Overviewing Ecological Mindedness in Indonesian Education: From Regulation to Instructions

Yohanes Heri Pranoto Universitas Katolik Musi Charitas, Palembang <u>heri pranoto@ukmc.ac.id</u>

ABSTRACT

Education, both as a product and a system, in Indonesia has openly disclosed up opportunities for the instillation of ecological values for students from primary, secondary, to higher levels of education. This distinctly becomes proof that the curriculum as a product of regulation is still open to forging, so ecological education commences and is delivered. This is the background of this article. To what extent is ecological education present in the education system in Indonesia? How are ecological values present in the learning process? This article raises those issues straightforwardly through the latest research references in the hope that it will serve as a content or summary of the process of seeding ecological values in the world of education that is worthy of being a reference for subsequent related studies. This article also presents some feasible recommendations, so ecological education can better "land" on the existing education system. In addition, the future of ecological education practices will also be elaborated in this article.

Keywords: ecological mindedness, Indonesian education, curriculum, classroom instructions

INTRODUCTION

Floods in Palembang seem to have become merely seasonal; three hours of flooding, puddles everywhere. Apart from the high annual rainfall, which is between 2500-2600 mm, other things that cause flooding in the city of Palembang are the increase in population and changes in land function (Al Amin, Sarino, & Sari, 2015). Waste system is also one of the nominees for contributing to flooding.

Of the many things that cause flooding, waste control seems to be something that is very likely to be pursued by all residents as an effort to stop flooding. Every citizen with full awareness can participate in processing waste, or at least not littering, especially in watersheds. Reporting from regional.kompas.com 01/02/2021, waste in Palembang reaches 1,200 tons per day.

Overviewing Ecological Mindedness in Indonesian Education: From Regulation to Instructions Yohanes Heri Pranoto Every citizen's efforts, such as throwing garbage in its place, cannot just grow. It must be accustomed from the beginning or from an early age so that it can become a culture. The question is how the habit of throwing garbage in its place can become a habit if the family - parents - do not provide family education. This is what makes environmental and ecological awareness education included in the curricular sphere, or in education.

Education, both as a product and a system, in Indonesia has openly disclosed up opportunities for the instillation of ecological values for students from primary, secondary, to higher levels of education. As a consequence, education should design a curriculum that is attractive and raises students' attention to ecological issues. This is not only at the elementary and secondary school levels, but also higher education (Jones & Galloway, 2013). Ecology as a concept is not limited to specific media and subjects. If assessed as a concept, ecology can be taught and instilled in students, one of them.

It distinctly becomes proof that the curriculum as a product of regulation is still open to forging, so ecological education commences and is delivered. Because it is attached to the curriculum, the instillation of ecological values is concentrated on teaching materials. So far, there have been a lot of research and development designing ecological-based teaching materials (Muhaimin, 2015; Yunansah & Herlambang, 2017). Some textbooks in schools and colleges already contain the values of love for nature and the environment. Not only in the realm of theory and concept, but also in practice and assessment.

By this research, the implementation of ecological awareness in question is studied not only from the realm of regulation by certain authorities but also practically in schools. The hope is that by connecting the two things, an understanding of ecological practices can be obtained, and the implementation of ecological values can continue and will never stop.

To what extent is ecological education present in the education system in Indonesia? How are ecological values present in the learning process? This article raises those issues straightforwardly through the latest research references in the hope that it will serve as a content or summary of the process of seeding ecological values in the world of education that is worthy of being a reference for subsequent related studies.

METHOD

This research is a descriptive research with a qualitative approach. This type of research utilizes qualitative data and is described descriptively. According to Sugiyono (2018) this method is carried out to observe independent variables without making comparisons or drawing relationships with other variables. Meanwhile, Arikunto (2019) emphasizes that research with this method is intended to investigate certain things and the results are presented as a research report.

Overviewing Ecological Mindedness in Indonesian Education: From Regulation to Instructions Yohanes Heri Pranoto The data is obtained from the second source, namely previous research which contains regulations, provisions, guidelines, implementation, and evaluation of ecological content in the world of education. Furthermore, the information is grouped into two groups, namely regulation and implementation. The data collected is described to get a real and summative picture that can be used as a reference in similar research.

FINDINGS AND DISCUSSION

Ecology and Education

Ecology is the science of the reciprocal relationship between living things and the surrounding natural (environment) (KBBI, 1997). Ecology (Oekologie) was first defined by Ernst Haeckel in 1866 as "the science of the relationship between organisms and their environment" (Husain, Utina, & Nusantary, 2019). Furthermore, Irwan (2017) defined human ecology as the interrelationships that exist between humans and their environment.

In various parts of the world today, explained by Anwari (2010), that ecological damage is increasingly prominent and even begins to defeat political and economic issues. In fact, ecological damage is considered a super sensitive issue. On the one hand, a handful of people act to destroy the ecology on the basis of ambition and egoism (UNESCO, 2014). On the other hand, the negative impact of ecological damage is felt by almost all humans. All efforts are seen as absolute in order to prevent ecological damage from getting worse. The world of education is also required to be able to participate in finding solutions so that ecological damage is not twisted towards the lowest point of destruction.

