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Environmental literacy discourse represented in local portal “Nggalek.co”

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Abstract. Nowadays, environmental problems are important issues that require people to respond in the right ways to prevent worse disasters. For that reason, environmental literacy discourse is an important issue to be built informal and non-formal education and in the public sphere. Environmentally literate individuals have the knowledge and skills required to analyze the environmental problems so that they can behave pro-environmentally. This paper has a purpose to know how the local young people in Trenggalek (a rural district in the southern coastal area of East Java) develop environmental literacy through a local portal of “Nggalek.co.” The Trenggalek-based portal “Nggalek.co” is intended as the means for communicating their localities to their community and the world. This paper will explore the environmental literacy discourse presented in the portal by using Critical Discourse Analysis by Fairclough. This analysis applied three levels of analysis, micro, meso, and macro. The study shows that environmental literacy is a somehow essential issue in this portal, especially when it is related to governmental policy in environmental problems. The awareness of the environmental problems shows a high level, especially because it is directly related to people’s daily life, that is when there is “natural” disaster people got direct impact.

1. Introduction

Environmental issues become a subject that needs serious attention from many more people on this planet. More environmental-related disasters occur in many parts of the world with a hundred dead tolls because of many reasons. One of the reasons is the lack of awareness of environmental problems. It is why it is urgent to develop environmental literacy in many social educations, formal and non-formal, as well as a public sphere. The environmental issues bring significant consequences for human future anywhere, so we need to have a look at the goal of education as clearly stated in the Belgrade Charter, that the purpose of environmental education is to develop a world population that is aware of, and concerned about, the environment and its associated problems. In recent years, environmental literacy has been considered to be the most important component of environmental education [1].

There are many definitions, and concepts of literacy, like those, are popular in modern educational institutions in the U.S., Europe, and other regions influenced by them, literacy (reading and writing) has overwhelmingly been defined as a set of cognitive processes and skills [2]. Literacy is generally defined as an ability to write and read with written or pressed symbols and use this for communication. Literacy is also defined as the use of reading and writing skills to give a better meaning to the world. Street [2] describes these views of literacy as a distinction between an autonomous model of literacy and an ideological model. In the information era of industrial revolution 4.0, literacy has started to be defined



as having enough information and equipment in the field, such as computer literacy, media literacy, financial literacy, mathematics literacy, and environmental literacy may be counted as examples.

Roth introduced “environmental literacy “ for the first time, defined as information about the environment and awareness level of it [3]. Nowadays, there are many definitions of environmental literacy. In general, the definition of environmental literacy is to understand individuals and societies and their relationships in their natural environment. Environmentally literate individuals are aware of all the activities that originate from humanity and their damage to the environment, and; they can decide correctly about the future of environmental life. In 1992, Roth proposed a definition of environmental literacy by expanding it on the aspects of human behaviors. Environmental literacy is the level that individuals can manifest their information and sensitiveness into behavior. In this sense, environmental literacy means that people have the appropriate knowledge to make the environment systems work without problems and take the necessary precautions and do what is required to ensure natural systems to achieve overall aim [4].

It is the fact that the new media gives more power for people at large, mainly providing more opportunities in participating in the community’s lives through the voice that people can deliver. It is not surprising that in the Indonesia context after the reformation, many different voices come up from the ordinary people, which is sometimes sparking controversies. On the other side, the new media also gives more significant opportunities for people, especially those who previously unarticulated due to the social-political system.

This paper intends to address the content of a portal Nggalek.co focusing on how the discourse of environmental literacy represented in the portal, through its articles. Nggalek.co is interesting to be discussed because of some assumption; it is as the means of articulating the voices of young people of Trenggalek. This portal is an independent portal. Therefore it has strategic roles, not only in articulating the voice of local young people but also building the knowledge owned and shaped by local young people, including the local wisdom that is traditionally practiced by communities in many aspects of life.

We can find out such local knowledge and local wisdom, for example, in how rural people treat and cultivate their land, in traditional ways, in the procession of preparing the land before planting it. In the process of planting paddy that involves many women, giving treatment to the plants and the soil, as well as the tradition in harvesting, all of which is building a harmonious relationship between human beings and nature. Also, this portal highlights its advocating and strengthening the local traditional art and culture in facing the global culture that is more difficult to be avoided in the new media era.

This study focuses on the discourse of environmental literacy represented in the portal “Nggalek.co.” It is qualitative research with a focus on the content of internet media. There are two approaches to answer the questions of research. First, data will be analyzed under the frame of the environmental literacy concept by referring to Charles E Roth [3]. In analyzing the data, it applies the method of Critical Discourse Analysis (CDA) by Fairclough [5], which focuses on the three levels of analysis, mainly micro, meso, and macro levels of analysis. Data sources of this study are the texts from the websites of Nggalek.co which are classified into the articles under environmental issues as their themes.

