

Environmental Awareness Content for Character Education in Grade 10 in Indonesian Language Student Textbooks

Laili Etika Rahmawati^a, Anggi Niasih^b, Hari Kusmanto^c, Harun Joko Prayitno^d, ^{a,b,c,d}Indonesian Language and Literature Education, Faculty of Teacher Training and Education, Universitas Muhammadiyah Surakarta, Surakarta 57102, Indonesia, Email: ^{a*}Laili.Rahmawati@ums.ac.id

This study aims to describe how environmental care is included in the student textbooks of the Indonesian language studies in grade 10. The descriptive qualitative approach was used in this research, using teaching materials that contained environmental content. The data resources used were the grade 10 Indonesian language student textbooks that followed the 2013 curriculum, published by the Ministry of Education and Culture of the Republic of Indonesia. The document analysis method was used as the data collection technique, while the content analysis method was used to analyze the data. The results of the research show that there were 25 topics that were introduced in the student textbooks of the study of the Indonesian language related to developing concern for the environment in grade 10 students. The values of caring for the environment were presented in the form of material, introductory texts of the material, and assignments. The types of texts that contained material raising environmental awareness were found in the texts of observation reports, expositions, and debates. The results indicate that Indonesian language textbooks contain not only material regarding the types, structures, and rules of the texts, but also regarding the ethics of environmental education through environmental-based literacy.

Key words: *Character education, environmental care character, textbooks of the Indonesian language in grade X.*

Background

There has been a growing concern related to the decreasing moral quality in the world of education. Due to this, educational institutions have found the need to include character development in their curricula. Teachers, parents, and society in general play an important role in giving concrete examples. Unresolved character education problems may lead to moral decadence. Maunah (2014) states that moral decadence has become an important problem and a disgrace to the education world. Furthermore, this moral decadence has also become a common phenomenon in every layer of society, including government institutions (Ainiyah, 2013). This decline in moral quality is exemplified by group fights among students, senior dominance over their juniors, blackmail, bullying, and cheating.

Interactions or relationships between people and the environment can create a variety of problems to the environment itself, especially when people are ignorant of their own individual responsibilities. Humans clearly play a crucial role in maintaining environmental sustainability. In the current era of globalization, rapid development in many areas often triggers people to behave undesirably. These negative attitudes have also spread to the education sector. One good example of this is the environmental damage caused by students' ignorance of their surrounding environment.

The lack of interest in environmental issues is closely related to personal character. Character development is one of the government's main concerns and will be most successful when desired behaviours are repeatedly induced. The development of a person's character is affected by inherited behaviour and the environment (Jang, 2019). Character education needs to be implemented in the early age of childhood so that children and also teenagers learn to behave in accordance with the expected character of the Indonesian nation when they get older.

Literature Review

Character consists of unique traits possessed by individuals, and individual character building is a continuous process. "Good character is not formed automatically; it is developed over time through a sustained process of teaching, example, learning and practice" (Pala, 2011:23). Young generations, as the successors of a nation, need to be introduced to good behaviour so they can build good character. One example of such good character that they need to possess is caring about the environment.

A character deficit regarding environmental care can be clearly seen in the attitudes of people who no longer care about the environment around them. This phenomenon also occurs in the education world. The lack of awareness in protecting the environment is evident among education practitioners, especially students (Vindriyana, 2017). For instance, there are students

who still litter, spray graffiti on the school walls, and do not take care of the plants around the school area (Vindriyana, 2017). It is clear that schools should be responsible for managing the learning process which is based on environmental care (Schuwirth, Borgwardt, Domisch, Friedrichs, Kattwinkel, and Kneis, 2019).

Environmental care character building, which means fostering positive attitudes in managing and protecting the environment, can be done in any educational institution. Future education needs to involve the development and encouragement of behavior that shows care for the environment (Feszterova and Jomova, 2015; Suwandi, Ahmad and Rahmawati, 2017). Purwanti (2017) states that every education practitioner must show a caring attitude towards the environment. This can be done by improving the quality of the environment, raising awareness of school parties regarding the importance of environmental care, and developing the desire to protect the environment. Moreover, Purwanti (2017) mentions that the objectives of environmental care character education are to encourage environmental management, avoid environmental damage, develop a sensitivity towards the environment, build environmental concern and responsible behavior, and to produce students who are able to set good examples in caring for the environment.

