

The Value of Ecological Education in Indonesian Language Teaching Materials for 12th Grade Senior High School

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ABSTRACT

Environmental education is one way that can be used to resolve events or phenomena that occur with nature. Educational environments could be integrated with various subjects, eg the Indonesian Language. The material charged to teach the ecological value in teaching the Indonesian Language can be found in a textbook. The textbook in this research is Buku Sekolah Elektronik (BSE) Languages Indonesia Ministry of Education and Culture Revised 2018 Edition for Class 12 SMA/MA/SMK/MAK. This book is a student book prepared by the government in the context of implementing the 2013 Curriculum (K13). This book arranged and reviewed by various stakeholders under the coordination of the Ministry of Education and Culture, and is used in the early stages of the implementation of Curriculum 2013. This study aims to describe and explain the charge of ecological value in the Indonesian Language material for 12th grade Senior High School. This study uses a qualitative descriptive approach with a content analysis model. The method used in this research is to collect data by reading it over and over again. The data analysis technique used in this study is an analytical technique with an interactive model. The results of this study indicate that the ecological contents in Indonesian language teaching materials for class 12 SMA are: (1) human relations or relationships with the physical, natural, and ecological environment; (2) their relationship with others or with each other; (3) bound by a social structure as well as institutions or institutions; (4) the dependence of society and culture on time and place; (5) is recreational and fun; and (6) starting from simple and close to students.

Keywords

Ecology, teaching materials, Indonesian language

Introduction

Earth is a planet inhabited by various living things; among the living things on earth are plants, animals, and humans. All living creatures on earth are interdependent with each other [1]. Our society on this earth is facing environmental problems. The environmental crisis is marked by global warming, expanding deserts, ozone layer disturbance, biodiversity crisis, water, air pollution, and poverty in developing countries[2]. The occurrence of various events or phenomena resulted in changes in human attitudes towards the surrounding environment [3]. The problems of complex events or phenomena on this earth need to be solved with a multidisciplinary and multidimensional approach, which one of them is education[4].

Education is an activity that is inherent in human life [5]. Education is used as a social strategy to maintain the nature of humanity[6]. Education without humans in it will be useless because humans are the only thing that can be educated[7].

Ecology is a whole of knowledge related to the total relationships between organisms and their

environment that are both organic and inorganic [8]. An education that prioritizes the importance of protecting the natural environment as a source of human life has been found by many experts and educators from the 19th century [9]. Education that has an ecological perspective is very important because sustainability is one of the big challenges that humans will face [10]. Sustainable education that must be developed includes several things, such as: 1) environmental education; 2) global education; 3) civic education; 4) education against violence and racism; and 5) health education[4].

Environmental education is a process of introducing values and concepts to understand and appreciate the relationships between culture and the biophysical environment. Environmental education also carries out behavioral practices in making decisions regarding issues related to environmental quality[9]. The ecological approach used in education is one of the considerations to direct students learning and attitudes towards their environment [10]. The ecological approach has four tiers in terms of intelligence ecological, yes it is (1) to identify the

components of biotic and abiotic ecosystem; (2) understand the function and use of each component in the ecosystem; (3) me knowing the system of nature management and environment; and (4) understand and be able to implement values in ecological systems[11].

Learning in the process of ecological approach not only in the room a special individual, but also includes a community of students and teachers is more widely [12].Meanwhile, the characteristics of the Environmental Education Curriculum presented by the ministry include: (1) local content of the education curriculum, environment; (2) the existence of assimilation or integration with all learning; (3) applicable or can be applied in everyday life; (4) is recreational and fun; (5) starting with simple things and close to student life . The scope related to sustainability is quite broad, namely environmental issues (climate change; disaster risk management; biodiversity; environmental protection; natural resources; urban damage; and clean water sustainability) [14].

Introducing environmental issues in the area of education can be done in various ways, one of them is through Indonesian language learning. Indonesian language learning based on ecological education is one the way to keep improving students love for the environment through their own language skills. [12].Books are a source of learning as well as an important factor. Books can provide knowledge, improve skills, as well as a positive attitude towards the obligation to maintain and preserve an environment. A book that is based on the value of love for the natural environment and the surrounding environment, can guide the reader to have ecological intelligence (ecological intelligence), which makes the reader the center of control of the environment (human as in control of the natural environment)[13].