Environmental problems cannot be overcome only through the repositioning of human relations with their natural environment, but also through a reorientation of values, ethics and norms of life which are then concluded in collective action, as well as restructuring social relations between individuals, individuals with groups, groups with groups, and between groups and larger organizations (Okur & Berberoglu, 2015; UNESCO, 2014). At this point, the world of education is required to be able to develop relevant perspectives (Anwari, 2010). First, the world of education must build an understanding that ecological damage is a bad impact from human activities to fight over resources. Second, the world of education understands ecological damage as a bad reality that demands human sacrifice. These two things are important to be understood by the world of education as a mutual relationship between humans and the environment.

The implementation of ecological education in learning in schools, among others, can be done as follows (Anwari, 2010).

- 1. Ecologically-minded education can contain competencies on: individuals and populations, interaction and interdependence, environmental influences and limiting factors, energy flow and nutrient cycles, community and ecosystem concepts, homeostasis, succession, humans as members of the ecosystem, and ecological implications for activities. humans and society.
- 2. Organizing the teaching of the environment, developing a critical attitude and caring for the environment in students, preserving the

environment, and utilizing the environment as a learning resource.

3. Ecological education can be carried out with an ecological character approach, which is able to touch the psychological side of humans in relation to nature and their environment.

Ecological Mindedness in Indonesian Education

Ecological education in Indonesia cannot be separated from the term environmental education, which in Indonesia itself has been known for a long time. Ecological education in question began to be implemented in a targeted manner since the implementation of the 1984 Curriculum. In 1984, the Directorate General of Primary and Secondary Education, Ministry of National Education (DITJEN DIKDASMEN DEPDIKNAS) determined that the delivery of subjects on the environment should be integrated in all subjects at the general secondary level. and vocational education as outlined in the 1984 curriculum. At the primary and secondary education levels, environmental subjects are taught by incorporating environmental issues into almost all subjects.

The existence of the planting of ecological values through education is getting stronger with the holding of the first collaboration between the Ministry of Education and Culture (DEPDIKBUD) and the Ministry of Environment for the implementation of ecological education in 1996. The government also continues to encourage the development and strengthening of the implementation of ecological education in schools. -schools, among others, through teacher upgrading, promotion of environmental service month, preparation of guidebooks for the implementation of environmental education, and others.

In 2004, efforts to introduce ecological materials to students, especially in basic education, were not only carried out through the national curriculum, namely the curriculum but also the local curriculum or local content. The curriculum accommodates ecological education with the allocation of time for the implementation of the local content curriculum. Many regions in Indonesia and schools fill local content curricula with ecological education materials.

The community's obligation to protect and manage the environment is regulated in Law Number 32 of 2009 concerning Environmental Protection and Management (Environmental Laws). Article 67 obliges the community to maintain the preservation of environmental functions and control pollution and/or environmental damage (KLHK, 2019). Previously, in Article 65 it was also regulated that everyone has the right - among others - to get PLH in fulfilling the right to a good and healthy environment.

Departing from the mandate of the Environmental Law, efforts are needed to encourage school activities in the environmental sector in a structured manner with a policy and curriculum approach that involves all parties and has an impact on the environment as a whole.

Ecological education in Indonesian education has begun to experience a period of crisis since the implementation of the 2013 curriculum. The main principle of implementing the 2013 curriculum is considered not to support the creation of opportunities for the application of environmental education. The direction of education that only focuses on competence and competition does not provide opportunities for ecological sense that is more sensitive to taste and initiative.

The end of the 2013 curriculum implementation seemed to be the beginning of an opportunity to build a culture of ecological quality in the world of education. An independent learning curriculum that prioritizes independence for schools to determine the learning process provides space for exploration in the implementation of environment-based learning in every relevant subject for the realization and return of the character of environmental awareness in students.

Ecological Learning Materials

Analysis of textbooks is done by exploring things that already have material (teaching materials) that have been studied, more deeply, coherently and more clearly. So that the things we already know, and what we don't know will be analyzed again, down to the roots. The success of learning as a whole is highly dependent on the success of the teacher in designing learning materials.

Learning material is essentially an inseparable part of the syllabus, namely planning, predicting and projecting what will be done during learning activities. Broadly speaking, it can be stated that learning materials (instructional materials) are knowledge, skills, and attitudes that must be mastered by students in order to meet the specified competency standards.

Learning materials occupy a very important position of the entire curriculum, which must be prepared so that the implementation of learning can achieve the goals (Marco, Mindt, & Gardiner, 2017). These targets must be in accordance with the Competency Standards and Basic Competencies that must be achieved by students. That is, the material specified for learning activities should be material that really supports the achievement of competency standards and basic competencies, as well as the achievement of indicators.

