

ENVIRONMENTAL EDUCATION- IMPORTANCE & SCOPE, AIMS & OBJECTIVES, CONCEPTS & PRINCIPLES

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ABSTRACT: *Environment is the sum total of conditions which influences the growth and development of living organisms. Education helps to develop the innate inner capacities of individuals. Environmental education helps individuals to develop knowledge about the environment, responsible environmental behaviour and skills so that they can improve the quality of the environment. The major objectives of environmental education are- awareness, knowledge, attitudes, skills, participation. Environmental education has a vast scope and importance in different disciplines such as environmental studies, environmental science, environmental engineering etc. So, Environmental education is noteworthy in all spheres of real life and education.*

Keywords: Environmental Education, Environment, Objective, Importance, Concept, Principles.

INTRODUCTION

The term "Environment" has been derived from a French word "Environia" means to surround. Environment is the sum total of conditions in which an organism has to survive or maintain its life process. It influences the growth and development of living organism. So, the term "environment" refers to all elements of the physical and biological world, as well as the interactions between them.

It consists of atmosphere, hydrosphere, lithosphere and biosphere. Environment can be roughly divided into two types such as (a) Micro environment and (b) Macro environment. It can also be divided into two other types such as (c) Physical and (d) Biotic environment.

(a) Micro environment means the immediate local surrounding of the organism.

(b) Macro environment means all the physical and biotic conditions that surround the organism externally.

(c) Physical environment refers to all abiotic factors or conditions like temperature, light, rainfall, soil, minerals etc. It comprises of atmosphere, lithosphere and hydrosphere.

(d) Biotic environment includes all biotic factors or living forms like plants, animals, Micro-organisms.

According to some learned people, the word "Education" has been derived from the Latin term "Educatum" which means the act of teaching or training. A group of educationists say that it has

come from another Latin word “Educare” which means “to bring up” or “to raise”. According to a few others, the word “Education” has originated from another Latin term “Educere” which means “to lead forth” or “to come out”. All these meanings indicate that education seeks to nourish the good qualities in man and draw out the best in every individual. Education seeks to develop the innate inner capacities of man. Education is the process of facilitating learning, or the acquisition of knowledge, skills, values, beliefs, and habits.

According to Rigveda: “Education is something which makes man self-reliant and selfless”.

Educational methods include teaching, training, storytelling, discussion and directed research. Education frequently takes place under the guidance of educators; however, learners can also educate themselves. Education can take place in formal or informal settings and any experience that has a formative effect on the way one thinks, feels, or acts may be considered educational. The methodology of teaching is called pedagogy.

Environmental Education (EE) is defined as education that helps individuals to become more knowledgeable about their environment and to develop responsible environmental behaviour and skills so that they can improve the quality of the environment. (UNESCO, 1978).

MEANING OF ENVIRONMENTAL EDUCATION:

Environment is derived from the French word “Environner”, which means encircle or surrounding. Environment is a complex of many variables, which surrounds man as well as the living organisms. Environmental education describe the interrelationships among organisms, the environment and all the factors, which influence life on earth, including atmospheric conditions, food chains, the water cycle etc. It is a basic science about our earth and its daily activities, and therefore, this science is important for everyone.

SCOPE OF ENVIRONMENTAL EDUCATION

Environmental education discipline has multiple and multilevel scopes. This study is important and necessary not only for children but also for everyone. The scopes are summarized as follows:

1. The study creates awareness among the people to know about various renewable and non-renewable resources of the region. The endowment or potential, patterns of utilization and the balance of various resources available for future use in the state of a country are analysed in the study.
2. It provides the knowledge about ecological systems and cause and effect relationships.
3. It provides necessary information about biodiversity richness and the potential dangers to the species of plants, animals and microorganisms in the environment.
4. The study enables one to understand the causes and consequences due to natural and induced disasters (flood, earthquake, landslide, cyclones etc) and pollutions and measures to minimize the effects.

5. It enables one to evaluate alternative responses to environmental issues before deciding an alternative course of action.
6. The study enables environmentally literate citizens (by knowing the environmental acts, rights, rules, legislations, etc.) to make appropriate judgments and decisions for the protection and improvement of the earth.
7. The study exposes the problems of over population, health, hygiene, etc. and the role of arts, science and technology in eliminating/ minimizing the evils from the society.
8. The study tries to identify and develop appropriate and indigenous eco-friendly skills and technologies to various environmental issues.
9. It teaches the citizens the need for sustainable utilization of resources as these resources are inherited from our ancestors to the younger generation without deteriorating their quality.
10. The study enables theoretical knowledge into practice and the multiple uses of environment.

The EPA (Environmental Protection Agency) has a following list of the components of what should be gained from environmental education (EE)-

- a) Awareness and sensitivity to the environment and environmental challenges.
- b) Knowledge and understanding of the environment and environmental challenges.
- c) Attitudes of concern for the environment and motivation to improve or maintain environmental quality.
- d) Skills to identify and help resolve environmental challenges.
- e) Participation in activities that lead to the resolution of environmental challenges.

