



Need of Environmental Education in Teacher Education

NIHARIKA GAUTAM

Junior research fellow,

Department of Education

Sardar Patel University, V.V. Nagar, Anand

Gujarat (India)

Abstract:

Environmental education is important to trigger proactive participation of the teachers and the teacher educators in addressing, debating and protesting on significant environmental issues. This article describes the aims and objectives of environmental education, need and environmental educations, categorizes the environmental education, enlists different examples of formal as well as non-formal education, and discuss the importance of environmental education and teaches the awareness raising strategies.

Keywords: Education, Environmental education, Teacher educators

1. Introduction

As far as environmental education is concerned, there is a major deficiency in teacher education programmes both in-service as well as pre-service which gives a concurrent idea about both teacher education mingling up with environmental education. There are only a very few institutes in our country which prepares the teachers by providing the teacher training in environmental education along with the teacher education programmes. The main purpose of this paper is to arise the awareness strategies among the teacher educators.

The goal of environmental education is to develop a world population that is aware of and concerned about the environmental and its associated problems and who has the knowledge, skills, attitudes, motivation and commitments to work individually and collectively towards solution of current environmental problems and prevent the new ones.

2. Aims and Objectives

The aims and the objectives of the environmental education is to increase public awareness about environmental issues, as explore possible situations, and try to lay the foundations for a fully informed and active participation of individual in the protection of environment and the prudent and rational use of natural resources. The resolutions provide the following guiding principles for environmental education:

- The environment as a common heritage of mankind.
- The common duty of maintaining, protecting and improving the quality of environment, as a contribution to the protection of human health and safeguarding the ecological balance
- The need for a prudent and rational utilization of resources
- The way in which each individual can, by his own behaviour and action, contribute to the protection of environment.
- The long-term aims of environmental education are to improve management of environment and provide satisfactory solutions to environmental issues.
- Provide opportunities to acquire the knowledge, values, attitudes, commitments, and skills needed to protect and improve the environment.

- Encourage pupils to examine and interpret the environment from variety of perspectives- physical, geographical, biological, sociological, economical, political, technological, historical, and aesthetic and ethical.
- Arouse pupil's awareness and curiosity about the environment and encourage active participation in resolving environmental problems.
- Environmental education is closely linked to the other cross circular themes of other subject areas.

3. Categories of Environmental Education

There are two categories of environmental education:

3.1 Formal Environmental Education

- a) Formal Environmental Education: It is imparted at the school levels. It mandates that environmental components are covered in the school curriculum at various levels.
- b) Environmental Appreciation Course(Distance Education): The aim of this programme is to provide interested person an opportunity to learn in detail about specific environmental issues occurring in the surrounded area.
- c) IGNOU: India Gandhi National Open University through distance education mode provides under graduate degrees.
- d) Environmental Concepts in Management and Business Studies: The central Ministry of HRD, Government of India, 2002 integrated environmental concepts and issues in the syllabi of Management and Business Studies.

3.2 Non-Formal Environmental Education

- e) Eco Clubs
- f) The National Green Corps
- g) Population Education Programme
- h) Environmental Campaigns
- i) Globe
- j) Green Olympiad
- k) Seminars, Symposia, Workshops, Public meetings, camps, exhibitions, Puppet shows and street theatres

3.2.1 Importance

Sustenance of "Nature" that is the key to the development of future of mankind. It is the duty and responsibility of each one of us to protect the nature. It is here that the understanding of the "Environment" comes into the picture. The degradation of the environment is linked with developmental process and ignorance of people about retaining the ecological balance. Indeed, no citizen of the earth can afford to remain aloof from the issues related to the environment. It is therefore essential that the study of the environment becomes an integral part of the education process.

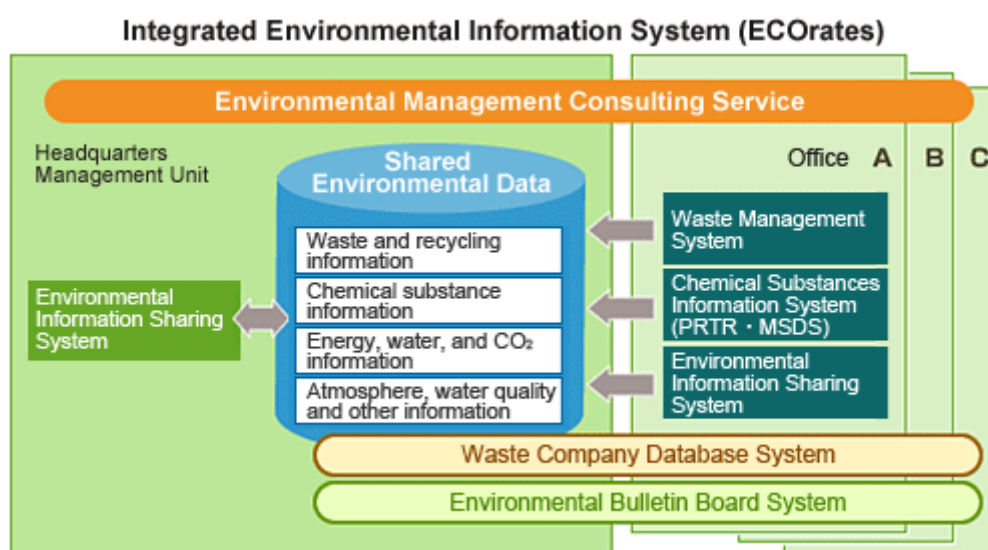
3.2.2 Awareness Raising Strategies

The Ministry of Environment and Forest(MOEF), Government of India started National Environment Awareness Campaign (NEAC) in 1986with the aim of creating environmental awareness at all the levels of society. Under NEAC the ministry provides financial assistance to select non-government organizations i.e. NGOs, Education and Training Institutes, Community Organizations to create massive awareness among citizens of India including Teacher Education.