Learning materials are chosen as optimally as possible to assist students in achieving competency standards and basic competencies. Things that need to be considered regarding the selection of learning materials are the type, scope, sequence, and treatment of the learning materials.

Analysis of teaching materials is needed and becomes a study carried out to examine in detail the elements or structure of the subject matter as a basis for discussion or interpretation (Pruitt, 2019).. The study contains descriptions, descriptions, reviews, explanations, careful examination of the subject matter studied. The study can contain comments, arguments, criticisms, reviews of the subject matter.

Regarding to the understanding of the character and position of teaching materials in the educational process, ecological education cannot just exist without the role of the teacher as a driver of the learning process itself. Ecology education is taught by applying a contextual approach. The application of the contextual approach in the class steps is as follows (DEPDIKNAS, 2003):

- 1. Develop the thought that students will learn more meaningfully by working alone, discovering themselves, and constructing their own knowledge and skills.
- 2. Carry out inquiry activities (with cycles of observation, questioning, hypothesizing, collecting data, and drawing conclusions).
- 3. Develop students' curiosity by asking questions.
- 4. Creating a learning community (learning in groups, small groups, equal class groups or bringing in experts).

- 5. Present the model as an example of learning. (the teacher acts as a model in doing something, for example plant nurseries, recycling, etc.)
- 6. Reflect at the end of the meeting (eg direct statements about what was learned in the lesson, notes or journals in student books, impressions and suggestions from students regarding learning, discussion or work).
- 7. Perform authentic assessments such as assessing activities and reports, homework, quizzes, student work, reports, journals, test results, and writings).

CONCLUSION

Ecological education known as environmental education in Indonesia has become a focus in the world of education from every curriculum from time to time. The government through the ministry of education cooperates continuously with the ministry of the environment to build a culture of ecological love in the world of education. The policies that have been made so far are strong evidence of the government's seriousness in paying attention to environmental conservation through education.

The implementation of ecological values is also seen in the teaching materials in books used in the learning process. Ecological material that is universally adaptive is to be able to enter all lessons without destroying the order of knowledge that is the content of the lesson. That way, there is no doubt that the actualization of ecological values can still be sustainable and live in school students.

REFERENCES

- Al Amin, M. B., Sarino, & Sari, N. K. (2015). Visualisasi potensi genangan banjir di sungai
- Lambidaro Melalui Penelusuran Aliran Menggunakan HEC-RAS Studi Pendahuluan Pengendalian Banjir Berwawasan Lingkungan. Seminar Nasional Teknik Sipil I (SeNaTS I), Universitas Udayana, Denpasar, 25 April 2015.
- Anwari, W. M. K. (2010). Pendidikan tentang ekologi. http://www.jubileejkt.sch.id/index.php?option=com_content&view= article&id=131%3Apendi dikantentang-ekologi&Itemid=39
- Arikunto, S. (2019). *Prosedur penelitian suatu pendekatan praktik.* Rineka Cipta.
- Departemen Pendidikan Nasional. (2003). *Pendekatan kontekstual.* Direktorat.
- Husain, I., Utina, R., & Nusantary, E. (2019). Pengembangan buku ajar ekologi dengan memanfaatkan hasil analisis potensi ekosistem mangrove sebagai penyerap karbon. *Jambura Edu Biosfer Journal, 23-*

Overviewing Ecological Mindedness in Indonesian Education: From Regulation to Instructions Yohanes Heri Pranoto

31.

- Irwan, Z. D. (2017). Prinsip-prinsip ekologi: ekosistem, lingkungan, dan pelestariannya. PT. Bumi Aksara.
- Kementerian Lingkungan Hidup dan Kehutanan [KLHK]. (2019). *Statistik lingkungan hidup dan kehutanan tahun 2018.* KLHK.
- KBBI. (2018). *Kamus besar Bahasa Indonesia*. (online)
- Marco, R., Mindt, L., & Gardiner, S. (2017). Education for sustainable development goals. Learning objectives. UNESCO.
- Muhaimin. (2014). *Membangun kecerdasan ekologis*. Alfabeta.
- Okur, E. & Berberoglu. (2015). The effect of Ecopedagogy-based environmental education on environtmental attitude of Inservice teachers. *International electronic Journal of Environtmental Education*, *5(2)*, 86-110.
- Prasetyo, K. & Hariyanto. (2017). *Pendidikan lingkungan Indonesia, dasar pedagogi dan metodologi.* Remaja Rosdakarya.
- Pruitt, A. (2019). Principles and practices of education. Essex: ED-Tech Press.
- Sugiyono. (2018). Metode penelitian kuantitatif, kualitatif, dan R&D. Alfabeta.
- UNESCO. (2014). *Shaping the future we want*. UN Decade of education for sustainable development (2005–2014). Final Report. UNESCO.
- Yunansah, H., & Herlambang, Y. T. (2017). Pendidikan berbasis ekopedagogik dalam menumbuhkan kesadaran ekologis dan mengembangkan karakter siswa sekolah dasar. Jurnal Pendidikan Dasar, 9(1), 27-34.