An Ethics-Based Approach to Environmental Education

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Introduction

In the globalized world today, we have many common issues that should be discussed and solved. These issues are often made more complicated and difficult due to the globalized world and mobile society. Some of these issues are environmental issues that are a concern not only for human beings, but also for every living thing on Earth. Many countries accept environmental education as having a significant role in environmental issues and set up various types of curricula. Also, environmental issues have already been discussed in many places such as political, educational, and public places. However, being a popular topic means that there is tons of idea and thoughts available that might be confusing. We need to think carefully about what is right and wrong, and need to have our own ecological thinking for decision-making in environmental issues. This paper, therefore, attempts to prove the significance and possibility of an ethics-based approach to environmental education, which aims to think ethically about environmental issues. Personally, my Japanese environmental education is one of the chief reasons that I started thinking about such an ethics-based approach, since I doubt whether I had an education about ethical thinking until university.

This paper is divided into three chapters. Chapter 1 defines an ethicsbased approach through examining ethics, environmental ethics, and environmental education. Chapter 2 mainly discusses environmental education itself and examines environmental education in Japan and the UK, in relation to an ethics-based approach. Chapter 3 chiefly examines a textbook, Joe Walker's *Environmental Ethics* (2000), looking at how this textbook approaches environmental issues with ethics, while analyzing some problems in the textbook.

Chapter 1: An Ethics-Based Approach

What is an ethics-based approach? Here it is necessary to define the term 'ethics-based approach' in terms of environmental education for this paper. I should start by briefly clarifying the word 'ethics'. The Longman dictionary of contemporary English says that ethics are 'moral rules or principles of behaviour for deciding what is right and wrong'. In short, ethics is the study of goodness and rightness (Schmidtz and Willott, p.xii). Our ethics deeply affect our existence in society. Andrew Light and Holmes Rolston III say that 'ethics becomes a guide to what law ought to be' (Light and Rolston, p.3). We could also say that ethics becomes a guide to what environmental policies ought to be. If ethics is a guide to decide something important, the significance of ethics is immeasurable. Also they conclude that:

A legitimate goal of ethics is to provide us with a language, with effective arguments, whereby we can claim that some kinds of actions are right or wrong, or at least better or worse, independently of their cultural or legal context.

(Light and Rolston,

p.6

Without ethics – a guide – you cannot have a language, or even a right, to argue common issues in public, since you need to have a common answer. To think about what is right and wrong in environmental issues ethically is important, as you cannot say what is right and wrong based only on the point of view of your own interests. It is not about what is right for you or wrong for you. Environmental problems are not always decided, or should not be judged, in just two ways, right and wrong. A decision considered right for human beings could be wrong for other living things. To just think about your own interest is easy, however, it is well known that we interact with each other. Therefore, you need to see outside your own sector of self-interest, as well as of class interest, when you deal with common issues (Rolston, p136). In addition, environmental ethics has been studied by many scholars. This ethics-based approach cannot be explained without environmental ethics. As previously mentioned, ethics is about rightness and goodness. Environmental ethics also considers rightness and goodness to be an important principle as well. Perhaps, environmental ethics focuses on rightness and goodness for all of the Earth, rather than only in human society. Of course, it concerns about human society too, although, it provides us with a wider view in general. Light and Rolston said:

Environmental ethics has been most concerned with the moral grounds for protecting the welfare of non-human animals, the moral foundations for laws protecting endangered species, and the ethical basis for preserving and restoring degraded environments.

(Light and Rolston, p.2)

Environmental ethics often makes us think about future generations too.

You cannot know about what has not yet occurred, or who has not yet been born. You may think that things that may happen in the future, after you pass away, do not matter. On the other hand, some people may well think that the interests of unborn generations should weigh just as heavily with us as the interests of people alive now (Gower, p. 1). Here, I will not argue this topic, in order to stay focused on our main theme – an ethics-based approach. The topic of future generations will be argued in a later chapter in terms of how we approach this topic in schools.