3.2.3 Environmental Information System

Environmental Information System (ENVIS), by providing scientific, technical and semi-technical information on various environmental issues since its inception in 1982-83 (Sixth Plan), has served the interests of policy formulation and environment management at all levels of Government as well

as decision-making aimed at environmental protection and its improvement for sustaining good quality of life of all living beings. The purpose has been to ensure integration of national efforts in web-enabled environmental information collection, collation, storage, retrieval and dissemination to all concerned, including policy planners, decision-makers, researchers, scientists and the public.



3.2.4 The long-term objectives of the Scheme

- To build up a repository and dissemination Centre in environmental science and engineering.
- To gear up state-of-art technologies of information acquisition, processing, storage, retrieval and dissemination of environmental nature.
- To support and promote research, development and innovation in environmental information technology.
- Its short-term objectives are as follows:
- To provide national environmental information service relevant to present needs and capable of meeting the future needs of the users, originators, processors and disseminators of information.
- To build up storage, retrieval and dissemination capabilities, with the ultimate objective of disseminating information speedily to the users.
- To promote national and international cooperation and liaison for exchange of environment-related information.
- To promote, support and assist education and personnel training programmes designed to enhance environmental information processing and utilizing capabilities.
- To promote and exchange of environment-related information amongst developing countries.

3. Museum of National History

4. Eco-Clubs in Schools

Eco Clubs play an important role in creating environmental awareness amongst the future generation. 2000 Eco-Clubs have been established in Government, Aided, Private, Public Schools and Colleges of NCT of Delhi. Department of Environment provides increased token grant @Rs. 20,000/- to each Eco Club School/College for undertaking various Eco-friendly activities.

The activities under this scheme includes:

- ✓ Motivate the students to keep their surroundings green and clean by undertaking plantation of trees.
- ✓ Promote ethos of conservation of water by minimizing the use of water.
- ✓ Motivate students to imbibe habits and life style for minimum waste generation,

source separation of waste and disposing the waste to the nearest storage point.

- ✓ Educate students to create awareness amongst public and sanitary workers, so as to stop the indiscriminate burning of waste which causes respiratory diseases.
- ✓ Sensitize the students to minimize the use of plastic bags, not to throw them in public places as they choke drains and sewers, cause water logging and provide breeding ground for mosquitoes.
- ✓ Organize tree plantation programmes, awareness programmes such as Quiz, essay, painting competitions, rallies, nukkad natak etc. regarding various environmental issues and educate children about re-use of waste material & preparation of products out of waste
- ✓ Organize Nature Trail in Wild Life Sanctuaries/Parks/Forest areas to know about the Bio-diversity

5. Use of mass media

6. IT/Websites

References

1. Andrews, William A. Contours: studies of the environment. Englewood Cliffs, New Jersey, Prentice-Hall, Inc., 1974. In 4 volumes with teacher's guide as follows: (1) Environmental Pollution, (2) Freshwater Ecology, (3) Soil Ecology, and (4) Terrestrial Ecology.
2. Benton, Allen H.; Werner, William E., Jr. Field biology and ecology. New York, McGraw-Hill Book Co., 1978. 564 p.
3. Biological science: an ecological approach - BSCS green version biology. Chicago, Rand McNally and Co., 1978. 782 p.
4. Fowler, John M. Energy-environment source book. Washington D.C., National Science Teachers Association, 1975. 279 p.
5. Gregory, George Peter. Environmental concerns: the nation. New York, Harcourt Brace Jovanovich, Inc., 1977. 122 p.
6. Hungerford, H. R.; Peyton, R. B. Basic concepts in ecology. (An unpublished instructional document). Southern Illinois University, Carbondale, Illinois, 1978.
7. Hungerford, H. R. et al. Investigation and action skills for environmental problem solving. Champaign, Illinois, Stipes Publishing Company, 1978. 166 p.
8. Moran, Joseph M.; Morgan, Michael D.; Wiersma, James H. An introduction to environmental sciences. Boston, Little, Brown and Company, 1973. 389 p.
9. Odum, Eugene P. Ecology. New York, Holt, Rinehart, and Winston, 1975. 244 p.
10. Smith, Robert Leo. Ecology and field biology. New York, Harper and Row, Publishers, 1974. 850 p.
11. Smith, Robert Leo (ed.). The ecology of man: an ecosystem approach. New York, Harper and Row, 1976. 399 p. Tomera, Audrey N. Understanding basic ecological concepts: a work text Portland, Maine, J. Weston Watch, Publishers, 1979. 135 p.
12. Turk, Amos; Turk, Jonathan; Wittes, Janet. Ecology, pollution, environment. Philadelphia, B. Saunders Company, 1972. 217 p. Turk, Jonathan; Wittes, Janet; Wittes, Robert;
13. Turk, Amos. Ecosystems, energy, pollution. Philadelphia, Pennsylvania, W.B. Saunders Company, 1975. 296 p.
14. Udall, S. L. The quiet crisis. New York, New York, Holt, Rinehart and Winston, 1963. 209 p.
15. <http://envfor.nic.in/division/environmental-information-system-envis>
16. <http://www.mitsubishielectric.com/company/environment/policy/product/communications/envinfo/index.html>
17. <http://www.delhi.gov.in/wps/wcm/connect/Environment/environment/plan+schemes/eco+clubs+in+schools+and+colleges/eco+clubs+in+schools+and+colleges>