2. Literature Review

2.1. Local portal: “Nggalek.co”

Nggalek.co is a portal based in Trenggalek that focuses its writings on the theme of local issues and explores the local wisdom in many aspects. The article is mostly written in essay genre, instead of news. This choice of genre is based on the agreement but the management of Nggalek.co, a group of young people interested in giving a contribution to the local development by scrutinizing and giving their eyes to the daily practice of the local government and communities. This portal covers local issues of development in Kabupaten Trenggalek and the problems related to its people [6].

There are about 85 articles published in this portal since its first launching, March 2016, up to September 2016. There are many themes presented in the articles ranging from the topics of local

history, local wisdom, daily activities of the local people, up to articles on the issues of policies of the local (regent) government of Trenggalek in running its programs. There are a few short stories presented in the portal, all of which share the common point about the local people and place of Trenggalek [7].

The management of this group, through this portal, set the aims at exploring and developing knowledge-based on local wisdom and local experience. By improving the local wisdom, they expect that it will significantly contribute to the local development, a development that is considered fairly, between the tangible and intangible potencies, between physical and human development. Their concern is that so far, the intangible aspects, such as tradition, local wisdom, history, culture, are not yet taken into account sufficiently in the developmental process. Trenggalek in the young people's consciousness (the founders of Nggalek.co) is a little town with abundant tangible potencies, such as beautiful and fertile natural landscapes as well as a cultural landscape. Cultural and natural heritages are the most precious capital possessed by the region, and it culturally needs to be explored further. The cultural exploration of society enables them to build better human resources and ensure rural sustainability. This action is also the response to the government and stakeholders in Trenggalek that is deemed not sufficiently give a high priority on the intangible aspects such as human resources and cultural development.

With the identity of a creative group, establishing the portal "Nggalek.co" is the first step to go further in building rural sustainability through literacy. This portal is a means to communicate their rural daily social problems through analyzing and exploring them into articles that easy to understand. Building the knowledge-based on local wisdom is the aims of the group, in addition to their goal to build the local region as a good town that takes local tradition and culture into account, ensuring rural sustainability for the people's welfare.

2.2. *Environmental literacy discourse*

Borrowing from the Roth concept, environmental literacy is to understand individuals and societies and their relationship in their natural environment. Environmentally literate individuals are aware of all the activities that originate from humanity and their damage to the environment and; they can decide correctly about the future of environmental life [4].

This portal gives more highlights on the environmental issues that become people's daily problems. The local identities are expressed in the big concern on the problems related to the surrounding environmental issues such as the management of waste, garbage, policy on forest management, the policy of green technology, the policy of green public areas, and others. The environmental issues become serious concerns, primarily when it is related to the policy of the government in the development. Criticism of the developmental problems is always related to the sustainability of the development that should consider the environmental burden. The people's concerns and awareness of the environmental issues will build what is called environmentally literate citizens [8].

Some articles showing the concerns on these issues are as follows, "Kebersihan Tempat Wisata Tanggung Jawab Siapa? (The cleanness of tourist destination areas, whose responsibility?)" (07-July 2016, written by Trigus), "Musuh Perayaan adalah Sampah (The enemy of the celebration is waste)" (27-August, by Roin). They show their concern on the waste and garbage at the public places that people often find out especially at the place after an event of celebrating something, and at the tourist areas. They also articulate the environmental issues which are not separated from global issues. The article "Merenungkan Ide Pembangunan Bupati Trenggalek (Thinking of development ideas of Trenggalek regent)" (08-August 2016, by Wahyu) criticizes the government's plan to invite investor more than inviting people's participation. The idea of investment from foreign or global companies is a big concern because the writer realizes that global companies or foreign investment are commonly understood as the capitalist with the most significant interest in their profit and not caring for local people's wellbeing [9].

This portal strengthens the idea that new media internet gives more opportunities for the people to participate in the community's life and raising people's awareness of environmental issues. In addressing the environmental issues, peoples, through the writing, questions the government in its policy of development. Many of the articles articulate the necessity for the local government (Pemerintah

Kabupaten Trenggalek) to gives priority to local wisdom, people safety, and environmental protection and conservation (against deforestation, illegal logging, and river pollution).

The local identity is also built from the concept of local wisdom. Etymologically, wisdom means a person's ability to use the mind and sense in responding to an event, object or situation. The local wisdom is defined as the tradition rooted in the community's life since the old times [10] The local wisdom is essential to be exposed for a contemporary generation because of its marginalized position in contemporary discourse [11] when young people and older people do not know any more about a particular tradition. Otherwise, this local wisdom will be endangered by the flooding of contemporary popular culture celebrated and supported by the power of capital.