One more thing I need to explain before talking about this ethics-based approach itself is environmental education. This chapter briefly explains it. Environmental education is a relatively new field of study and has the task of addressing an extremely wide-ranging content, characterised by highly complex inter-relationships, impacts and solutions (Palmer, p.267). In many countries, the necessity of environmental education is already accepted and various types of curricula have already been established. Some curricula may work well and can have a positive effect, both on the development of people's understanding of the environment and on their formulation of attitudes and feelings of responsibility towards it. However, the influence of environmental education is certainly not as dominant nor successful as it ought to be yet (ibid, p.135). There is still room for improvement. More details about environmental education will be discussed further in a later chapter.

An ethics-based approach also considers rightness and goodness to be an important principle. Also, it borrows ideas of environmental ethics as well, which this chapter has already talked about above. An ethics-based approach is to introduce various types of ideas or ethics of environment/nature and also of 'life' to develop ecological thinking or environmental awareness. In students the aim is to encourage them to think

ethically about environmental issues – what is right or good and wrong through environmental ethics – and to develop their own ecological thinking for decision-making in environmental problems. Of course it prefers good decisions for the environment, but it does not urge us to make them.

Perhaps, if students decide that they do not care about the environment after thinking about it ethically, what can be done? One of the aims of this approach is to make students think for themselves. Even if this approach is successful in making students think for themselves, I believe it is possible that they may fail to think 'ethically' about nature. If one can think ethically, one may realize that anthropocentric thinking does not work for the preservation of nature because it means that nature is considered to be simply 'an object.' If we only think what is right and good for the relationship between human beings and nature, this way of thinking is in opposition to the aim of an ethics-based approach. The world is not simply comprised of human beings and nature; categorizing the world in this way may lead to relationships between things on Earth being overlooked. In order to avoid such an outcome, an ethics-based approach must to be studied further and act as a guide to show students the right way of thinking ethically.

Also, the types of ideas or environmental ethics that are introduced should not be just one idea or one sided, and they should not make the learners believe that things taught are absolute. Importantly the aim is to develop your own ecological thinking to make your own decisions toward environmental problems. This is because lately there is much 'green propaganda' and advertising, information, products, social groups, companies, and other things involved in greenwashing, which often claims friendly slogans such as 'good for the environment' emerging. It has

become a trend for such groups to talk about environmental topics, to form a good impression to their customers or listeners. To know the truth behind these things would be extremely difficult for people who do not have knowledge in this field, and what is more, perhaps some people, even many people, would not suspect these things are not always correct. Furthermore, even experienced people in this field are also having difficulty in revealing the truth about what is good for the environment, since long-term effects should be considered. E.F. Schumacher said that 'as one problem is being "solved", ten new problems arise as a result of the first "solution" (Schumacher, p.23). Also, your solution could be a disaster for others (Palmer, p.267). What is important is not to be misled by newly available data or information. In order to avoid this, you need to develop your own ecological thinking. As may be the case, to have basic scientific knowledge of ecology is also necessary. However, thinking ethically about environmental issues remains key to the success of environmental education. Rolston said that 'an ecological conscience requires an unprecedented mix of science and conscience, of biology and ethics' (Rolston, p.136). To solve environmental problems, it requires many people's actions rather than a few. I believe that an ethics-based approach in environmental education has the potential to make it possible to lead a large number of people to have ecological thinking or environmental awareness. Kamon mentions that to build a clear notion of philosophies and ethics is important for environmental problems in this complicated society (Kamon, p.iii). The details of the approach of an ethics – based approach will be explained in later chapters through analysing environmental books.

Chapter 2: Environmental Education

This paper has already briefly discussed about environmental education in Chapter 1. In this chapter, environmental education is the main theme and we look at environmental education itself and some problems concerning it, in relation to an ethics-based approach. As previously mentioned, environmental education is a relatively new topic and many countries have already recognized it as an important topic to study, both for human kind and also for nature. Historically, one of the reasons that environmental education got people's attention in the world is related to key environmental events, that are widely known: perhaps the publication of Rachel Carson's Silent Spring in 1962, or Schumacher's Small is Beautiful in 1973...perhaps the near-meltdown of Three Mile Island Nuclear Power Plant in Pennsylvania, USA in 1979; the catastrophic failure of a Soviet nuclear power plant at Chernobyl in 1986, which contaminated large areas of northern Europe (Palmer and Neal, p.11). Those events drew people's attention and triggered environmental movements. After the publication of Carson's Silent Spring, in 1970 the International Union for the Conservation of Nature and Natural Resources (IUCN) gave a definition of environmental education that influenced many other institutions and might be described as the 'classic' definition (Palmer, p.7). That is:

Environmental education is the process of recognising values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the inter-relatedness among man, his culture, and his biophysical surroundings. Environmental education also entails practice in decision-making and self-formulation of a code of behaviour about issues concerning environmental quality.