Methods

This research is included in the type of descriptive qualitative research. The data source is selected from this research that the book "Buku Bahasa Indonesia Kelas XII untuk SMA / MA, dan SMK / MAK Kurikulum 2013 Edisi Revisi

2018" used a teacher as a source of study subjects Indonesian Language for 12th grade SMA / MA and SMK / MAK . The subjects of this study were selected through a purposive sampling technique , namely taking data through certain considerations. The following research uses a content analysis model. Content analysis qualitative is the best approach much-used for qualitative analysis of documents via search das theme ar in the material being analyzed[14].This rule-based approach to qualitative content analysis ensures that all empirical bases are dealt with systematically and the analysis is reproducible to some extent [15].The following is the basic process of qualitative content analysis[16].

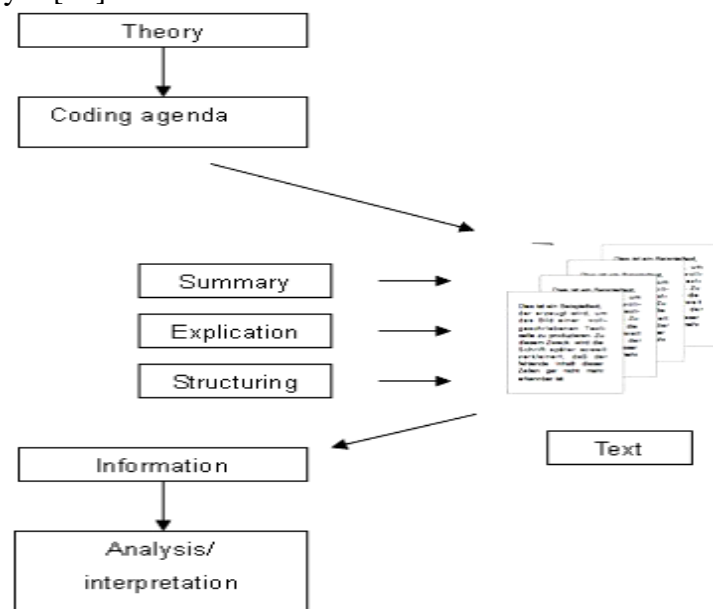


Figure 1. The process of qualitative content analysisby Mayring

The process of content analysis qualitative by Mayring can be divided into nine different stages below.

- Material determination.
- Analysis of the situation in which the text originates.
- Formal characterization of the material.
- Determination of the direction of analysis.
- Theoretically informed differentiation of the questions to be answered.

- Selection of analytical techniques (summary, explanation, organization).
- The definition of the unit of analysis.
- Material analysis (summary, explanation, organization).
- Interpretation.

The validity of the data in this study applying the theory of triangulation test. The data analysis technique applied in this research is an analytical technique with an interactive model. This interactive model analysis is an analytical technique that has several research steps; collecting data, reducing or reducing data, presenting data, and finally drawing conclusions.

Results

Human Relations with the Body, Nature, and the Environment

Human relations or relationships with the body, nature, and the environment in this book are contained in historical novel materials. Historical novels are included in the material in Chapter 2, namely Enjoying Historical Stories. Historical novels are an important genre and are often written in Western countries. The historical novels are written usually contain many messages of life, such as education, culture, environment, and nationalism. Stories in historical novels can also make someone more familiar with their nation. Therefore, the values in historical stories can be used as a means of Indonesian Language learning. In this chapter, language material that contains the value of environmental education can be found in the example text presented in the text entitled Mangir by Pramoedya Ananta Toer. The following is an excerpt from Pramoedya Ananta Toer's text Mangir which contains the value of ecological education.

Under the moon tonight, there is not a single cloud in the sky. And the moon has risen along with the setting of the sun. Quickly he rose from the horizon, visiting anything and everything his light touched. Also the forest, also the sea, also animals and humans. The sky is clear, clean, and bright. On another land, Java, the situation is restless, restless, as if humans don't need peace anymore (p. 48).

The text excerpts in Mangir's novel have shown that natural conditions that are calm, beautiful, and peaceful can not guarantee human peace. It takes effort and a strong desire from humans themselves to show their gratitude for nature, not for war. Concern for the natural environment must also be balanced with concern for the social environment. So that a good relationship can be established between the body, nature, and the environment.

In another paragraph, the relationship between humans, nature and the environment is also shown by the following quote.

