external world, and the internal world of his (her) own consciousness, together with the participants in these processes and their attendant circumstances (...).' Transitivity refers to how meaning is represented in a clause in context. It comprises three elements: (1) Processes (verb group) consisting of social and psychological phenomena; (2) Participants (nominal group)

indicating actors or agents (humans and non-humans); and (3) Circumstances (prepositional group) informing temporal and spatial frames and manner. These elements were utilized as tools to scrutinize the verbal texts regarding the parameters of environmental discourses. To get complete capture, the representation of images is seen as a binary mode, which means it has an equal role to verbal text. Thus, a closer look at images accompanying the verbal text was conducted to see whether the image plays a primary role in constructing deep-seated environmental discourses.

RESULTS AND DISCUSSION

The multimodal critical discourse analysis in this study reveals that all types of environmental discourse, including knowledge, attitudes, behavior patterns, and cognitive skills, are represented in the coursebook. This indicates that the coursebook has established profound environmentalism. Though the occurrence of environmental discourses across the chapters is limited, the presentation of one chapter dedicated to environment-related issues should be appreciated. The first phase of the analysis was based on a curriculum lens including learning goals and learning contents depicted in the opening chapter, as it can be seen in table 1.

Table 1. Learning goals and learning contents of chapter 9

Learning goals	
Social function	To state opinions about various topics in the form of hortatory texts in a responsible way
Learning contents	
Listening	Listening to get specific attention Listening to state whether a statement is true or false
Speaking	A monologue of a hortatory
Reading	Reading for getting specific attention Reading for detailed information Reading between the lines
Writing	Completing a hortatory text with a thesis or arguments Writing a good recommendation using a problem-solution strategy

The coursebook follows the revised edition of the 2013 curriculum, a recent curriculum in the Indonesian educational system. The pedagogical principle of this curriculum is the genre-based approach which delivers the materials in diverse social genres (transactional, interpersonal, and monologue). Chapter 9's primary objective is to teach learners dealing with hortatory text. The nature of hortatory lies under the genre of arguing (Knapp & Watkins, 2005), specifically under exposition type, which deals with the way

to expand a proposition effectively and persuasively, for instance, in a student's essay (Paltridge, 1996). Interestingly, in this argument-based genre, the coursebook's authors take environmental issues to elicit learners to argue. As a way to introduce the environment-related topic, placing this in the genre or arguing may potentially lead learners to activate their cognitive side to explore and develop their environmental awareness.

Furthermore, regarding the type of

environmental discourses, the analysis of collected data reveals that environmental discourses indicate all four types of discourses. Due to the space limitation in the article, we represented one sample for each kind of

discourse, as summarized in table 2. We recorded the location of the data indicated by page number, text types, and description of what the data contained.

Table 2. Findings of environmental discourses

No	Discourse	Data	Text type	Description	Evidence
1	Knowledge (ecological principles)	P. 161	Reading-based activity	The text discusses fine for the use of plastic bags for shoppers in England since 2015. The charges then will be used to solve plastics problems.	Figure 1
2	Attitudes (ethics, sense of responsibility, affection)	P. 154	Short-reading passage with image	The image visualizes two garbage trucks in a garbage dump. The text reminds readers that lots of consumption of products impacting lots of waste in the landfill which pollute the air, soil and water	Figure 2
3	Behavior patterns (consumption, conservation)	P. 155	Reading-based activity with image	The image contains a sign for throwing rubbish in the garbage bin. The text tells about how to create a clean and fresh city by watering plants, planting trees, stopping smoking, and not littering.	Figure 3
4	Cognitive skills (analytical ability to solve problems)	P. 178	Diagram	The Diagram consists of two titles and followed by two two-way arrows pointing to arguments and recommendation. This is the diagram for writing activity.	Figure 4