Teachers and students in the education world always maintain positive interactions and communication. Teachers help students develop their cognitive, affective, and psychomotor abilities. To do this effectively, suitable learning facilities are needed. Suryaman (2006) states that one of the important facilities is textbooks that are used to guide students. The availability of textbooks is a significant factor that supports the learning process.

Textbooks play a very important role in helping improve the quality of the learning process. Piper, Simmons Zuilkowski, Dubeck, Jepkemei and King (2018) say that textbooks are an important element in improving the learning process and cannot be ignored in this process. In addition, textbooks provide knowledge. Therefore, they are a very crucial facility of learning practices (Çobanoğlu, Şahin and Karakaya, 2009; Hajiyeva, 2015; Surma, Vanhoyweghen, Camp and Kirschner, 2018; Van den Ham and Aiso, 2018).

According to some experts, textbooks are necessary for learning. A good textbook can effectively improve students' competencies. The effectiveness of each textbook is different. The higher the quality of a textbook, the more competent the students (Sievert, Van den Ham, Niedermeyer and Heinze, 2019). Textbooks play an important role in environmental care character building. The textbooks that contain environmental care values help students develop these characteristics. Jung (in Suwandi, Ahmad and Rahmawati, 2016) claimed that textbooks that contain environmental care values provide guidance for students so that they possess ecological intelligence, which means that the students are able to act as a control on their environment.

The main issues observed in this study were the topics used to build character in the field of environmental care in the textbooks of the Indonesian language study published in 2013 by the Ministry of Education and Culture of the Republic of Indonesia. Therefore, this research aims to describe the environmental care values contained in those textbooks.

Research Methodology

The qualitative approach was used in this research (Creswel, 2014: 203; Tojo and Takagi, 2017; Zurqoni, 2019), and it aims to provide a description of the educational values concerning environmental care in grade 10 textbooks of the Indonesian language study based on the 2013 curriculum. The texts of the Indonesian language study materials were used as research data, and they contain the values of environmental care character education. Grade 10 textbooks of the 2013 curriculum for Indonesian language study, published by the Ministry of Education and Culture, were used as data resources. Three types of methods included documentation, observation and field notes, were used to collect data. Grade 10 textbooks of the 2013 curriculum Indonesian study published by the Ministry of Education and Culture were used in the documentation analysis method. The observation method was carried out by thoroughly reading the texts in order to find environmental care material covered in the student textbooks for the study of Indonesian. Then, the texts containing the environmental care material were listed in accordance with the values of environmental care character building.

Content analysis was used to analyze the data in this study. When using this method, it is necessary for researchers to formulate the materials of the research before the research begins. All these stages are carried out in accordance with this objective. The next step that needs to be completed is for the researchers to select the research object to be analysed, which in this study was the building of environmental care character. A triangulation of data sources was used to validate the data. Triangulation is defined as the verification of data from different sources, using different methods and at different times.

Research Results and Discussion

The results and discussion of this research focus on the principles of character education included in the textbooks. The contents of the environmental care character education are formulated in the introduction of the materials, texts and assignments. Environmental care behavior deals with the attitudes and actions related to preventing environmental damage to the surrounding nature and to developing measures to fix environmental damage that has occurred. The material that contained environmental care character education were found in the texts of observation reports, exposition and debates.

The Content of Environmental Care Character Values in the Introduction of the Materials

The ideals of environmental care character education in textbooks can be found in the introduction. Environmental care, as stated in the introduction, means taking care of the environment through maintaining cleanliness. A clean environment represents human activities related to individuals, societies and the environment (Jornet and Damşa, 2019).

Data 1

“Have you ever listened to someone express a view or opinion about a particular issue? For instance, you are listening to an explanation about how important it is to keep your environment clean. To convince listeners or readers of the importance of maintaining a clean environment, a speaker or writer needs to present arguments.” (page 51)

Data 1 is an introductory text of a textbook which includes the values of environmental care character education. The introductory text helps to produce perception, understanding and initiate care for the environment in students (Pane and Patriana, 2016). The value of environmental care character in data 1 is seen in the statement of *how important it is to keep the environment clean*. Developing the values of character education using textbooks has become crucial since in the learning process. Students not only develop their cognitive skills, but also psychomotor skills, or in other words, learning that is integrated with character education. This is consistent with the statement of Astuti and Wuryandani’s (2017) saying that textbooks are the gateway to integrated learning. It means that a good textbook contains not only learning material, but also contain all the elements that support physical, mental and student character development.