(IUCN,

1970)

In addressing people's concerns about the environment, environmental education started to have significant meaning in schools and even outside of schools. Environmental studies cover highly complex and wide-ranging contents as well as environmental issues. Palmer and Neal said:

Environmental education should provide experience of problem solving, decision making and participation, with considerations based on ecological, political, economic, social, aesthetic and ethical aspects.

(Palmer and Neal, p.29)

Ecological, political, economic, social, aesthetic and ethical aspects cannot be covered by one subject. Therefore, covering environmental studies as a subject is exceedingly difficult, especially for school children, and also for their teachers, even though environmental education should be dealt with as a compulsory cross-curricular theme. Also, the subject should not be taught as absolute. Environmental issues are controversial topics and actually no one can really know what will happen if we do not take action for the protection of nature. However, we can at least try to predict the consequences if we do not, and, also, we can think ethically about whether the consequences we predict are right or good. To know the facts of environmental problems that happen now is necessary to avoid having unrealistic ideas, especially when focusing on environmental philosophies. Conversely, to focus solely on environmental disasters and negative issues is unfavorable because the gap between theory and practice should be

small. We need to combine philosophy or theory with factual knowledge. Environmental education is not simply about 'saving the world' in the way that the trite slogan might say (Palmer, p.267). Palmer also mentioned that:

It is equally about the development of an appreciation of the wonders and beauty of the world, and of a sense of *wanting* to save it – in short, the development of ecological thinking or of an environmental ethic.

(ibid.)

However, we need to be careful about her claim of 'an appreciation of the wonders and beauty of the world.' This kind of aesthetic thinking could be ambiguous from the point of view of an ethics-based approach. Of course, one's feelings of an appreciation of the wonders and beauty of the world would help motivate one to save it. However, what about nature or animals is it that you find unattractive? Also, what are the true wonders and beauty of the world? If you think about these questions ethically, you may realize that aesthetic ideas shape your values toward them. In environmental education, teachers should not give lessons in the form of: 'Look at this picture. You can see the beauty of nature. Let's appreciate and preserve this beauty.' In short, an aesthetical sense toward nature should not be created based on another person's opinion. It should be formulated through your own experiences or sensibilities.

Furthermore, the idea of beauty is also controversial. Beauty defined by general opinion does not always have to be absolute. Beauty can contribute to the liking of an object. However, the reason one wants to protect nature should not always be beauty. It is not a sufficient reason and it causes a paradox because there is environmental prejudice in the idea of beauty. It is not simply about whether nature/the environment looks

attractive to you.

Beauty is not the only controversial topic in environmental education. There are many controversial topics or themes which are difficult to deal with in schools. For example, animal rights are one of the most difficult topics in environmental education. Many people consume some animals as food in their daily life, especially cattle, pigs, chicken and fish. This paper does not argue whether it is right or a good thing to kill animals to eat. A point this paper draws attention to is that one had better think for oneself before accepting another person's answers or ideas. Environmental education should provide an opportunity to prompt you to think or be concerned about things which you did not pay attention or you took for granted previsously. This is where environmental education should start.

2-2: Japanese Environmental Education

Historically, in Japan people started being concerned with environmental problems, especially air and water pollution, during the country's rapid economic growth and industrialization (Hayabuchi, p.3). For instance, *Itai-itai* disease, *Minamata* disease, *Niigata Minamata* disease and *Yokkaichi* asthma are known as the four big pollution incidents of Japan during this period. These incidents made people realize that nature can be easily polluted if care is not taken, and that people can suffer from this pollution as they cannot survive without relying on natural resources, especially water and air. After these pollution incidents became famous, Japanese public education began teaching about pollution issues within social studies at school (ibid.). Therefore, it is said that Japanese

environmental education originally came from pollution issues (Kato as quoted in Hayabuchi, p.3).

