

The Effects of Sustainable Development on Environmental Education

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Abstract: Sustainable development is an umbrella term, which encompasses many disciplines including ecology, economy, biology, and education. Today, the world has started to pay much more attention to environmental problems. As these problems continue to grow day by day, human behaviors must play a salient role in solving these sort of problems. The sustainable development movement is creating a newer and a stronger awareness for environmental issues. Therefore, a process of questioning, in which some questions such as “Who teaches the environmental issues to whom, and how?” can be answered, has started, and this process is still continuing to improve. This paper discusses the effects of sustainable development on environmental education. Within this scope, various applications in the field of environmental education are going to be discussed.

Introduction

The world today is very concerned about environmental issues. It is so concerned that environmental problems have become the main focus not only for the environmentalists, but also for the governments, societies, industries and many disciplines as well. The studies on the environment mainly consist of its relationship to human behaviors. As a result, environmental education and training have seen rapid improvement in the last 30 years. Adults and children have been included in these environmental training programs using various methods and miscellaneous points of views (Keleş, 2000, p.10).

The terms “environment” and “education” have not been used together since the middle of 1960s. The term “Environmental Education”, was first used by Thomas Pritchard in 1948 at a meeting of International Union for the Conservation of Nature and Natural Resources (IUCN). Pritchard suggested the term environmental education in supposition of a lack of terminology in the field (Palmer, 1998). The term was first used in scientific literature in a 1986 study conducted by Schoenfeld. However, he stated that he did not specifically use the term and asserted that its use for the first time was coined by the American Association for the Advancement of Science (AAAS) in 1964 (Disinger, 2005b). Before the term environmental education, “natural study”, “outdoor activity” and “the education of natural protection” were used (Elder, 2003). Additionally, “the training in the use of sources”, “innovative training”, “training in source management”, and “population training” were also the other terms used in environmental subjects (Disinger, 2005a).

The History of the Environmental Education

When the history of environmental education is taken into account, it is possible to say that it is in its embryonic stage. One of the first studies about environmental education was the conference held by the United Nations in Stockholm in 1972. Growing environmental problems were mentioned in a declaration given after the conference (UNESCO, 1972). After the conference, it was assumed that environmental issues were the problem of all of the nations throughout the world. An environmental training program was prepared with the cooperation of UNESCO and The United Nations in 1975.

An international governmental conference was held in Tbilisi, Georgia, in 1977. The decisions taken at the conference were: People at different ages should undertake an environmental education both formally or informally. Also, the mass media should share the responsibility to ease these educational processes in this mission. Environmental education was understood to be a lifelong process. The training should be given in an interdisciplinary and holistic way. Environmental education should help people to be aware of world problems faced today, and develop a sense of productive skills for problem solving in order to protect the environment regarding ethical issues as well. Environmental education should be viewed out of the society that we live in. It should consist of a problem solving process that is focused on the issues and the actions of individuals. At the conference, the roles, the goals, and the framework of the environmental training were determined. Additionally, the basic principals were defined. The goals of environmental education are raising the awareness and consciousness, and changing the attitudes, skills and contributions of people and research to bring about a better environment. Among some principles are the ongoing environmental studies, which are started at pre-school and continue on after school, adopting interdisciplinary approaches, focusing on “now” and “future”, and in order to teach environmental issues, getting help from educational institutions and methods (UNESCO, 1977). The 1977 conference in Tbilisi demonstrated that it is a necessity to cooperate internationally to reach the goals in environmental education. As a result the conference is regarded to be a turning point in placing the environmental education in a human training context.

In 1992, The Project on Environmental Education and Progress in Rio de Jenerio set forth a new term “sustainable development” in education. The United Nations set the basis of sustainable development at an international environmental conference with the help of 81 countries in order to contribute to the sustainability in 1997 (Knapp, 2000). UNESCO highlighted the significance of a sustainable future in 1997 (Mortensen, 2000, p. 28).

Educators use the term environmental education in various ways because of its diverse nature. The term environmental education associates with the definitions of ecology, environmental science, outdoor training or the explanation of the environmental issues. Each of these plays a part within the term “environmental education”. The goal in this training is to prepare individuals for the constantly changing world of technology, to understand continuously changing problems of the earth, to play an effective role in the protection and the development of the environment and finally to have people gain the necessary practical skills, so that they can easily fill this role (Ramsey, Hungerford, and Volk, 2005). The main purpose of environmental education is to train individuals by raising an awareness of environmental sensibility. While teaching the ecological knowledge, the change in behavioral attitudes towards the environment should be paid more attention. Trainees are supposed to indicate their reflections in their behaviors towards environmental issues after training (Erten, 2007, p.3). Another goal in environmental education is to inform the trainees about the environment, including its problems, and then to subsequently motivate and create awareness about how to solve these problems (Stapp et al, 2005, p.34). In order to reach these goals, the number of people who are conscious about environmental issues and their responsibilities should be increased (Culen, 2005). Environmental literacy constitutes another goal in environmental education (Volk and Mcbeth, 2005).