"Once upon a time, Demak's horse's hooves would blow dust all over the land of Java. When the dust falls back to the earth, remember my subjects, you will see, not a single footprint of the Wargi people will be seen. Also, the footprints in Blambangan and Padjajaran will be destroyed and covered by the dust of your horses" (p.50)

Based on the quote above, it is known that the natural environment that was originally sustainable and peaceful became a war fight which resulted in the dust flying in the Blambangan and Padjajaran areas. This is a reflection of the arrogant attitude of humans

who always want more without paying attention to the impact it will have on nature. From the historical story text material, it is found the value of ecological education in the form of relationships or relationships between humans and the body, nature, and the environment.

The human relationship with the body, nature, and the environment is also shown during the activity of identifying values in historical novels. One of the values that are closely related to this aspect is a cultural value. Cultural values are values that have and contain close relationships to a group of people, culture, or civilization. The value of ecological education contained in this material is shown in the following quote.

And when a man lands from a voyage, whether from far or near, he will stop in one place a few dozen paces from the wharf. He will raise his prayers in front of him standing Sela Baginda, a stone monument carved with an inscription from Sri Airlangga. If he continues his steps, all the major roads he will pass, the economic as well as the military roads. He will always run into natives who walk quietly without haste, even under the hot sun (p. 65).

The quote by Pramoedya Ananta Toer in the historical story material shows that humans have characters who like to be in a hurry, fast, and instant. In fact, everything that is done on this earth must be considered and considered carefully. The character in the quote illustrates that the indigenous people still uphold Eastern cultural values. The cultural value shown in the quote is a calm life, no rush, and everything must be connected with nature. If this is done, then the relationship between humans, the body, nature, and the environment will be balanced and sustainable.

Attachment to each other

One of the principles of ecological education is to have an attachment to others. The shape of the attachment in learning Indonesian Language can be found in a variety of materials. However, the book "Bahasa Indonesia Kelas XII for SMA / MA, and SMK / MAK Curriculum 2013 Revised Edition 2018" can be found in the literature materials, such as a novel. Complex stories with characters who have diverse characters can represent concepts and values that are useful for human life. For example, social values state that humans always need other people as in the following quote.

Most of the donors, men, women, young and old, refused to be sent home. They intend to donate energy as well. So be a giant kitchen that night. After that came a group of carts delivering firewood and oil. And the fire burned in dozens of furnaces (p. 66)

In ancient times, humans were very dependent on others. Nature provides everything to help humans survive. However, humans cannot do it alone. Humans need the help of each other both physically and psychologically. This cooperation attitude is the hallmark of ecological education. They depend on each other for smoothness and mutual benefit.

Bound to the Social Structure of Society and Institutions or Institutions

The form of the value of environmental education related to social structures and institutions or institutions in this book is contained in the material "Presenting Ideas Through Articles". The article presented is related to the value of ecological education entitled "Photographing Indonesian Health Conditions". Through this article, students are invited to find out the social structure community that is related to health institutions. The Indonesian Doctors Association (IDI) is one of the institutions

that spearhead the world of Indonesian health.

Professor of health administration from the University of Berkeley, Henrik L. Blum, stated that four factors influence the health status of humans or people, namely the environment, human behavior, health services, and genetics or heredity. In simple terms, Hodgetts and Cascio divide two health services, namely public health services and individual health services. Public health services are carried out by public health specialists, with the main focus on maintaining people's health and preventing disease (pp. 141-142).

The quote above states that one of the factors that influence the health status of the community is the environment. Through IDI, the information is more easily accepted by the public. An institution or institution is important to be introduced to students through various fields of science. Articles are material that is easy to insert the values of ecological education.

Dependence of Society and Culture on Time and Place

The book showed that society and culture depend on the time and place through moral value delivered in a historical novel. One's awareness to place oneself when values are limited by geographic area is something that should be appreciated. The book exemplifies the value of geography which is limited by culture related to the clothes worn. In areas with hot weather, people are used to wearing thin clothes and tend to be more open. On the other hand, people in mountainous areas are accustomed to wearing thick and closed clothes.

Cultural dependence on time and place is also found in the same material, namely moral values. In addition to being limited by

geography, this value can also be limited by time. The quotations shown in the book are nginang culture, namely chewing betel leaves, jambe fruit, and lime. The ancient people believed that everything natural (derived from nature) would have a positive impact. However, this habit is now almost no longer found.