However, even though 40 or 50 years have passed since the four big pollution incidents happened, Japanese schools still do not have a subject for environmental studies. Today, environmental education in schools takes place within only a few subjects such as social studies and science, and also during the period of integrated study which was originally set up in 2002 to teach international understanding, information and communication technologies, health and welfare, and other general issues or topics that are difficult to cover in other regular subjects (*The Japanese Society of Environmental Education* (JSEE), p.114).

As a result of the Japanese government stating that 'environmental studies' should be an important topic example for the period of integrated study, scholars and educators belonging to environmental studies expected the wide spread of this subject in schools. However, the revised Course of Study in 2008, which is the Ministry's official guidelines for schoolteaching, decided to reduce the amount of time for the period of integrated study, because of the change from 'Education at ease,' which focuses on giving children less pressure from education by reducing the amount of study time and the contents of the curriculum, to 'Positive scholarship ability,' which focuses on developing scholastic ability. As a result of this change, the reduction of environmental education is a concern (ibid, p.5). Also, there is a fundamental educational problem. In the course of Japan's education policy development after World War II, following the 1958 second revision of the official Course of Study, legal enforcement was created, making top-down education a formal requirement. This topdown system, where in all decisions are made in Tokyo, does not produce flexibility in schools. Even though the 'Law for Enhancing Motivation on Environmental Conservation and Promoting of Environmental Education' was established in 2003, and various action plans for environmental education were put into effect, the teaching of nationally stipulated subject matter became the highest priority. Therefore, even though educational activities that require a cross-curricular, multi-disciplinary approach such as environmental education are carried out on a secondary level, they can never become the core educational activity (Furihata and Takahashi, pp.41-42).

Apart from the Course of Study's lack of flexibility, there is another reason why environmental studies cannot be a core educational activity. Without considering environmental studies as a subject for entrance into high school or university, the significance of environmental education will be low in Japan. The contents that students learn in junior high school and high school are always considered for an entrance exam. Perhaps, dealing with environmental studies as a compulsory subject in universities is practical (ibid, p53). Japanese environmental education is not well organized at all. They cannot give an excuse such as 'a lack of time for teaching environmental education' since the priority is high in society in the long term. Even though teachers teach environmental studies in the period of integrated study, they usually do not teach environmental ethics or philosophies since other regular subjects do not usually cover these studies.

However, without ethical thinking, an approach to environmental problems might be based on the cause-and-solution approach. To know the facts of environmental problems, and to think about their solutions is not meaningless. However, to analyse environmental problems, you need to have ethical thinking because ethics construct the society which causes environmental problems. Also, JSEE stated that:

Practical environmental education can take into account a logical and normative framework supplied by environmental ethics. Practical obligations of environmental education based on environmental ethics would be the first step toward the solution for global environmental problems.

(JSEE, p.105)

There are many problems Japanese education needs to solve in order to spread environmental education. No matter what, an ethics-based approach should be a part of Japanese environmental education because of the significance of ethics in environmental problems. It is not difficult to predict that younger generations will have more complicated environmental problems than this generation. In order not to be fooled by newly available data or information, one needs to develop one's own way of ecological thinking. An ethics-based approach would be a powerful tool for students in the long term.

2-3: Actual Examples of Environmental Education in the UK

Through this chapter, this paper stresses the significance of an ethics-based approach in environmental education. However, this does not mean that environmental education simply needs to have an ethics-based approach. As previously mentioned, environmental issues contain highly complex and wide-ranging contents. Therefore, environmental education needs to provide various types of teachings to students. Hence, before examining examples of an ethics-based approach, this part of the essay focuses on the UK, where environmental education is well-studied and in a

top class globally. This paper will not explicitly compare environmental education in Japan and the UK, however you may realize the difference in thinking about environmental education between the two countries. In the UK, environmental education is an officially recognized and documented cross-curricular theme of the National Curriculum for schools. It is one of the first five themes that are documented. The other four are health education, education for citizenship, careers education and guidance, and economic and industrial understanding. These five themes can be featured in or arise out of a number of other areas of the curriculum. In addition, schools have freedom to interpret the guidelines for the various themes and to decide how best to incorporate them into the curriculum as a whole (Palmer and Neal, p.23). Environmental education is not defined as a subject, yet still there is some flexibility and respect toward it.

