

BETWEEN ECO-EDUCATION AND CRITICAL THINKING: THE APPLICATION OF EMANCIPATORY LEARNING ON GAINING THE AWARENESS OF ENVIRONMENTAL PROBLEMS IN BALI

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ABSTRACT

This article is aimed at explicating the environmental problems in Bali and explaining that emancipatory learning is an idealism of learning applied to gain critical thinking of Balinese young generation on the importance of environment sustainability. This is a non research article or a review article in a form of descriptive style regarding critical education and cultural study as its basic idealism. This review article generally summarizes the existing literatures on a topic in an attempt to explain the current state of understanding on the topic. This article was written in form of narrative style of article writing. There are several matters to be reviewed in this article from various literatures and writers; environmental sustainability problems in Bali, the education system in Indonesia as it is applied in Bali, Balinese cultural contribution on environmental sustainability, the concept of hegemony, critical education and emancipatory learning, eco education and thus, the correlation between all those matters. Especially on emancipatory learning explanation, this article lists several strategies in combining emancipatory learning and eco education. There are several names of expert to be appeared in this article such as Gramsci, Giroux and Freire.

Keywords: environmental problems, critical thinking, emancipatory learning

INTRODUCTION

On a Huffington Post article entitled “Bali: Paradise Lost” written by Kylie Thiermann in 2017, Bali is stated having a worrying level of environmental issue, especially on trash management. There are several facts revealed on this article, one of the shocking ones is that 15 thousands cubic meters of trash are disposed of along roadsides and at illegal dump everyday all around Bali. The trashes are mainly plastic products. The amount is more than even Balinese people ever imagined. Thiermann stated two reasons behind the trash management; (1) Balinese used to dispose waste the way their children and grandchildren do today. Balinese a century ago knew nothing about plastic and its products. They dispose organic waste such as coconut or banana leaves. Today, Balinese use plastics on their everyday lives yet dispose them the way their ancestors did. (2) The government do not apply firm rules in managing the trash in Bali. There might have been rulesto be applied, but they are not applied effectively.

Huffington Post is not the only reputable media that discusses about environmental problem in Bali. “Indonesia Vows to Tackle Marine Pollution”, an article posten in The Conversation on March, 2017 which was written by Thomas Wright spot lighted the plastic pollution in Indonesian marine, especially in Bali. Wright stated that as one of largest tourism destinantions in the world, Bali should examine their sanitation and cleanlines level before it is too late. Wright wrote the environmental problem in Bali in the illustration below:

“As the rain pounds down on banana leaves and rice fields, the rivers fill up and irrigation system overflow. With it, the water messes bring trash in bulk: anything from food wrappers and plastic bags to bottles and other domestic waste.(Wright, 2017)”

Wright added that plastic pollution could be very harmful for the land, the ocean and the people who depend their lives to “them”. Plastic can kill ocean mammals, turtles and species that consume it. It can also poison food and water resources, as harmful chemicals leach out of the plastic. Moreover, plastic leach cancerous toxins which is very harmful to human and animal health.



Image 1. Marine Pollution in Bali

There are many efforts have been done by the local Balinese, the tourists to overcome the plastic waste problem, many NGO's have worked hard to prevent bigger impact. However, if most of Balinese are still applying their ancestor's way in managing trash, would the problem be merely overcome? Bali environment and sanitation has a big enemy comes from the land itself – the people and their “unupgraded” culture in managing waste. NGO's hard work would not be succeeded if there is no support and cooperation from the Balinese people to manage their trash well. How to make the support and cooperation come true? Education is the answer. On behaviorism as the principle of education it is said that education is habit and better culture formation (Brownell, 1979:72), means that to change people's habit in environmental, especially trash management and to form new better habit on it, people should be educated well about environment and how to maintain it well.