The Content of Environmental Care Character Values in Assignments

Environmental care character education is also included in the giving of assignments. In this section students need to identify environmental damage and come up with solutions.

Data 2

“Think about damage that has occurred to the environment around you. Give a recommendation to overcome the problem!” (page 62)

Data 2 is a task given to students. The task of data 2 is to identify a form of environmental damage and to provide a solution. The assignment in data 2 requires students to be sensitive to the environment through identifying an environmental problem and the factors that contribute to the damage, and to present a solution. This assignment shows how the textbooks can

motivate students to be sensitive to their environment. A different condition is found in the textbooks published by the Turkish government, which do not yet include the component of environmental literacy (Karatekin, 2012).

The assignment shown in data 2 focusses on environmental care character education. This is very important because education is integral to the creation of a good environment. Education is not a partial system. The importance of providing textbooks that have an environmental care component, according to Mustari (2014:147), is first because we need the environment, and second because nature has the right to continue.

Environmental Content for Character Building in Reports on Observation Results

The principles of character education are presented in the textbooks in the reports on observation results. One of the values covered is the impact of the misuse of rivers.

Data 3

“The river in general is a place for many people to carry out their activities. However, in a village named Jantur, in Bumiaji district, the river is used for people to throw their garbage into. As a result, the river bed, which used to have flowing water is now dry and covered in piles of garbage.” (page 31)

Data 3 shows a quotation from the reports of observation results regarding environmental problems. It also presents an example of damage to a river from being misused. The text in data 3 contains character building of environmental care by showing the need to protect the river and to throw garbage away in its proper place.

Throwing garbage continuously into the river leads to changes in the river function and also causes flooding. Mulasari & Sulistyawati (2014) state that the increasing amount of garbage and its mismanagement will become a major problem for both the government and society. Furthermore, this problem will not only affect the environmental sector but also the health sector. Therefore, humans need to adapt ecologically to the environment to make changes and create harmony with the environment (Fedele, Donatti, Harvey, Celia, Hannah and Hole, 2019). In addition to presenting the value of caring for the environment by showing the need to protect the river, the written report on observation results also presents the value of character education by showing students that they can turn garbage into useful products that can be sold.

Data 4

“Both organic and inorganic waste is very useful if managed properly.” (page 32)

Data 4 exhibits character building with regard to environmental care because it exemplifies one attitude that can help prevent environmental problems. The mentioned behavior is using waste to make compost. Fatoni, Rinaldy and Ahmad (2017) state that garbage can be utilized and turned into beneficial products such as compost, which is derived from organic matter. Meanwhile, much of the inorganic waste can be recycled. There are two other values that are included in this text report, namely showing concern for air quality and appreciation for beautiful natural scenery.

Data 5

“National parks offer many benefits for the environment such as fresh air and beautiful natural scenery, which exist in the same space and time.” (page 41)

In this data, the emphasis on environmental care is the advantages of national park existence in terms of providing environmental service products such as clean air and stunning views. The data indicates that humans are able to create national parks, which improve air quality and provide beautiful landscapes. So, one way to preserve nature is by creating national parks. This is in line with the research conducted by Purwanto (2005). He claims that there are three types of nature preservation areas based on their specification, and one of them is national parks. National parks that are managed well are evidence that the government and society still make contributions to and participated in protecting the environment.

Data 6

“There is a demand for a policy that is able to regulate the allocation of natural resources, which are used to support the needs of the citizens. This regulation is necessary to ensure the sustainability of the environment, and it must take into account the socio-economic aspect of the surrounding community.” (page 41)

In their relationship with the environment, people need policies to control the use of natural resources. Consequently, people need to be considerate in using natural resources, and they need to still protect the environment. The fact that there are regulations regarding environmental management shows that the government and societies care about the environment.

Data 7

“More and more garbage is being produced, especially in metropolitan cities such as Jakarta and Surabaya.” (page 43)

The beginnings of the garbage problem stems from the increasing human and animal populations that produce waste, followed by increasing population density in one particular area. In the most populated areas such as residential areas and big cities with limited open space, garbage has become a significant problem (Suyono & Budiman in Mulasari & Sulistyawati, 2014). This is covered in the student textbooks and it indicates an awareness of environmental problems.