Schools' Council's *Project Environment* (1974) formalized a 'three-fold structure' which comprises three core threads: education *about* the environment, education *in* or *from* the environment, and education *for* the environment (Palmer, p.137). The three core threads are:

- Education *about* the environment has the purpose of developing knowledge and understanding about *values* and *attitudes*.
- Education *for* the environment encourages pupils to explore their personal response to and relationship with the environment and environmental *issues*. This is linked to the development of *attitudes* and *values*, including elements of human understanding and behaviour necessary for the development of sustainable and caring use of the environment.

• Education *in* or *through* the environment uses the environment as a resource for learning. It is a resource which enables the development of a great deal of knowledge and understanding as well as *skills* of investigation and communication.

(Palmer and Neal, p.29)

Palmer and Neal mention that planning for the inclusion of environmental education in the curriculum needs to take account of these three interlinked components (ibid.). Both education about and for the environment are highly necessary in terms of developing environmental awareness and ecological thinking. All environmental education requires an understanding of values and attitudes, because human beings are mostly the cause of environmental problems. Human beings behave according to their values. Strong values are necessary in order not to cause any new environmental problems, and to make human beings become a better species for the environment. Education for the environment reflects the ethical element of the environmental curriculum from the report by HM Inspectors of Schools in Scotland (Scottish Education Department, 1974), which states that a program of environmental education should disseminate the views of Project Environment (Palmer, pp.141-142). The ethical element is:

A programme of environmental education aims at introducing pupils to the idea of personal responsibility for the environment and the concepts of stewardship. It trains pupils to ask if the criteria of proposed actions are based on morally justifiable values.

(Palmer, p.142)

We can interpret that to mean that to understand values and attitudes, we

need to understand ethics.

Here this paper would like to introduce one case study in Scotland of a good example of how environmental education may be structured (ibid, p.148). Beancross Primary School is a suburban school and the staff are very engaged in designing appropriate environmental studies. This school utilizes the basic three-fold framework of education 'about', 'in and through' and 'for' the environment. It focuses especially on 'for' the environment among the three, with a distinct focus and developing values and attitudes as well as knowledge through issues-based teaching (ibid, pp.149, 154). To start the whole school process, the school staff asked these questions:

'Which environmental values should a school try to promote?'

'What can a school (and an individual teacher) do to promote such values?'

(Palmer, p.155)

What we can understand from these questions is that environmental education in shools should have a clear syllabus. However, these questions do not mean that the school pushes values that they promote to their pupils. What the school aims to do for their pupils is to help them work out what they think and where they stand, and take time to raise awareness and understanding of issues in ways meaningful to their life experiences (ibid, p.156). Environmental education is not to impose views onto students, but rather to give them the opportunity to think for themselves about environmental issues. It relies on oneself.

Beancross focuses upon the controversial nature of environmental issues and its teaching style is issues-based. The school staff became

interested in the Action Competence Model (Jensen, 1995) which is issues-based and is composed of four sections: Knowledge/Insight, Commitment, Visions and Action Experiences (ibid, p.156). The Action Competence Model utilizes issues to make both students and teachers ponder questions relating to issues starting from mostly either 'how' or 'what'. The school's issued-based approach is not to teach about issues, but to utilize issues to make students think on their own and to let them find their own answers toward issues. Environmental education in the UK is a cross-curricular theme, but not a subject. Therefore, if schools can work on environmental education, a significant effect can be expected more than if environmental education is taught as a subject simply organized by an individual department. In either case, in environmental education, success can never be achieved without cooperation between departments.

Chapter 3: A Textbook of Environmental Ethics

To understand an ethics-based approach in environmental education, I shall primarily use one specific book, Joe Walker's *Environmental Ethics* (2000). This book is a textbook mainly for students studying for examinations at higher levels in the UK, and uses major ethical traditions to discuss environmental issues. In this chapter, I will not discuss examinations in environmental education. Since the aim of this chapter is to think about what an ethics-based approach in environmental education would be like, I believe that to examine this textbook could lead to a better understanding, in terms of both using ethical theories and using controversial topics.

