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Environmental Education in Japan Movement

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1. New Beginning of Environmental Education in Japan

Environmental education in Japan, which has started from educating people about pollution, has changed greatly with the content and the method in both school education and social education which reflects an international trend. It is possible to consider five terms in searching for the trend of environmental education in Japan.

1) From the 1950's to the beginning of the 1970's

Nature conservation activity and the protection movement were carried out by the local populace in various places in the 1950's, and the realities of industrial pollution and the destruction of nature were clarified. The Environment Agency was set up, and the Nationwide Elementary and Junior High School Society of Anti-pollution Measures started. Pollution education and nature education were individually done in each region.

2) From the latter half of the 1970's to the first half of the 1980's

International approaches proposed in conferences such as the International Workshop on Environmental Education in 1975 and the Tbilisi Intergovernmental Conference on Environmental Education in 1977 were hardly shared in Japan, and they came to be paid attention in Japan only after 1990. In 1975 the Nationwide Elementary and Junior High School Society of Anti-pollution Measures changed its name to the Nationwide Elementary and Junior High School Society of Environmental Education. The environmental education society started at the university level in 1977. This was a time when pollution education,

nature education, and environmental education began to cooperate, and the concept of education extended from pollution to environment.

3) From the latter half of the 1980's to the first half of the 1990's

This was a time when global environmental concerns came to the front. The Environmental Education Panel, 'Better environment built by all,' was set up by the Environment Agency in 1988, and the idea of a partnership was shown. Environment Basic Law was promulgated and enforced in November, 1993, and "Environment and study concerning protection of the environment" was provided for by Article 25. On the other hand, the Japanese Society of Environmental Education was set up in 1990, and it was the basic organization of the cooperation of teachers, NGO members and researchers. The Ministry of Education issued 'Guidance Material for Environmental Education (for junior high school and high school)' in 1991. (The elementary school version was issued in 1992.) It proposed the target of environmental education and the concrete ability and the attitude to want to raise the standards of environmental education. It also showed the concept of environmental education as a cross curricular theme and a sprout element of the concept of sustainability. In addition, based on the "Surveillance study on the enhancement of environmental education to the child" (1991-93), "Junior Eco Club" began in 1995 where both children and adults learn about the environment in their region, and last year about 140,000 children are participated in this activity.

4) From the latter half of the 1990's to 2000

The Central Environment Council proposed "Future environmental education and environmental studies: toward a sustainable society" in December 2000 and "Basic Environment Plan -Guidepost for the Environmental Century" in 2001, which identified environmental education as one of the 11 strategic environmental policies and made clear the direction " toward a sustainable society."

In the education administration, themes of environmental education, information education, international understanding education, and health and the welfare education, etc.

became new educational themes for the "Period for integrated study" to be founded by the 15th stage Central Education Council first report (1996). It has been executed since April, 2002. Each school is developing the approach of various classes with the best use of "trait of the region and the school."

5) After 2001

In the century of the environment, The Environmental Education Promotion Law was enacted in July, 2003, and the basic policy was enacted in five related ministries in September, 2004. Moreover, the Ministry of Education renewed 'Guidance Material for Environmental Education' in March, 2007.

This is a new beginning of an event to promote environmental education of Japan. The cooperation and the partnership of various subjects are beginning in the context of the concept of sustainability. A new phase into which environmental preservation activity and environmental education are integrated is faced where the citizens begin to have a sense of values and ethics that integrate nature recognition, science recognition, and social recognition as a global citizen, and voluntarily behave responsibly and revolutionize their lifestyle, and independently participate in the creation of a sustainable society. And now the question of how the quality of environmental education can be improved is asked.

2. Ideas and the problem of environmental education in Japan

Human should solve the problems in the society and the region that those humans made. Educating people who can construct and maintain a sustainable social economic system is the ultimate purpose of environmental education. We have to concentrate wisdom to educate citizens who not only are able to "preserve" the environment but also to "independently participate in activities which create a better environment, and have a responsible attitude and behavior towards the environment."

The following objectives are set in The School Guideline Material: "To foster the attitude by which awareness and knowledge on the environment and environmental problems are maintained, based on a comprehensive understanding and recognition of the relationship

between human activities and the environment, while at the same time acquiring the skills, thinking ability and judgment which will help to facilitate individuals to adopt desirable approaches taking environmental conservation into consideration, and to make proactive participation in creative activities to improve the environment, and take responsible actions on behalf of the environment." Though the Guideline was formulated in 1991, the objectives are still valid today, and it is necessary to make the best use of them for the integration of theory and practice. The following are the principles of promotion of environmental education based on the principle of the Tbilisi declaration.