Data 8

“It is important to note that nature conservation is not only the responsibility of the government, but also of all of the country’s citizens.” (page 43)

Attempts at protecting the environment are needed since the environment is the source of life (Sutoyo, 2015). There is a mutual relationship between every individual and the environment because the environment plays a significant role in the lives of people. One indicator that someone cares about the environment is that they are aware of their surroundings. The way they react to their surroundings shows their awareness of the environment. Tamara (2016) states that environmental awareness can be defined as good behaviour towards the environment, such as avoiding doing any environmentally damaging activities.

The Content of Caring for the Environment in Expositions

The values of character education is also presented in the form of exposition texts. The values included are the population explosion, the depletion of natural resources, global climate change, the extinction of flora and fauna, the destruction of natural habitats, the increasing pollution index and the rise in poverty.

Data 9

“The earth is now facing a number of serious environmental problems. There are six major problems, namely the explosion of the population, the depletion of natural resources, global climate change, the extinction of flora and fauna, the destruction of natural habitats, increasing pollution and the increasing rate of poverty.” (pages 56, 63, 65 and 68)

Data 9 is content that shows environmental content of character. This is emphasized by listing the phenomena related to existing environmental problems. Azmi dan Elfyetti (2017:125) mentions that the quality of the environment is currently decreasing due to the exploitative behaviour with regard to nature without considering its sustainability and ecological functions. The environmental content in student textbooks indicates the desire to build the character of being concerned about the environment.

Data 9

“The implementation of the continuous development concept is actually far from expectations. The difficulty in the implementation mostly occurs in developing countries such as Indonesia. For example, in our country approximately 3,180,243 hectares (about 50 times the size of Jakarta) of jungle is lost to logging activities each year. The extinction of the flora and fauna ensues. This fact is strong evidence for the destruction of nature and a calamity for humans.” (page 57)

Environmental problems included in the student textbooks that show environmental content of character building is also presented in the second part of data 9. The division of data 9 is supported by the research carried out by Arif (2016) that claimed that forest destruction, or deforestation, in Indonesia happens much faster than in any other countries. This environmental problem included in the student textbooks suggest an attempt in building character of environmental care.

Environmental Content and Character Building in Debates

Another form of environmental content included in the textbooks is presented in the form of debates. Environmental awareness covered is environmental damage caused by human activity in utilizing natural resources.

Data 10

“It is true that many natural disasters are caused by humans. Nevertheless, it is also important to note that the earth itself is aging, which contributes to the occurrence of natural disasters. Global climate change due to human activities causes natural disasters to happen faster and more often.” (page 185)

Data 10 is an example of the texts of debates that show concern for the environment. The environmental value covered is human activities that cause environmental damage. This is clear from the statement, *“Global climate change due to human activities causes natural disasters to happen faster and more often”*. Debates can be categorized as having environmental content



for character building because debaters discuss the facts regarding the condition of the environment and the effects of human activities on the environment. This in turn teaches students to care for the environment. Based on the description presented in the preparation and development of textbooks, it is necessary to include environmental aspects. Suzuki, Akimoto, Ishihara and Kobayashi (2017) state that textbooks that are used in the learning process need to include environment-based content.

Conclusion

The research results indicate that the Indonesian language textbooks of student grade 10, based on the 2013 curriculum published by the Ministry of Education and Culture of the Republic of Indonesia, contain environmental content to support character education. The environmental aspects of this character building are covered in the introduction of the material, texts and assignments. The types of texts that contain environmental study are presented in the text of observation reports, expositions and debates. Out of the textbook's eight chapters, only three of them are related to the environment. Nevertheless, these results suggest that the Indonesian language textbooks do not only cover learning material related to the language itself, but also cover knowledge on the importance of environmental literacy, which has not been a main concern in this modern era. It is hoped that the environmental content of these textbooks will raise the awareness of students about the environment.