As previously mentioned, there is always something we need to be

careful about when teaching students. This is 'brainwashing.' No matter how sure one is about things taught in school, it cannot be said that 'this is absolutely right' in terms of controversial topics. Otherwise, you would brainwash your students into believing that your own opinion is right, even though this is not your intent. We can say that environmental issues are controversial issues. For instance, Stevenson gives an example:

Some people firmly believe that the hole in the ozone layer is so serious that all life on Earth will cease some time in the next century. Other people believe just as firmly that presence of a hole is reversible and that all the proposed negative consequences will be alleviated before the end of this century. Yet others believe that there is a hole in the ozone layer and that the people in power are keeping it a secret, and still others believe that there is no hole in the ozone layer at all....... (Stevenson, p.212)

Though just one issue is picked up and discussed, many ideas or answers toward the issue will emerge, since the current environmental debate has such potentially far-reaching and serious consequences (ibid.). It is often impossible to have one agreeable answer in environmental issues. Therefore, *Environmental Ethics* never gives one opinion, even though it asks 'Is there an environmental crisis?' It gives each side of the issues, from 'Yes', 'No' and 'Perhaps.' The 'Perhaps' section means that in understanding both the complexity of natural systems and environmental issues, developing your own general response to the environment is necessary (Walker, p.5).

This textbook has five chapters. Each chapter except Chapter 5, has almost the same approach: introduction, main themes to argue, ethical

responses, conclusion and study guides. Chapter 1 of the textbook introduces basic knowledge of ethical theories, each of which adopts a different approach to the environment and issues related to it (ibid, p12). The ethical theories which are introduced in the textbook are not very detailed, however they might be sufficient for school children to gain basic ideas of ethical theories. This paper looks at some ethical theories in the textbook to examine how it tries to approach such theories to learners.

Firstly, I will approach Egoism. Egoism takes the view that people will always behave in ways which are beneficial to them. Whether this benefit might be direct or not, it will always be the motivation for their actions (ibid.). Generally, many people behave in ways which are beneficial to them, in short, they have egoistic aspects. It is not a problem to have egoistic aspects. If you do not care for your own benefit at all, it is more problematic to survive in society. However, being an egoist is problematic in terms of the environment. Egoists treat the environment only for their own interest, which may be a disaster for others, and nature. They will not take action for the environment, if the action does not produce benefit for them, or, if it makes their benefit less. One practical example of this egoism is hedonism, which takes the view that people behave in certain ways in order to produce the greatest pleasure for themselves (ibid.). If use of the environment helps them maximize their pleasure then that is morally acceptable (ibid, p.20).

Next is altruism, which is the opposite of egoism in some ways, taking the view that when making ethical decisions people should take into account the wants and needs of others before their own. If you took into account the wants and the needs of the environment before caring your own, there might be less environmental issues than today. However, how can you predict the wants and needs of the environment? Even if the objects are human beings, still it remains difficult to predict their wants and needs. What you consider right or good for the environment could in fact turn out to be the opposite. As you can see, both egoism and altruism have advantages and disadvantages in relation to some situations. Perhaps, whether you take the egoism or altruism approach, your approach could be interpreted the opposite way by the objects.

One more theory this paper looks at is utilitarianism. The textbook introduces the claim of philosopher Jeremy Bentham (1748-1832):

The greatest happiness of the greatest number is the foundation of morals and legislation. (J Bentham, *The Commonplace Book*)

As you can see from Bentham's claim, utilitarianism cares about 'happiness'. Furthermore, happiness should be for as many people as possible. If we assume that environmental degradation has a serious negative impact on the happiness or the satisfaction of future generations, then this gives a utilitarian reason to act so as to prevent, or at least inhibit, such degradation (Rowlands, p.19). Learning these ethical theories makes you realize where you stand and what your behavior looks like. The significance of looking objectively at yourself through ethical theories is immeasurable to develop environmental awareness. After introducing these ethical theories, teachers should allow students to discuss environmental issues in using them.