Recreational and Fun

Indonesian learning language can be done in a recreational and fun. The recreational and fun nature that also contains environmental values is shown in the historical text material "Borobudur Temple". In the text, it is explained that Borobudur Temple was erected on a hilltop overlooking the fertile rice fields between the tenuous earth. Quoted text "Borobudur" has shown that natural conditions when it is amazingly beautiful and very supportive. Borobudur Temple was founded on an ancient lake. In the past, the lake became the estuary of various rivers. Natural events that occur in the vicinity, such as a volcanic eruption, have brought the lava that has settled and closed the lake. The historical text 'Borobudur Temple' is not only informative but also fun for students.

The ecological content in this class 12 Indonesian language material is also found in the chapter "Presenting Ideas Through Articles". Students are asked to find facts, linguistic elements, and distinguish linguistic elements in opinion articles and scientific books. This article which has recreational and fun value is entitled "Pangandaran Beach Tourism Object". The text presented in the article describes the beauty of Pangandaran Beach and recommends various seafood preparations as in the following quote.

In addition, there is a hill that becomes a forest in the Pangandaran Beach area. Go around further, then you can see a very beautiful waterfall right at the top of the hill. The tourists who want to take the time to go to this waterfall must go on foot. Coming home from

this tourist attraction, don't forget to taste various kinds of seafood at the stalls around the beach, such as shrimp, crab, squid, fish, and so on. For family gifts, try buying anchovies, the famous jambal roti on Pangandaran Beach (p. 153).

The ecological content contained in the text of the article above has fulfilled the recreational and fun value. In addition to being informative, the article is also one of the media to introduce the nature of the archipelago. It is important to do this in a teaching and learning activity to foster an attitude of love for the environment, pride, and awareness to protect the surrounding natural environment.

Simple and Close to Students

The values instilled in ecological education are values that are simple and close to students' lives. In the Indonesian language material for 12th grade, this value is found in the Chapter "Presenting Ideas Through Articles". The article is a type of writing that contains opinions, ideas, thoughts, or criticisms of problems that develop in society. Articles are usually written in popular scientific language. The article presented in the book "Bahasa Indonesia Kelas XII untuk SMA/MA and SMK/MAK Curriculum 2013 Revised 2018 Edition" has a topic that is very close to students. The book also displays illustrations that can arouse students' curiosity about the conditions in the surrounding environment. One of the articles that have a theme close to students is in the text "Pak Raden and the Story of Multiculturalism". The text tells about the legendary Unyil for the generation of the '80s to the early '90s in Indonesia. Unyil is a wooden doll created by Mr. Raden, an alumnus of Fine Arts ITB. Si Unyil's story has taught the diversity of characters that the Indonesian people have. The differences in social class presented in this article are easily digested and understood by students. Si

Unyil tells the story of a harmonious social life even though it is decorated with many differences. In addition, the article also provides an example of the Unyil program which was broadcast on national television at that time.

Through Unyil, the government also participates in socializing many of its programs or policies, such as Family Planning, invitations to carry out night patrols, schools, and others (p. 137).

The various types of activities in the quote above show that values related to the environment can be embedded in various types of material. The Family Planning Program established by the government at that time was one way to reduce the population in Indonesia. An uncontrolled population will cause harmful impacts, such as environmental impacts. Air pollution, the amount of household waste, to poor sanitation. Through Unyil's article, students will more easily understand environmental issues around them with the help of the teacher.

The teaching material that is simple and close to the next student is an article about the history of paper and the process of earthquakes. Paper is an item that is needed in the world of education, for example as a base for writing. Paper is a writing tool that is needed by humans to write. According to history, the paper was discovered in the past by the Chinese. Her name is Cai Lun (Ts'ai Lun). Cai Lun is a Chinese national who was born during the Han Dynasty which already existed in the 1st century AD (p. 170)

Earthquakes are events that are experienced by almost all regions in Indonesia because they are located between two continental plates, namely the Asian continent and the Australian continent. In this book, students

are asked to arrange facts into a complete article. By collecting facts about earthquakes, students become aware of events that occur in their environment. This will help him to behave and prepare for the future. The activity of compiling a collection of facts about earthquakes will also help students to be more prepared for natural disasters that will cause damage such as the following quote.