There is one section of education that applies environmental knowledge in educational process, so called environmental education or eco-education. Eco/Environmental Education is a process of education that allows individuals to explore environmental issues, engage in problem solving and take action to improve the environment. Indonesia education curriculum has been applying environmental education or eco-education on its system since 1972 and 2018 is on its third period. According to the presentation of Deputy for Public Participation and Environmental Communication Ministry of Environment, Republic of Indonesia in an World Environmental Summit in 2014, there are

several efforts and programmes are presented about eco-education in Indonesia. The first one is by conducting teacher training. The teachers are trained to apply environmental knowledge on their class activity. The second one is distributing environmental modules to schools. The third one is applying several environmental programmes, such as “Adiwiyata” and “Program Sekolah Asri” which involve certain teachers and students in environmental maintenance activities in a period of time. Furthermore, the presentation also reveals about the achievement of Adiwiyata program as can be seen on the image below:

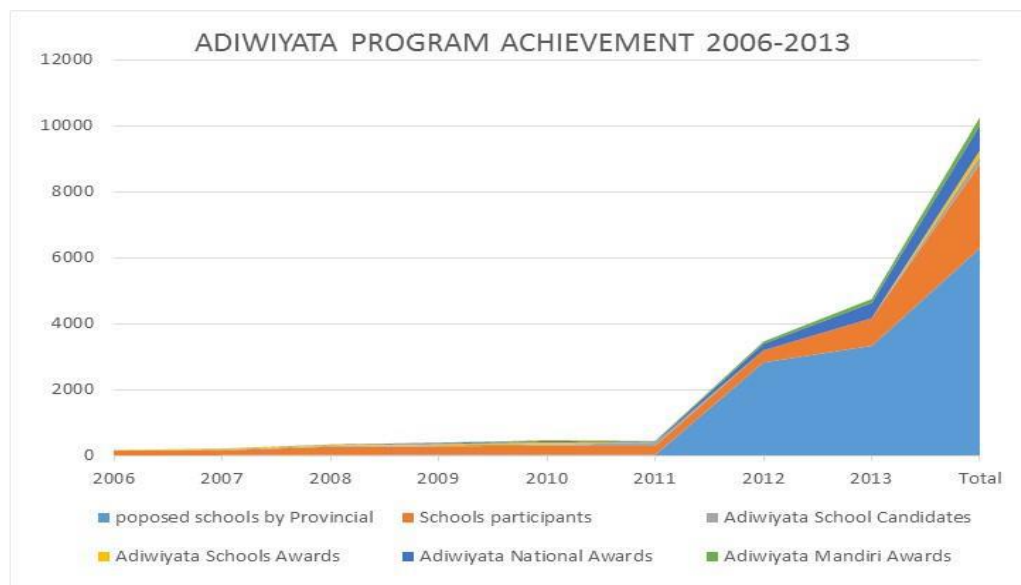


Image 2. Adiwiyata Program Achievement 2006 -2013

To this end, the question would be “if the program has succeeded, then why the environmental problems are still raising in Indonesia? What is wrong?” Those efforts, especially the programmes seem merely pragmatics and ineffective regarding to the worsening environmental problem. It is seen from the length of time, teachers and students number of participation and the approaches. Indonesian education needs to apply more comprehensive, effective and continuous process of environmental/eco-education. The local yet highly reputable media, Inside Indonesia wrote an article entitled “An Urgent Need for Environmental Education”. The article was written by Lyn Parker an anthropologist in 2017. She wrote that the eco-education programmes (Adiwiyata, Sekolah Asri) are not effective due to the limitation of participants and time length. She also pointed that the school curriculum is disappointing regarding to eco-education. Indonesian school curriculum does not equip students with the necessary knowledge and skills to understand and take action on complex and systemic social-and-environmental problems.

Eco-education in Indonesia needs more genuine rooten processes rather than only pragmatic procedures. What and how to apply would be presented on the discussion part.

DISCUSSION

It was stated on the introduction, to solve environmental problems in Bali through education, there should be one rooted, genuine and holistic effort to be done. It is not about massive cleaning of plastic trashes, but shaping new better habit and culture of Balinese trash management starting from the younger ages. The word "culture" originally meant "cultivation, farming." Another, presently most popular meaning of this word is associated with the sphere of spiritual life, that is, with human consciousness (Stevenson & Dillon, 2010:12). Environmental culture is a capability of people to use environmental knowledge and skills in their practical activity. Without an adequate level of culture, people may have necessary knowledge but not apply it.