- 1) Since environmental problems are closely related to a diverse range of areas, a comprehensive viewpoint, which enables issues to be considered from a mutually linked and multilateral perspective, is indispensable.
- 2) It is necessary to do environmental education with the cooperation of all generations in various places.
- 3) Clarify a concrete target to act, and do not make the activity the self-target.
- 4) Do not be satisfied with only understanding the current state and the cause of environmental problems as knowledge; tie them to the actual actions.
- 5) Since learners need to develop the abilities of the problem discovery, the analysis, and the information gathering and use, the process should include the learner's experience, feeling, and understanding.
- 6) Dig up and use resources of various materials, talents, and networks in daily life in the region. It is necessary to make use of the traditional culture, the history, and predecessors' wisdom in the region in environmental education.

The following contents should be covered systematically and sequentially.

- 1) Mechanisms of nature (natural ecosystems, natural resources and their management)
- 2) The impact of human activities on the environment (alteration of natural mechanisms by human beings)
- 3) Relation between human beings and the environment (roles, responsibilities and culture of human beings in relation to the environment)

4) Culture and history of the relation between human beings and the environment

On the other hand, there is no absolute correct solution in the discussion about the ideal society. The way of environmental education is the process that everyone thinks of as sustainable society and it is important to discuss the ways to achieve it. The content that environmental education handles should spread to an extremely wide field including not only nature but also the society and economy, etc.

Learners need to look at environmental problems and the related phenomena scientifically, objectively, and fairly. These include not just an appreciation of the immediate benefits conferred by the ecosystem but also the capacity to see fully the spiritual, material, and academic benefits and to value these endowments. It is necessary to bring up receptivity to the environment for children and adults who begin to sympathize with the variety and beauty of the environment around them, and to know humans live as one of the living things in the mechanism of nature. It is also an important aspect of environmental education and environmental learning to foster a rich sensibility and to establish a foundation for the imagination and creativity through the experience of interacting with a rich natural environment.

3. Environmental education, study model and guideline of environmental education promotion

To put it simply, environmental education is a form of learning that endeavors to find out "how to live". That is to say, learning how to integrate "learning" and "living" is environmental education. In practical terms, this is achieved by establishing daily goals in life and dealing with real problems in the community, considering the measures needed to resolve those problems, and by learning proactively from the "relations" and "linkages." It is "learning for the future" by creating sustainable society.

Environmental education has been done by < problem "1 teaching approach > in pollution education and < observation "1 giving lessons approach > in nature conservation education. Now it is expected to become an educational approach which values the process and the thinking process where the learners find some problem from their familiar region, struggle with the problem, and find the strategy for the solution. Therefore it is necessary to

develop a program which encourages learner's "awareness": leads to the next step "examine" (motivation and judgment skill) leads to "search" and "think" (thinking skill) about the background of the event and the structure of the problem, devise an alternative plan for the solution and derive the answer by themselves (critical thinking and problem-solving skill); leads to activities that cooperate mutually and consider the meaning of the partnership between various subjects and practice some activities (Learner's sense of values and attitude face social participation.)

Learners begin with questions of "Why?" and "For what?" and use the "findings (find)" as a springboard to the next steps of "Deepen understanding (research)" and "thinking and judgment (think)" and continue to "practicing and participation (change and shift)." The process with feedback moves spirally. That is called 'action research' by Mr. Roger Hart. Learners can develop their problem-solving skill by experience-based education with activities such as research, questioning, think deeply, talk, bring ideas, create, explain, or take action.

A holistic approach and reflective thinking is lacking in the study model of the environmental education in Japan. In the approach, "the learners seem like they are talking with the study problem mutually and they construct their constant perception in the process of learning." Since the problem of the environment is in the interdependence relation among the environment, economy, and society, it is necessary to think about it with an interdisciplinary approach and find out alternative solutions.

In concrete terms, it will be necessary to adopt the following approaches for education for sustainable development: 1) interdisciplinary approaches, 2) systems thinking, 3) participation-type approaches that place emphasis on active involvement and practicality, 4) problem-solving-type approaches that place emphasis on a critical and multilateral approach, 5) approaches based on the perspectives of multicultural symbiosis, 6) integrated approaches that emphasize "involvement" and "association" (holistic approaches), 7) approaches based on linkages and collaboration among diverse social sectors.

Environmental problems have arisen from the multiple impacts inflicted on the environment by interrelated complex factors that are diverse in nature. Environmental problems are closely related to culture, history, dwellings, and furthermore, to politics, economics and

spiritual aspects of human beings. Accordingly, learning venues should not be limited only to school programs with nature observation or research activities about community resources. Learning activities with the aspect of lifelong education which children can participate in and change their surrounding environment together with community members. Also topics in environmental education such as water, air, ecosystem, soil, food, energy, etc. should be "tied up" by the aspect of protecting "life."

As Mr. Roger Hart says, "The best way to social development is to foster citizens who are aware and understand environmental management, and participate in creating democratic community," environmental literacy as citizen's wisdom is fostered by both children and adults participating and learning in the process of cooperation.

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