Exposing and exploring the local wisdom can be read from the article by Misbahus Surur (29-April 2017) "Desa dan Kearifan Lokal Persawahan." The local wisdom is defined as a tradition that has been done by local people for generations in the practice of planting mix-crops (tumpangsari), which is the opposite of the monoculture planting system. This traditional way of managing the paddy field gives more benefits to the farmers because this practice fertilizes the soil, naturally and it also means environmentally friendly. Besides, this practice also accounts for the roles of women farmers in the process of planting, taking care of the plants, and harvesting.

This local wisdom in the area of managing the paddy field is opposed to the modernization in agriculture farming (labelled as the global identity) which introduced the green revolution, doing farming with technologies such as chemical fertilizers, machineries, artificial seeds, intensive farming, that give harmful impact of soil fertility in the long run, and its social and cultural impact on the changes of people's life. The article also discusses the roles of women in traditional farming systems. In traditional and local contexts, women give a more significant contribution to daily life, actively involving in the process of producing food crops, and the women are close to nature. The writer of this article constructs the local farmer's traditional practice as part of the local identities. The local identity is self-identity while the opposed, other identity constructed is the farmers in western countries, of which the women are considered as more wasteful, and the masculinity principle is more dominant in agriculture by the predominant use of machine and technology.

There are many other examples of articles highlighting the local wisdom, which have a consequence of environmental issues. One of them is an article by Bonari Nabononar (04-May) "Trenggalek dan Konservasi Bambu" (Trenggalek and Bamboo conservation), which observes the local potencies of bamboo plants which is very useful for many daily uses such as making many kitchen wares and building homes. This conservation of bamboo culture has an environmentally friendly-effect, and these materials are available a lot in the local areas. This bamboo culture can function to counter plastic culture (any daily utensils are made of plastics) that harmful to the environment and much more costly.

The article highlights the fact that traditionally, bamboo is close to people's daily life, but in the modern time, the bamboo wares are replaced by many plastic-made wares. This contestation, between bamboo-wares and plastic-ware, is like the contestation between "Timun mungsuh Duren" (cucumbers versus durian). The contestation between the wares made from bamboo and the wares made from plastic is not a fair competition, because the traditional bamboo-made wares are not backed by a big company or capital, while the plastic wares are supported by big factory and capital. On the other hand, plastic is not environmentally friendly, because, in the long run, it cannot be decomposed. "Bamboo conservation is a big potency to be developed especially in anticipating the free market system, in which the flood of goods from another country will attack the local market." The self-identity is manifested in the developing local bamboo-made wares, which are less costly, and the material is available locally. It is also environmentally friendly. Besides is opposed to the plastic-wares as the product made by the factory, and it is not environmentally friendly. Plastic-ware is opposed to the local wisdom of bamboo-wares.

In discussing the local wisdom, it can be avoided to criticize the local government policy, as an article written by Trigus Dodik (24-05) entitled "Festival Rakyat yang Tidak Merakyat." From its title, the readers can understand the criticism of the festival delivered in Trenggalek on 20-22 May 2016. The criticism spots the problem that the name of the festival is "people's festival," but the benefit of this

activity did not go to the people. This activity is more beneficial for those sellers from out of Trenggalek [8] For example, there was a “Food truck,” that came to the festival and got much profit from the festival. When Alvin, the vice of Regent of Trenggalek was interviewed, he said that this is a test case to find out how interesting Trenggalek is. The point of the essay is that the festival does not benefit Trenggalek people themselves. It is not “by and for” Trenggalek people. The other article related to local wisdom as the important tool of analysis is presented in the essay by Misbahus Surur (30-August) “Trenggalek pada Suatu Pagi” (Trenggalek at one Morning) [7]. It gives the idea of emphasizing the necessity of “local wisdom” instead of the elite’s taste (the new government) as an important account in the local government policymaking to ensure the rural sustainability and people’s welfare.

3. Conclusion

To sum up, the ideas promoting environmental literacy is also intersected with promoting local wisdom (in agriculture, fishery culture, folk art, folk literacy). It becomes an important cultural strategy in building local identities. The localities are any habit and culture that are familiar with people’s lives, and this is related to the existence of the people culturally. It is important, therefore, to support and strengthen the local wisdom embedded in the people’s tradition.

One of the most strategic ways of promoting local knowledge is by exploring and building local history. The understanding of “who we are and where we are from” is an existential matter that can be answered through the exploration of local history. The local history covers the story of the kampung, places, tradition, all of which lead to the building of local knowledge because knowledge is power.

The negotiation between local and global identities happens in the following ways; the universal values or influence that is against the local social practice are negotiated, criticized, and, if possible, denied. On the other hand, global values or influence that support the local social wisdom are accepted. For example, the concept of Ecocriticism by Vandana Silva. The negotiation between “local and global” also involves the criticism not only global values not in line with the local wisdom but also governmental policies in development paradigm (social, educational, art, physical, economy programs) which does not become beneficial for the people in short-run nor in the long run.

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