From the discussion of culture, regarding to environmental issue, a person would have an environmental consciousness (Zhakarov, 2006:6). The consciousness is shaped from the habit his/her culture shows him/her everyday. An individual's environmental culture includes his/her environmental consciousness and environmental behavior. Environmental consciousness is understood as a totality of environmental and environmental ideas, world-outlook positions and attitude to nature, and strategies of practical activity directed towards natural sites.

Environmental behavior is a totality of concrete actions and acts of people directly or indirectly related to the impact on the natural environment or the use of natural resources. An individual's environmental behavior is determined by the level of his/her environmental consciousness and mastered practical skills in the area of nature management (Yasvin, 2006:9).

One of the efforts to gain proper environmental behavior is to apply eco-education. As what is stated above Eco/Environmental Education is a process of education that allows individuals to explore environmental issues, engage in problem solving and take action to improve the environment (UNESCO, Tbilisi Declaration, 1977). There purpose of applying eco-education at schools is building capacity for the environmentalization of the entire education system (introducing environmental concepts in all curricula and training aids, ensure implementing the psychological aspects of the promotion of environmental culture, ensure a system of editions, courses, and forms of work for building an environmental culture among all population groups (Yasvin, 2006:9). Especially for the students eco-education has an aim to build a humane, partnership behavior in relation to nature that implies (1) affecting human esthetic and moral spheres and arousing and strengthening people's desire to conserve nature; (2) building people's psychological integration of their relationship with animals and plants into the sphere of ethics.

Eco-education could be applied on school subjects, as its knowledge becomes the theme of subject. For example environmental Issues in English genre of texts, Biology that fond on environmental issues and so forth. Eco-education could also applied in form of outdoor environmental school activities. These kind of efforts have been done at schools worldwide, especially to most school in Indonesia and Bali. However what makes environmental problems grow bigger? Beside those physical efforts, there is one important thing to be gained that eco-education becomes more effective. It is

called critical thinking. Critical thinking assumes that people can be involved in 'making things happen' rather than have things happen to them. Critical thinking as a basis for learning is the antithesis of rote learning, basic training and behaviour modification - none of which imply the critical engagement of learners in initiating and evaluating ideas (Thomson, 2000:2). It assumes that all people - whatever their intelligence or ability - must engage in the wider world if they are to survive in it and help to reconstitute it. Information produced by specialists - including government, the media, scientists, educationalists, economists – should not be regarded as the property of specific groups but something which is routinely interpreted and acted upon by all of us in the course of our everyday actions.

Critical thinking is the kind of thinking which challenges fatalism, prejudice, apathy and indoctrination. The aim is to engage active citizens in informed participation in social and political life to achieve a more equitable and socially just democracy. Critical thinking is not simply concerned with overcoming individual and group 'ignorance' but with encouraging ways of thinking that are critical of the kind of status quo which supports inequalities, injustices and the abuse of power (Mayo 1997). Without critical thinking any knowledge would "come" and "go" without synthesizing human mind. Related to the environmental learning, there would be many application of efforts in gaining environmental behaviour but would not be effective if the knowledge learnt pragmatically. Modules, short term programmes, traditional application of classroom processes are the examples of pragmatic application of eco-learning. It is not effectively gaining the awareness of environmental problem. Students should internally understand how and why they should manage their environment well, and it is called having critical thinking on environment.

Having critical thinking make them understand what they should do and not should do regarding to environment maintenance. They would also understand that they should change several behavior that could harm the environment. The behavior they learnt from their surroundings, culture. Critical thinking could be gained if the learning process apply emancipatory learning idealism. Emancipatory learning sounds unfamiliar, however it is one of Freire's critical pedagogy concern which has known worldwide. Emancipatory learning is not concerned with strategies for personal self improvement via an undue emphasis on academic qualifications by way of ladders of individualised opportunity. Its purpose is to develop understanding and knowledge about the nature and root causes of unsatisfactory circumstances in order to develop real strategies to change them (Freire, 1970:36).

The kinds of knowledge, pedagogy and educational relationships encouraged by emancipatory learning are those which are formed in solidarity with the interests of the least powerful in society. The reason for collaboration is to work with the least powerful to gain more autonomy and independence, more control over their own lives, and to bring about change in the interests of greater equality and social justice.