Chapter 1 of the textbook asks the question 'Does the environment have rights?' To think about rights for the environment, you need to think ethically about it for a good discussion. Here this textbook focuses on intrinsic value and instrumental value. It explains that:

The value of something may come from within itself (intrinsic) or in relation to its usefulness to other things outside itself (instrumental).

(Walker,

p.18)

The idea of intrinsic value is often supported and claimed by Deep Ecologists, who argue that nature has its own worth, regardless of whether it is useful for human beings. Therefore, it should be protected for its own sake, not because it is useful to us (ibid.). Perhaps, before learning such ideas of values, people may not be aware of the notion that the environment might have rights. The concept of the environment is wide ranging. It concludes both non-living material things such as a stone, and non-living, 'non-material' things such as the atmosphere. If you consider that nature, such as things mentioned above, has its own rights, it will change your view of the world.

On the other hand, the idea of instrumental value is easily accepted by people, especially economists, more than one of intrinsic value. When we put a label of 'resource' on nature, this infers that nature is considered to have instrumental value, usually in terms of producing something of greater economic value. Also, you can interpret that something of nature has no intrinsic value in terms of its being or existence until it is acquired or used (Starling, p229). What are the problems of the idea of instrumental value? The textbook says that 'the problem with looking at things this way is that it seems quite cold and calculating' (Walker, p.18). This reason fails to indicate what the problem is. It does not matter whether looking at things in terms of instrumental value seems cold or not. It does matter if looking at nature from a view of instrumental value causes environmental degradation due to a lack of respect toward nature, which is considered not

to have intrinsic value. Also, the textbook gives an example of instrumental value in the case of human beings:

Your house was on fire. You were being visited by a world famous scientist who is close to discovering the cure for cancer. The fire brigade know this and decided to save him first leaving you exposed to the flame. (Walker, p.19)

This example raises more questions, because there is no absolute correct answer. If you look at the example only from the perspective of instrumental value, the decision is perhaps reasonable in terms of the prediction of saving the number of lives in the future. However, in the case of human beings, this example is certainly controversial. Who is valuable or unworthy to survive? Can 'life' be weighed by instrumental value? And can nature be considered in the same way as human life? Can it be considered the same way as human life? In order to avoid careless remarks, I will not give any answers to these questions here. As previously mentioned, an ethics-based approach should introduce various types of ideas or ethics of the environment/nature and also of 'life' in order to develop an ecological way of thinking or environmental awareness. Also, the aim is to think ethically about environmental issues and to have your own ecological thinking for your decision-making in environmental problems. Unlike the example, deciding on difficult problems is not easy like the example. One may not be able to decide anything regarding environmental problems despite thinking ethically, however, thinking ethically may raise environmental awareness.

3-2: Looking at Environmental Issues with Ethics

Our global future depends upon sustainable development. It depends upon our willingness and ability to dedicate our intelligence, ingenuity and adaptability – and our energy – to our common future. There is a choice we can make.

(WCED 1987)

The term 'sustainable development' seems to have become a slogan for environmental movements. Also, it is often used by governments and international organizations to promote their environmental strategies. However, what is sustainable development? The phrase can mean different things, depending on what 'sustainable' and 'development' mean and what context concerns. Environmental Ethics discusses 'development' and 'poverty' in Chapter 4 - The Human Dimension. This paper will briefly introduce the history of 'sustainable development', before examining how the textbook uses ethics to discuss it. First of all, the idea of sustainable development was used in an international forum in the World Conservation Strategy (IUCN, 1980). Within the Strategy, the concept of sustainable development may be interpreted as the present development of available resources without decreasing the ability of future generations to meet their needs. The Strategy argues for three priorities: the maintenance of essential ecological processes, the sustainable use of natural resources, and the preservation of genetic diversity and the conservation of wild species (Palmer, p.60). As you may realize, originally the Strategy did not stress economic development, instead mainly focused on aspects of ecological sustainability. Therefore, it was criticized that it was anti-development (ibid, p.61). The term 'sustainable development' is not clear from the beginning and is considered a controversial term. Some people tend to emphasize economic development, while on the other hand, others might tend to emphasize sustainability in ecological terms.