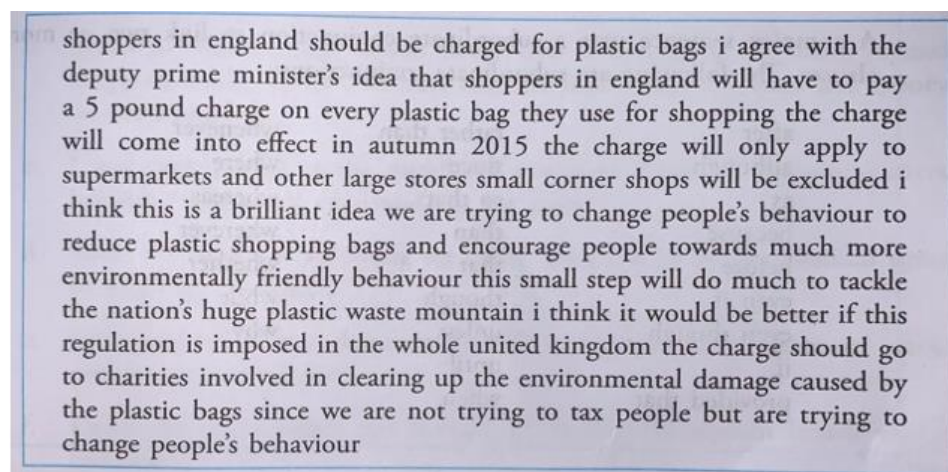


Figure 1. Evidence of knowledge of environmental discourse

The discourse of knowledge about the environment is represented in an activity (see figure 1). Learners are asked to rewrite the text properly by considering capitalization and punctuation. The text discusses a case study in England on the overuse of plastic bags. This case report may be knowledge of one solution following ecological principle by giving charges or fines to the shoppers of supermarkets or large stores. This idea or solution can serve as an

example for solving the plastic waste problems in other places. From transitivity analysis, the verb processes dominating the clauses are material processes. The material processes showcase the treatment or action of the doer toward done things or outcomes. With regard to shoppers, the text reveals that they 'will have to pay a 5 pounds charge on every plastic bag'. The modality 'will' and obligatory phrase 'have to' level up the strength of the clause. The verb

‘pay’ is considered a solution to lower the number of plastic consumptions. The income of the fines is used as another way to solve the problem, as in the clause ‘... the charge should go to charities...’. This clause shows ‘the charge’ and ‘charities’ as participants. However, from a critical lens, adding extra money to plastic bag users may not significantly impact plastic waste since plastic bags will still be produced. A limited number of available plastic bags can decrease waste since shoppers will be forced to use other reusable kinds of bags.

The second discourse deals with attitudes which may activate learners’ sense of responsibility toward waste production. The image illustrates two garbage trucks in the garbage dump, similarly describing what the verbal text writes about. From a multimodal lens, the exposure of the waste pile could be intended to emphasize the phrase ‘a lot of waste’ in the text. However, the amount of waste is considered small because the authors could capture a more ‘worrying’ portrait of the garbage dump, i.e., a mountain of debris. Located in one-third of the image, the trash does not get

immediate attention. The portrait of two trucks is more significant than the waste, so the attention to the waste may be lower. Regarding transitivity analysis, all the clauses use material processes. One interesting finding is the use of circumstance ‘today’ in the beginning indicating the emphasis on this information (Eggins, 2004). The text highlights ‘people today’ as current habits and recent situations. This suggests that the readers, which in this context are students as future citizens, to be sensitive and affectionate with waste management.

In the third finding, behavior pattern discourse is represented in figure 3. The text discusses how to make a clean and fresh city by encouraging concerns about daily consumption (e.g., avoid smoking) and conservative awareness (e.g., planting trees, watering plants, creating shady-trees areas, cultivating colorful flowers). However, the image of a garbage bin's sign only illustrates marking the place for throwing rubbish. As an alternative mode, the text would benefit from the picture of a clean and green city. It may persuade learners as readers to act as suggested by the text.

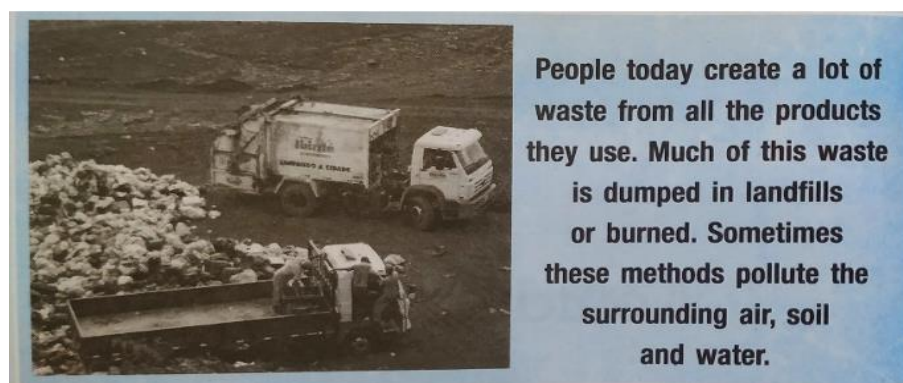


Figure 2. Evidence of behavior pattern of environmental discourse

The final discourse in the selected coursebook is the environmental discourse of cognitive skills. As viewed in figure 4, the diagram reflects what learners should do for writing activities. Using a diagram indicates the possibility of multiple direction modes to initiate the task. Not only text or images, other modes, such as diagrams, charts, and audio, can be utilized as tools to acquaint what learners should do. Regardless of the instruction used by the

language teachers, the task aims to activate learners’ cognitive skills to solve the problem offered in the diagrams. In the first diagram, on the top of it, the topic is ‘stop littering in the classroom’. In the second one, the topic is ‘neighborhood clean-up is a great volunteer project’. Learners are instructed to expand their arguments toward the issues, which may lead them to analytical ability to solve the environmental problems surrounding them.