The consciousness of critical pedagogy asserted that all people are conscious beings who are equally predisposed to reflect and act upon the world around them. Such social activity is assumed to be integral to the innate character of humanity, and if it is suppressed or prevented, then social

inequality results (Freire, 1970:37). Inequality is described in terms of the *opinion* that all people are equally capable of directing their intellect toward forming their *own opinions*. This means that if the intellectual activity that is necessary in order to form opinions is suppressed or undermined, then inequality is replicated in society.

To illustrate to process of emancipatory learning under critical pedagogy, the writer would present a class activity with and without emancipatory learning, surely related to eco-education. In a traditional idealism of teaching, commonly called teacher centered learning, the knowledge of environment would only be taught in textbook and does not have much eagerness to discuss and apply. Freire called the model of learning as banking education model. The banking education model describes a social world where oppressors, as teachers, assume the role of subject and act to make people (as students) objects by regulating and controlling the knowledge of the world that enters their consciousness. Students may not open their consciences to the world as they intend, but must passively receive knowledge in the form of deposits that they simply file and store. The teacher teaches, knows, thinks, talks, chooses, acts, and decides. But students, as the objects of education, do the opposite of all of these things, making them dependent on the teacher for these actions. They are receptacles for knowledge about the world that they may collect, catalogue, and store, but not act upon, transform, or recreate. The teacher justifies this relation by presenting him- or herself as knowledgeable, encouraging students to accept themselves as ignorant.

Moreover, banking education controls people's conscious engagement with the world, making them receptive to knowledge transmission from the "teacher" and less able to engage in dialogue with others. This socializes the banking-educated person into a world of objects; the oppressive society created by the oppressor class. They accept the status quo and believe that they cannot engage with the world other than through the teacher's guidance (Freire, 1970:72). This false perception prevents them from objectifying the oppressor; indeed, they may admire oppressive people and harbor ambitions to be like them, as the peasant dreams of becoming a landowner. As banking education denies the ever-changing nature of people and the world they inhabit, oppression seems to be permanent with no prospect or possibility for change. Though they know that they are oppressed, perception of their situation is impaired such that they may be unable to describe the reality of their own oppression.

The banking model causes two notorious possibilities; First, eco-education in the class would only text based. Students read the text about environmental problem, having limited pragmatized discussion, answer the questions given and done. No more action the students could involved in. Second, It does not gain students' critical thinking on environmental problems as there are limited and pragmatized discussion. It leads to their behavior outside school when they truly face the action of environmental management; when they manage trash and or when they follow other people's way in disposing trash, for example.

Emancipatory learning is better instead, as it has stated on the previous page, it gain students' critical thinking in environment maintenance. It helps eco-education to have more portion on discussion and practices. There would be texts about environmental issue, however, teacher would lead meaningful discussion and give more opportunities to students to speak up about their personal thought and experience related to the texts. It respects student's uniqueness in expressing thoughts of environmental issue, make the students easier to internalize the issue to their everyday life and personal thoughts. Thus, it leads to their environmental behavior outside school – better and proper ways in managing environmental issue.

CONCLUSION

Environmental problems, especially plastic waste, are growing these recent years in Indonesia especially in Bali. Surely it becomes a big threat for Bali tourism maintenance. Some said it is due to unupgraded waste management culture of Balinese people, some other said that it is due to unstrict rules applied by the government. Raised a serious question "isn't there any eco-education in Indonesian curriculum?" In fact, eco-education has applied in Indonesian education since 1973. The process involved teacher training, modules and environmental program to be done by restricted teachers and students. Those efforts are considered not effective due to the limitation of time length and participation of teachers and students. Indonesian eco-education needs more genuine, rooted and holistic efforts that is to modify the learning idealism. Emancipatory learning is suggested in this article. Emancipatory learning gain students' critical thinking on environmental management as it respects students uniqueness in expressing thoughts of environmental issue, make the students easier to internalize the issue to their everyday life and personal thoughts. Thus, it leads to their environmental behavior outside school – better and proper ways in managing environmental issue.

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