REFERENCES

- Ainiyah, Nur. 2013. *Pembentukan Karakter Melalui Pendidikan Agama Islam*. Jurnal Al-Ulum. 13(1): 25-38.
- Arif, Ahmad. 2018. *Bencana dari Darat dan Lautan*. KOMPAS. Oktober 2. pp. 2.
- Astuti, Harini Puji dan Wuri Wuryandani. 2017. *Analisis Nilai-nilai Karakter pada Buku Guru dan Buku Siswa Kelas IV Semester I Sekolah Dasar*. Jurnal Pendidikan Karakter. VII (2):226-239.
- Azmi, Fadila and Elfyetti. 2017. *Analisis Sikap Peduli Lingkungan Siswa melalui Program Adiwiyata di SMA Negeri 1 Medan*. Jurnal Geografi. 9 (2):125-132.
- Creswell, John W. 2014. *Research Design: Qualitative, Quantitative, and Mixed-Methods Approaches*. America: United States of America.
- Çobanoğlu, E. Omca, & Şahin, Birgül & Karakaya, Çiğdem. 2009. *Examination of the Biology Textbook for 10th Grade in High School Education and the Ideas of the Pre-service Teachers*. Procedia - Social and Behavioral Sciences. 1(1): 2504-2512. Doi 10.1016/j.sbspro.2009.01.442.
- Fatoni, Nur & Imanuddin, Rinaldy & Darmawan, Ahmad Ridho, 2017. *Pendayagunaan Sampah menjadi Produk Kerajinan*. Dimas. 17 (1):83-96.
- Fedele, Giacomo & Donatti, Camila I. & Harvey, Celia A. & Hannah, Lee & Hole, David G. 2019. *Transformative Adaptation to Climate Change for Sustainable Social-Ecological Systems*. Environmental Science & Policy. 101 (July): 116-125. Doi 10.1016/j.envsci.2019.07.001.
- Feszterova, Melania & Jomova, Klaudia. 2015. *Character of Innovations in Environmental Education*. Procedia - Social and Behavioral Sciences. 197 (February): 1697-1702. Doi 10.1016/j.sbspro.2015.07.222.
- Hajiyeva, Konul. 2015. *A Corpus-based Lexical Analysis of Subject-specific University Textbooks for English Majors*. Ampersand. 2(1): 136-144. Doi.org/10.1016/j.amper.2015.10.001.
- Jornet, Alfredo & Damşa, Crina. 2019. *Unit of Analysis from an Ecological Perspective: Beyond the Individual/Social Dichotomy*. Learning, Culture and Social Interaction. August: 1-10: Doi 10.1016/j.lcsi.2019.100329.



- Karatekin, Kadir. 2012. *Environmental Literacy in Turkey Primary Schools Social Studies Textbooks*. Procedia - Social and Behavioral Sciences. 46: 3519-3523. Doi 10.1016/j.sbspro.2012.06.096.
- Maunah, Binti. 2014. *Implementasi Pendidikan Karakter dalam Pembentukan Kepribadian Holistik Siswa*. Jurnal Pendidikan Karakter. V(1): 90-101.
- Mulasari, Surahma Asti & Sulistyawati. 2014. *Keberadaan TPS Legal dan TPS Ilegal di Kecamatan Godean Kabupaten Sleman*. Jurnal Kesehatan Masyarakat. 9 (2):122-130.
- Mustari, Mohamad. 2014. *Nilai Karakter: Refleksi untuk Pendidikan*. Jakarta: RajaGrafindo Persada.
- Piper, Benjamin & Zuilkowski, Stephanie Simmons & Dubeck, Margaret & Jepkemei, Evelyn; & King, Simon J., 2018. *Identifying the essential ingredients to literacy and numeracy improvement: Teacher professional development and coaching, student textbooks, and structured teachers' guides*. World Development. 106 (2): 324-336. Doi.org/10.1016/j.worlddev.2018.01.018
- Jang, Eunyong. 2019. *The Relation between Temperament and Anger Response among Prisoners: Comparison of Reinforcement Sensitivity Theory and the Psychobiological Model of Temperament and Character*. Heliyon. 5(2): e02103. Doi 10.1016/j.heliyon.2019.e02103.
- Tojo, Hiroko & Takagi, Akiko. 2017. *Trends in Qualitative Research in Three Major Language Teaching and Learning Journals, 2006–2015*. International Journal of English Language Teaching. 4 (1): 37. Doi 10.5430/ijelt.v4n1p37.
- Vindriyana, Ranita. 2017. *Upaya Sekolah dalam Membentuk Sikap Peduli Lingkungan Siswa melalui Ekstrakurikuler KPLH di SMA N 2 Temanggung*. Hanata Widya. 6 (8):28-38.
- Pala, Aynur. 2011. *The Need for Character Education*. International Journal of Social Sciences and Humanity Studies. 3 (2): 23-32.
- Pane, Murty Magda & Patriana, Rina. 2016. *The Significance of Environmental Contents in Character Education for Quality of Life*. Procedia - Social and Behavioral Sciences. 222: 244-252. Doi 10.1016/j.sbspro.2016.05.153.
- Purwanti, Dwi. 2017. *Pendidikan Karakter Peduli Lingkungan dan Implementasinya*. Dwijacendekia. 1 (2):14-20.
- Purwanto, Semiarto Aji. 2005. *Taman Nasional, Hak-hak Masyarakat Setempat dan Pembangunan Regional*. Antropologi Indonesia. 29 (3):269-288.