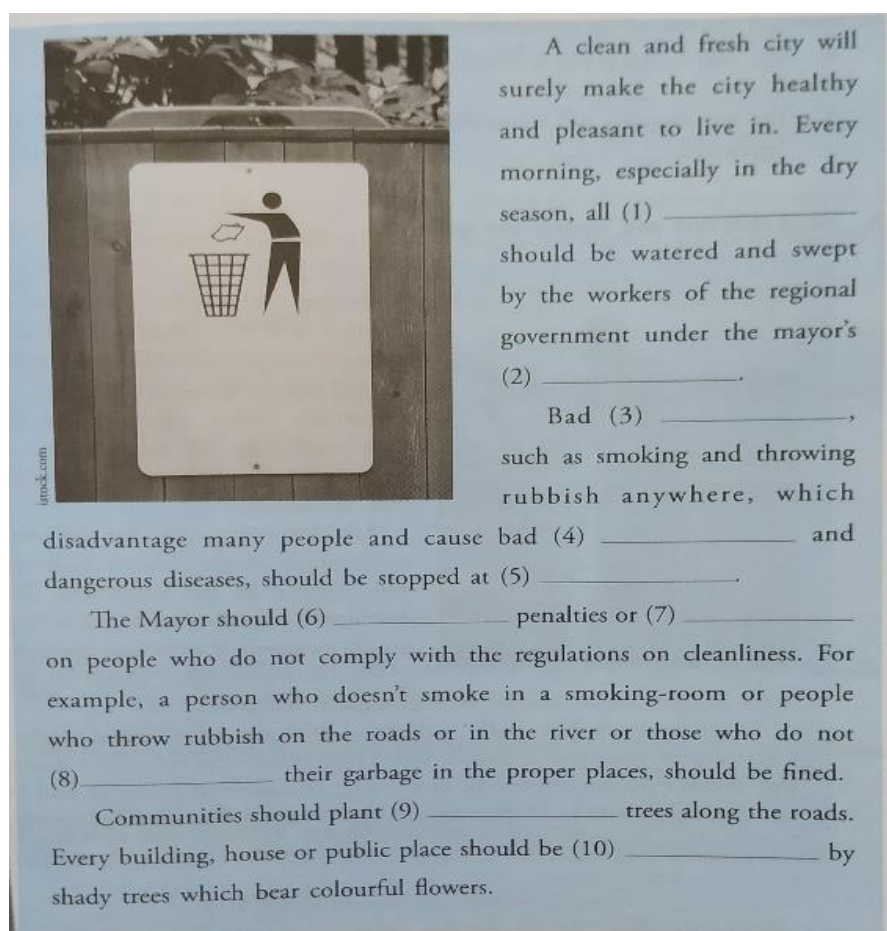


Figure 3. Evidence of attitudes of environmental discourse

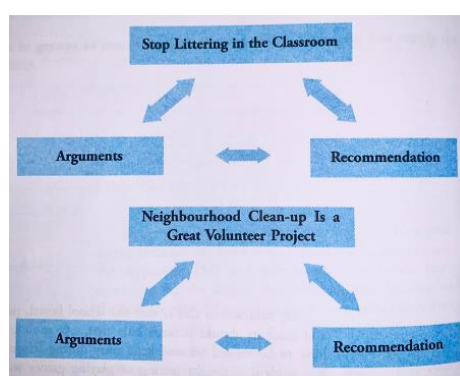


Figure 4. Evidence of cognitive skills of environmental discourse

The findings reveal the representation of various environment discourses in multiple modes within an EFL coursebook. Despite their depictions, environmental discourses must accommodate in-depth environmental literacy (Curdt-Christiansen, 2021) to comply with the global agenda proposed by UNESCO about global citizens (UNESCO, 2014). Environmental awareness comprises self-directed action with responsibility in every daily movement. Learners need to consider action regarding environmental

sustainability effectively and responsibly. Thus, one local activity, for instance, planting a tree, may impact other citizens. No matter its significance, sooner or later, when this action is consistently applied may output in the local, national, or global context.

CONCLUSION

In this article, we denaturalizes environmental discourses in an EFL coursebook. This may be a reference for language teachers as coursebook users who are expected to socialize environment-crisis awareness in the classroom and beyond. Regardless of their powerlessness in controlling the contents, their understanding and awareness of environmental-related content may shape them in using ready-to-use coursebooks critically. Thus, informed by MCDA as one of the critical lenses, language teachers must question the served contents and engage with the notion of environmental literacy to examine the content of the multimodal contents, including texts, images, and audio attached in the coursebook.

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