Environmental education is an interdisciplinary subject. It consists of many disciplines, and is a process which requires practice. It focuses on results. The current focal area in environmental education is man and his relationship with the environment whereas it was economical and social in the past. The content and the pedagogy are still being explored (Elder, 2003).

The starting point for training sensitive individuals is based on the cognitive, emotive and behavioral relations. Numerous environmental education programs have been developed regarding these relations since 1960 (Culen, 2005).

Views in Environmental Education

There are three main views about the relation between man and the environment. These are Cornucopian, utilitarian conservationist, and preservationist. The Cornucopian view states that nature has limited and unbalanced sources. The Utilitarian conservationist focuses on the needs of mankind and believes that the management of natural resources should be under the control of scientists. As for the preservationist, they state that men rule the nature and that the equilibrium of nature should stay in balance (Disinger, 2005, p.2).

These views constitute three different understanding in environmental education. They are fact based, rule based, and environmental education for sustainable development.

Fact based environmental education was developed in 1960s. It is mostly based on science and ecology. In this approach, specifically people who study in positive sciences are expected to solve environmental problems. The central focus of environmental education is on the definitions adapted to the aims of the training and scientific phenomenon. Normative environmental education originated from the idea that norms are important in solving environmental problems. It is considered that norms which are environmentally-friendly

can easily solve these problems. These norms can also contribute to educational fields. For instance, students can develop environmentally-friendly behaviors and notions within a training program based on social and scientific knowledge. Although courses are related to scientific notions, senses and feelings are included in these courses. The training for sustainable development was improved in the 1990s. Traditionally, environment and development are defined as an overlap between the interests of different people. This notion includes all of the social improvement. The definition of the environment includes not only the ecological development but also the economical and social sustainability as well. In this approach the educational goal is to create opportunities for people in order to acquire some knowledge and develop some skills to approach the environmental and sustainable issues with different points of view. The content of the training includes the past, the present, and the future. However, it is related to global and local problems (Sandel, Öhman and Östman, 2007, p.159-165).

For the sustainable development education includes societal, economical and environmental factors. Traditionally, the approaches in environmental education aim to train students who attend formal schools whereas in the framework of sustainable environment education the target group is students at every age regardless of whether or not they are in school (Smith, Pero, Smith, 2007). There is no specific definition which researchers agree on for sustainable development (Palemer, 1998). Sustainable development widely contains natural sciences and the economy. However, it also includes some values which focus generally on humanity and how culture should relate to other domains (UNESCO, 1997).

In formal education there are several applications for environmental education. These are: a) Adding supplementary courses about environmental education to the existing lessons, b) having one specific course solely for environmental education, and c) The Infusion approach which gives every subject an environmental perspective, d) Topic-based approach which selects one or more topics on the environmental problems and has studies focus on these problems, e) Ground-based educational approach which helps students learn the structural construction of the society through their own experiences and contribute to this construction under the guidance of their teachers, f) Project-based approach which provides students with information and skills through projects and conscientiously planned tasks, g) Sustainable education which plays a salient role in combining various fields in education. Sustainable education today is accepted as the future system which might help to improve of ideas and actions in environmental education. It is based on a concept of sustainable development into which social, economical, and environmental systems are integrated. It focuses on the solutions (Elder, 2003). Within the framework of the education, well-constructed environmental education programs are student-centered. Programs facilitate the ways in which students may develop a self-understanding. Imagining and doing make up students' self-cognition. Students are directly led to experiences and are encouraged to make their own decisions. Environmental education supports a system which provides an active learning surrounding, sharing ideas, doing constant research and working towards expertise (Simmons, 2005).

Environmental literacy is an important issue for many countries. In order to train conscious people about environmental issues, countries need individuals who are able to know how to teach environmental issues to people. Environmental education together with the topics related to education addresses social and ecological problems, and has a philosophy of its own. Within the boundaries of this definition, students need any prompt to encourage them to be environmentally literate and any programs which provide them to gain knowledge and skills on environmental education (Simmons, 2005).

In the center of the sustainable environment education is mankind. In order to explain environmental issues within the framework of the educational programs, the environmental topics are scattered in the schedules of different kinds of courses at schools. That is, these topics are not given within a curriculum of only one course. Also, the goals not only include the educational programs at formal schools but also for people from different age groups, and with different levels of formal education may benefit from environmental education. Environmental education also focuses not only on ecological perspectives but it also takes the needs of nature, economy and the individuals into the consideration.

Conclusion

Although environmental education is in its embryonic stage, it is a discipline which rapidly improves. Sustainability as a part of environmental education has started a new era. However, there have been some problems about the applications of environmental education. These problems vary from a country to another or from a city to city. In order to solve these problems environmentally educated people are needed. However, how to train these people about environmental issues and what kind of adequacy is needed are still questions to be answered.

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