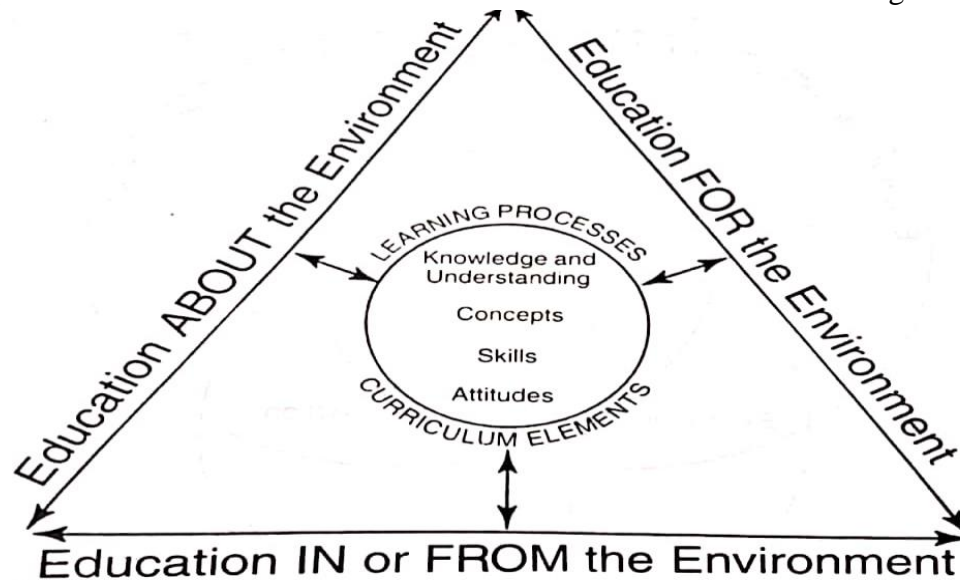


Fig 1- Model for teaching and learning in environmental education: components of the planning task

Newman (1981) proposed a three-fold classification of environmental education programmes based on different disciplines-

i) Environmental Studies

This is concerned with the environmental disturbance and minimization of their impacts through changes in the society (social sciences).

ii) Environmental Science

It deals with the study of the processes in water, air, soil and organisms which lead to pollution or environmental damage and to know a scientific basis for establishing a standard which can be considered acceptably clean, safe and healthy for human and the natural ecosystem (physical and natural science).

iii) Environmental Engineering

This is the study of the technical process which are used to minimize the pollution and the assessment of the impact of these on the environment (engineering sciences).

Environmental education helps to develop a sense of responsibility and solidarity among countries and regions as the foundation for a new international order which will guarantee the conservation and improvement of the environment. Environmental education has a vast scope and importance in this crisis period of environment and should cater to all ages and socio-professional groups in the population.

IMPORTANCE OF ENVIRONMENTAL EDUCATION:

1. World population is increasing at an alarming rate especially in developing countries.
2. The natural resources endowment in the earth is limited.
3. The methods and techniques of exploiting natural resources are advanced.
4. The resources are over-exploited and there is no foresight of leaving the resources to the future generations.
5. The unplanned exploitation of natural resources lead to pollution of all types and at all levels.
6. The pollution and degraded environment seriously affect the health of all living things on earth, including man.
7. The people should take a combined responsibility for the deteriorating environment and begin to take appropriate actions to save the earth.
8. Education and training are needed to save the biodiversity and species extinction.
9. The urban area, coupled with industries, is major sources of pollution.
10. The number and area extinct under protected area should be increased so that the wild life is protected at least in these sites.
11. The study enables the people to understand the complexities of the environment and need for the people to adapt appropriate activities and pursue sustainable development, which are harmonious with the environment.
12. The study motivates students to get involved in community action, and to participate in various environment and management projects.
13. It is a high time to reorient educational systems and curricula towards these needs.

14. Environmental education takes a multidisciplinary approach to the study of human interactions with the natural environment.

15. Environmental study is a key instrument for bringing about the changes in the knowledge, values, behaviors and lifestyles required to achieve sustainability and stability within and among countries.

AIMS OF ENVIRONMENTAL EDUCATION :

The world's first intergovernmental conference on environmental education was organized by the United Nations Education, Scientific, and Cultural Organization (UNESCO) in cooperation with the U.N. Environment Programme (UNEP) and was convened in Tbilisi, Georgia (USSR) from October 14-26, 1977.

According to Tbilisi Conference (1977), the goals of environmental education are:

- 1) To foster clear awareness of, and concern about, economic, social, political, and ecological interdependence in urban and rural areas;
- 2) To provide every person with opportunities to acquire the knowledge, values, attitudes, commitment, and skills needed to protect and improve the environment;
- 3) To create new patterns of behavior of individuals, groups, and society as a whole towards the environment.

