

IMPORTANCE OF ENVIRONMENTAL EDUCATION AT SECONDARY SCHOOL LEVEL

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ABSTRACT

Education is an independent field of study which is concerned with the process of development. With recent developments and advances, environmental education is a new source of concern for educators, teachers and students. It aims at developing in children awareness and understanding of the physical and social environment in its totality.

KEYWORDS: Education, Environment, School, Teacher

INTRODUCTION

Education involves the imparting of knowledge and development of skills for self-realization. The main focus of educational process is to develop the child's personality and to create conducive environment for the child in educational institutions. The teacher has the duty of imparting knowledge to the children; this knowledge is reflected in effecting changes in values, behaviour and attitudes of the learner. Environment refers to sum total of conditions which surround man at a given point in space and time. Knowledge of basic environmental concepts equips students with the skills required for active and informed participation in managing the environment.

Environmental education is a long-run learning process. It seeks to provide understanding of natural resources including its characteristics, distributions, present and potential uses, and how these resources are used by man. Not only natural environments, but also understanding of man-made environments, its qualities, statuses and influences for society. Understanding of these environments requires knowledge of the social, political, economic, technological processes. According to Clayton and Myers (2009, 181-182) environmental education seeks to affect "worldviews, attitude, and behavior". They also describe variety of methods that may be used in environmental education such as traditional courses, instructional units, supplement material, fieldtrips to community investigations (Volk & MacBeth 1998 cited in Clayton and Myers 2009).

Students at secondary school level should gain knowledge of the following understandings and concepts.

- Ecosystem: An ecosystem is defined as a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit. Fundamental concepts include the flow of energy via food chains and food webs, and the cycling of nutrients. The economic function of man becomes more significant than his other functions as it is more concerned with the functioning of ecosystem. thus the interaction of man through his economic function and hence as an environmental process, with natural environment and resultant human response to the environment is the fundamental concern of environmental education.
- **Greenhouse gas emissions:** Human activities are substantially increasing the atmospheric concentrations of a range of greenhouse gases. These include carbon dioxide, methane, ozone, nitrous oxide and chlorofluorocarbons.

- **Biodiversity:** Biodiversity is the variety of all life forms: the different plants, animals and micro-organisms, their genes and the ecosystems of which they are a part. The major threats to biodiversity are loss of native forests, introduced species, land clearing, absence of some representative ecosystems in national parks and other reserves and the lack of knowledge about our biodiversity.
- Sustainable Development: It aims at utilization of resources for development. The resources should be used ina wise manner. All resources are finite. Therefore efforts must be made to utilize the resources wisely and intelligently. Ecological protection involves proper handling of all resources, which the environment provides to avoid unnecessary depletion. Sustainability means to keep things going for a long time, considering the next and the next and the next generation. It means making sure that the environmental impacts of using those resources are kept within the earth's carrying capacity to assimilate those impacts.

It is important for teachers to recognise teaching and learning opportunities that arise from special events, days and programs, such as World Environment Day, and incorporate these into the curriculum. Focusing on the environment not only projects a positive image of the school's commitment to the environment but also provides the stimulus for creative environmental activities.

Challenges in Evironmental Education at Secondary School Level

- Lack of new trained and quality teachers.
- Lack of aspiration among teachers.
- Requirement of efficient teachers to change their methods of imparting the environmental concepts.
- Availability of less budgets than required.

The teachers' awareness of the goals and active participation is crucial to the entire process of curricular integration (Mellado, Ruiz, Bermejo, & Jiménez, 2006). The teacher has the duty of imparting knowledge to the children; this knowledge is reflected in effecting changes in values, behaviour and attitudes of the learner. To this end, teacher education must be accordant with an STS (science, technology, and society) model both pre- and in-service (Yetisir & Kaptan, 2008). Another important issue is the idea of developing criteria of quality for teacher education in order for teachers to gain competences in environmental education (Kyburz-Graber & Robottom, 1999).

Environmental education is essential for developing a healthy, sustainable society. Many current environmental problems are due to ignorance of basic ecological facts of life. To counteract this problem, well funded, scientifically accurate and carefully designed educational courses in schools are needed for an overall awareness of the students through learning basic natural resources so as to ensure that they will understand the value and importance of pollution control, resource conservation and wildlife habitat protection.

Scholars agree that environmental education has enormous influencing role in forming people's knowledge and attitude, and is highly practical in motivating to improve and protect environment. However, environmental education is limited in achieving its main goals by being institutionalized and disciplined within general education system.

Suggestions for the Improvement of Secondary School Environmental Education

• In order to help children grow in knowledge, values, attitudes and awareness relevant to environment, teacher is

expected to be not only dispenser of knowledge but also managers to teaching learning situations. Hence, it is essential to have strong effective policies and high quality of teachers must be actively pursued.

- Teacher must be effective, learning promoter and interactive. Teacher can motivate student for environmental education by telling them its importance in today's world.
- A teacher may organize field trips to zoos, national parks, bird sanctuary, etc.
- A teacher can use play way techniques to make them understand the significance of food chain and food web of ecological balance.

REFERENCES

- 1. Clayton, Susan, Myers Gene. 2009. Conservation Psychology. Understanding and promoting human care for nature. Wiley-Blackwell.
- Kyburz-Graber, R., Hart, P., & Robottom, I. (Eds.) (2006), Reflective Practice in Teacher Education. Bern: Peter Lang.
- Mellado, V., Ruiz, C., Bermejo, M^a. L., & Jiménez, R. (2006). Contributions from the Philosophy of Science to the Education of Science Teachers. Science & Education, 15 (5), 419-445.
- 4. Yetisir, M. I., & Kaptan, F. (2008). STS from a Historical Perspective and its Reflection on the Curricula in Turkey. International Journal of Environmental and Science Education, 3(1), 3-8.