- Schuwirth, Nele & Borgwardt, Florian & Domisch, Sami & Friedrichs, Martin & Kattwinkel, Mira & Kneis, David. 2019. *How to Make Ecological Models Useful for Environmental Management*. *Ecological Modelling*. 411 (Agust): 108784. Doi 10.1016/j.ecolmodel.2019.108784.
- Sievert, Henning & Van den Ham, Ann-Katri & Niedermeyer, Inga & Heinze, Aiso. 2019. *Effects of Mathematics Textbooks on the Development of Primary School Children's Adaptive expertise in Arithmetic*. *Learning and Individual Differences*. 74(February): 101716. Doi10.1016/j.lindif.2019.02.006.
- Suryaman, Maman. 2006. *Dimensi-dimensi Kontekstual dalam Penulisan Buku Teks Pelajaran Bahasa Indonesia*. *Diksi*. 13 (2):165-178.
- Surma, Tim & Vanhoyweghen, Kristel & Camp, Gin & Kirschner, Paul A. 2018. *The Coverage of Distributed Practice and Retrieval Practice in Flemish and Dutch Teacher Education Textbooks*. *Teaching and Teacher Education*. 74: 229-237. doi.org/10.1016/j.tate.2018.05.007.
- Sutoyo. 2015. *Revolusi Paradigma Perlindungan dan Pengelolaan Lingkungan Hidup di Indonesia*. *Jurnal Pendidikan Pancasila dan Kewarganegaraan*. Tahun 28. Nomor 1:56-66.
- Suwandi, Sarwiji & Yunus, Ahmad & Rahmawati, Laili Etika. 2016. *Kecerdasan Ekologis dalam Buku Sekolah Elektronik Mata Pelajaran Bahasa Indonesia SMP*. *Litera*. 15 (1):23-37.
- Suwandi, Sarwiji & Yunus, Ahmad & Laili Etika Rahmawati. 2017. *Ecological Intelligence Values in Indonesian Language Textbooks for Junior High School Students*. *Pertanika*. 25 (S):237-248.
- Suzuki, Shin Nosuke & Akimoto, Yutaro & Ishihara, Manabu & Kobayashi, Yukio. 2017. *Basic Development of the Active Textbook System Consisted of a General Book and a Portable Electronic Terminal*. *Procedia Computer Science*. 112: 109-116. Doi 10.1016/j.procs.2017.08.181.
- Tamara, Riana Monalisa. 2016. *Peranan Lingkungan Sosial terhadap Pembentukan Sikap Peduli Lingkungan Peserta Didik di SMA Negeri Kabupaten Cianjur*. *Jurnal Pendidikan Geografi*. 16 (1):44-55.
- Van den Ham, Ann Katrin & Heinze, Aiso. 2018. *Does the Textbook Matter? Longitudinal Effects of Textbook Choice on Primary School Students' Achievement in Mathematics*. *Studies in Educational Evaluation*. 59 (April):133-140. Doi.org/10.1016/j.stueduc.2018.07.005.



Zurqoni, Z. & Retnawati, Heri & Apino, Ezi & Anazifa, R.D. 2019. *Impact of Character Education Implementation: a Goal-Free Evaluation*. Problems of Education in the 21st Century. 76(6): 881-899. Doi 10.33225/pec/18.76.881.