Environmental Ethics claims that without sustainable development, poverty will not disappear. Developing nations seek to industrialize, because this may bring improved healthcare, sanitation, infrastructure and so on (Walker, p.99). Inevitably, industrialization has some impact on the environment, according to the history of industrialized countries such as the UK, Japan and the US. For example, it may bring pollution issues, coming from people's lifestyle change and degrading environmental resources. However, are poverty and degradation of the environment consequences of unsustainable development? Without clarifying what is sustainable development, we are unsure about what unsustainable development means either. Palmer (p.60) claims that perhaps they are consequences of dominant patterns of development.

How can we look at environmental issue such as sustainable development with ethics? The textbook uses ethical theories, which are introduced in Chapter 1, to give an answer to environmental issues from each ethical theories' aspect. The ethical responses section in the textbook introduces a response about poverty in an egoist point of view. It states:

An egoist may well take a 'survival of the fittest' view of national poverty. He may conclude that if you happen to live in a poor country then that might be unfortunate, but not his concern

(Walker, p.103)

I think many people living in developed nations actually take this view to poor nations. It sounds like poverty in such developing nations is considered the destiny of being poor from the beginning. In some points, such a view makes sense, because it is difficult for people living in developed nations to imagine conditions in extremely poor countries where they have not been to, or that are far away. However, governments should not take such an optimistic idea. Certainly, developed nations have received many benefits from developing nations, exploiting natural resources including fossil fuels. Perhaps, without the sacrifice of developing nations, current developed nations would not exist in economic terms.

A response about poverty from an altruist point of view says that 'governments should behave in a systematically altruistic way' (ibid, p.105). However, every nation has its own problems, which should be solved, within their own countries, before they worry about others, as the function of a nation is to protect its own benefit and property. Perhaps though, to solve environmental problems, we had better think about them from the point of view of public interest, rather than national interest (*Kyoto University Global Environmental Studies Council*, p.2).

Also, the textbook introduces a utilitarian response, which says that 'five per-cent of the world's population controls 90 per-cent of its wealth, which clearly is the opposite of what the utilitarian would desire' (Walker, p104). The utilitarian cares about the maximisation of happiness for the majority. If you consider future generations who are not be born yet to be the majority, this can be larger than the current population today. Hence, a utilitarian would welcome economic development for the improvement of life for the majority, but would also want to ensure that such development is undertaken in a sustainable way so that the benefits for future generations are maintained (ibid, p.105).

Through these ethical theories' interpretations, it could be argued that

there are only a few people who agree with such ethical theory. I think most people agree with some kind of ethical ideas, and also disagree with others. You do not have to take the entire view of every ethical theory; you can agree and disagree with part of ethical theories to make your own answer, since the aim of an ethics-based approach is to develop your own ecological thinking, and not to be fooled by new green propaganda. This textbook's ethical approach might be sufficient to make students realize where they stand and how they think about environmental issues. Also it can provide a lot of opportunities of discussions. However, I think there is still room for improvement in terms of the quality of the contents in ethics.

Conclusion

As previously mentioned, environmental issues are highly complex and wide-ranging, therefore, environmental education has many tasks to cover. However, we should not forget about the ultimate aim of environmental education among these tasks. It is to develop ecological thinking and environmental awareness. In order to achieve this, providing an opportunity to get one to think or be concerned about things to which one did not pay attention to or one took for granted before is required. To tell what is right and wrong in environmental issues might be difficult because long-term effects should be considered. You cannot say what is right and wrong based only on the point of view of your own interests. This is simply an egotistical manner which, in fact, causes environmental degradation. I think an ethics-based approach can take an important role in environmental education because an ethics-based approach is to think ethically about environmental issues through environmental ethics, which

focuses on rightness and goodness on all of Earth, rather than only on human society. It can be a guide for you to see outside your own sector of self-interest. Also it can guide you to realize where you stand, and how you behave toward nature, which helps you to develop your ecological thinking afterwards. However, as this paper highlights, the method of an ethics-based approach is not clear and detailed enough to be promoted. Taking it into account in applying this practice is required for the success of environmental education and also for future generations, in order not to have a large disparity between theory and practice.

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