A large earthquake can cause landslides, buildings to collapse or crack (p. 180)

Knowledge of natural phenomena is the knowledge that students must know. Through the material about writing this article, the values of environmental education that are simple and close to students can be applied properly.

Discussion

In line with the opinion of Ernest Bloch[17] and regulations from the Ministry of the Environment[18], several things fall into the category of teaching materials with an ecological or environmental perspective. These include:

- relations or human relations with the physical, natural, as well as ecological environment;
- their relationship with others or with each other;
- bound by a social structure as well as institutions or institutions;
- the dependence of society and culture on time and place;
- is recreational and fun; and
- starting from simple and close to students.

The teaching materials in the book "Buku Bahasa Indonesia Kelas 12 untuk SMA/MA and SMK/MAK Kurikulum 2013 Edisi Revisi 2018" have various types of topics spread over each subject. The value of environmental education contained in the book is spread over several teaching materials. Each of these teaching materials

has ecological educational values that can be applied as the basis for sustainable education. Indonesian is one of the complex subjects so that it can accommodate every value of a life well.

The teaching materials contained in the book "Buku Bahasa Indonesia Kelas 12 untuk SMA/MA and SMK/MAK Curriculum 2013 Revised 2018 Edition" do not fully contain the values of ecological education. The dominant teaching materials for ecological education values are historical stories (chapter 2), novels (chapter 4), articles (chapter 5), and essay criticism (chapter 6). Of the four materials, the value of ecological education is mostly found in article writing materials (chapter 5).

Relationships or human relationships with the body, nature, as well as the ecological environment contained in historical novels, are very diverse. This is because the novel has many elements, both intrinsic and extrinsic, which have the potential to become a medium for teaching ecological educational values. The Indonesian Language materials which include the value of environmental education can be found in the example of the text presented in the text entitled *Mangir* by Pramoedya Ananta Toer.

The quote by Pramoedya Ananta Toer in the historical story material shows that humans have characters who like to be in a hurry, fast, and instant. Everything that is done on this earth must be considered and considered carefully. The character in the quote illustrates that the indigenous people still uphold Eastern cultural values. The cultural value shown in the quote is to live calmly, not in a hurry, and everything must be connected with nature. If this is done, then the relationship between humans, the body, nature, and the environment will be balanced and sustainable.

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Indonesian can be found in various materials. However, the book " Indonesian Class XII for SMA/MA and SMK/MAK Curriculum 2013 Revised 2018 Edition" can be found in literary materials, such as novels. Complex stories with characters who have diverse characters can represent concepts and values that are useful for human life. Humans need the help of each other both physically and psychologically. This cooperation attitude is the hallmark of ecological education. They depend on each other for smoothness and mutual benefit.

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Learning Indonesian can be done in a recreational and fun way. The recreational and fun nature that also contains environmental values is shown in the historical text material "Borobudur Temple". In the text, it is explained that Borobudur Temple was erected on a hilltop overlooking the fertile rice fields between the tenuous earth. Excerpts from the text 'Borobudur Temple' have shown that the natural conditions at that time were extraordinarily beautiful and very supportive. The ecological content in this class 12 Indonesian language material is also found in the chapter "Presenting Ideas Through Articles". Students are asked to find facts, linguistic elements, and distinguish linguistic elements in opinion articles and scientific books. This article which has recreational and fun value is entitled "Pangandaran Beach Tourism Object".

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Conclusion

Teaching materials for Indonesia Language 12th grade Senior High School in the book " Buku Bahasa Indonesia Kelas 12 untuk SMA/ MA, and SMK /MAK Curriculum 2013 Revised edition 2018" contains a lot of cargo ecology. This is shown in the material text and historical novels, editorial text, and serving ideas through articles. The ecological

content contained in the Indonesian language teaching materials for 12 grade in Senior High School is the existence of (1) human relations or relationships with the body, nature, as well as the ecological environment; (2) their relationship with others or with each other; (3) bound by a social structure as well as institutions or institutions; (4) the dependence of society and culture on time

and place; (5) is recreational and fun; and (6) starting from simple and close to students. Thus, it can be concluded that the environmental teaching materials are found in the book "Buku Bahasa Indonesia Kelas XII untuk SMA / MA, dan SMK / MAK Kurikulum 2013 Edisi Revisi 2018" and are used in Indonesian language learning for 12th grade in Senior High School.

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