THE OBJECTIVES OF ENVIRONMENTAL EDUCATION:

1. **Awareness** - To help social groups and individuals acquire an awareness and sensitivity to the total environment and its allied problems.
2. **Knowledge** - To help social groups and individuals gain a variety of experience in, and acquire a basic understanding of, the environment and its associated problems.
3. **Attitudes** - To help social groups and individuals acquire a set of values and feelings of concern for the environment and the motivation for actively participating in environmental improvement and protection.
4. **Skills and Capacity Building**- To help social groups and individuals acquire the skills for identifying and solving environmental problems.
5. **Participation** - To provide social groups and individuals with an opportunity to be actively involved at all levels in working toward resolution of environmental problems.

Environmental Information only provides facts or opinions about environmental issues. But environmental education increases public awareness and knowledge of environmental issues. Environmental education enhances individuals' critical-thinking, problem-solving and decision-making skills.

PRINCIPLES OF ENVIRONMENTAL EDUCATION :

1. Resource Principles:

- (a) Resource use demands long-term planning if we are to achieve truly sustainable development.
- (b) Rationale utilization of a renewable source is a sensible way of preserving the resources while obtaining maximum benefits from it.
- (c) A mode of life heavily dependent upon rapidly diminishing non-renewable energy sources (i.e. fossil fuel) is unstable.

2. Soil Principles:

- (a) The protection of soils and the maintenance of sustainable agriculture are essential factors into the survival of civilizations and settlements.
- (b) Soil erosion is the irreversible loss of essential resources and must be prevented.
- (c) A vegetation cover (grass, forest) is important for the balance of nature and for the conservation of soil, besides being exploitable natural resources.

3. Wildlife Protection Principles:

- (a) Wildlife population is important aesthetically, biologically and economically.
- (b) Nature reserves and other protected wilderness areas are of value in protecting endangered species because they preserve their habitats.
- (c) The survival of humanity is closely linked to the survival of wildlife both being dependent on the same life-supporting systems.

4. Environmental Management Principles:

- (a) Sound environmental management is beneficial to both man and environment.
- (b) Management of natural resources should be done in a rational manner.
- (c) Elimination of wastes through recycling and the development of clean. Technologies are important to modern societies to help reduce the consumption of resources.
- (d) Human activities and technologies influence considerably the natural environment and may affect its capacity to sustain life, including human life.

5. Other Principles:

- (a) The relations between humans and their environment are mediated by their culture i.e.
- (b) Cultural, historical and architectural heritage are much in need of protection.

CONCEPT OF ENVIRONMENTAL EDUCATION:

Any curriculum should be based on well-thought out and clearly defined concepts that one wishes the learner to acquire. Some important concepts of environmental education have interdisciplinary significance such as environmental pollution, carrying capacity, ecosystems, ecology, and conservation etc.

CONCLUSION

Environmental education refers to organized efforts to teach how natural environments function, and particularly, how human beings can manage behavior and ecosystems to live sustainably. It is a multi-disciplinary field integrating disciplines such as biology, chemistry, physics, ecology, earth science, atmospheric science, mathematics, and geography. The United Nations Educational, Scientific and Cultural Organization (UNESCO) states that environmental education is vital in imparting an inherent respect for nature amongst society and in enhancing public environmental awareness. UNESCO emphasizes the role of environmental education in safeguarding future global developments of societal quality of life (QOL), through the protection of the environment, eradication of poverty, minimization of inequalities and insurance of sustainable development (UNESCO, 2014a)

Environmental education should bring about a closer link between educational processes and real life, building its activities around the environmental problems that are faced by particular communities and focusing analysis on these by means of an interdisciplinary, comprehensive approach which will permit a proper understanding of environmental problems.

REFERENCES

1. <https://en.m.wikipedia.org/wiki/Education>
2. https://en.m.wikipedia.org/wiki/Environmental_education
3. <https://sites.duke.edu/eelandscape/round-i/tbilisi-goals-and-objectives/>
4. <https://www.epa.gov/education/what-environmental-education>
5. <https://www.gdrc.org/uem/ee/tbilisi.html>
6. <https://www.google.com/amp/s/m.jagranjosh.com/> general-knowledge/amp/meaning-of-Environment-1439558815-1
7. <https://www.preservearticles.com/> /education/meaning-and-definition-and-concept-of-education/4718
8. Santra, S. C. (2005). Environmental Science (2nd ed.). New Central Book Agency.
9. Sharma, P. D. (2005). Ecology and Environment (7th ed.). Rastogi Publication.
10. UNESCO. (1978). Final report, Intergovernmental Conference on Environmental Education, organized by UNESCO in cooperation with UNEP, Tbilisi, USSR, 14–26 October 1977. Paris: Author.
11. United Nations Educational, Scientific and Cultural Organization., 2014a. Ecological Sciences for Sustainable Development. [online] Available at: <http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/capacity-building-and-partnerships/educational-materials/>