Environmental education, as a means of developing the sense of responsibility and solidarity among the school children

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Abstract
Environmentalism is an attempt to balance relations between humans and the various natural systems on which they depend in such a way that all the components are accorded a proper degree of sustainability. It denotes a social moment that seeks to influence awareness among the students by lobbying, activism and education in order to protect natural resources and ecosystems. It is a process of providing learning experiences to obtain knowledge, understanding, skills and awareness with desirable attitudinal changes about man’s relationship with his natural and man-made surroundings which includes the relation of population, pollution, resource allocation, transportation technology, urban and rural planning to the total human environment.

Environmental education involves an intricate process where stakeholder may start of as being passive observer of what is going on within their surrounding environment, but as transformed into taking responsibility and action for its protection. For this to happen, one must be able to see the link between the issue at hand and oneself – this is why the education is an indispensable tool for environmental protection. It is a cognitive process that involves a delicate mixture of a number components, including information, emotion, empathy and the ability, and courage to apply critical thinking. Thus the present qualitative paper, will focus on the major role played by environmental education, in the lives of the school going children.

Keywords: Environmental education, responsibility, solidarity, sustainability, human environment

1. Introduction
The chief concern of all educationists is with the environment of man, but man cannot exist or live in isolation from other forms of life and also from plant life. So educationists should be concerned with the environment of all biological population. The term ‘environment’ is derived from the French word ‘Environner’ which means ‘to encircle’ or ‘to surround’. It can be defined as the circumstances or conditions that surround an organism or group of organisms or the complex of social or cultural conditions that affect an individual or community. Environment is defined more comprehensively by others as a holistic view of the world as it functions at any point of time, with a multitude of spatial elements and socio-economic systems distinguished by equality and attributes of space and mode of behavior of physical and biological forms.

Environmental education refers to an organized effort to teach about how natural environment functions and particularly, how human being can manage their behavior and ecosystem in order to live sustainably. It is multi-disciplinary field integrating disciplines such as biology, chemistry, physics, ecology, earth science, atmospheric science, mathematics and geography. The term is often used to imply education within the school system, from primary to post - secondary. However, it is sometimes used more broadly to include all efforts to educate the public and other audiences, including print materials, websites, media campaigns etc.
The United Nations Educational Scientific and Cultural Organization (UNESCO) state that EE is vital in imparting an inherent respect for nature amongst society and in enhancing public environmental awareness. UNESCO emphasizes the role of EE in safeguarding future global development of society quality of life (QOL), through the protection of the environment education of protection of the environment, eradication of poverty, minimization of inequalities and insurance of sustainable development (UNESCO).

1.2 Need and importance of the study
It is only through taking a holistic approach to environmental education that one can be assisted in developing the critical thinking skills that will enable to overcome these obstacles and to understand and apply knowledge. Indeed, education is a power tool and each and every one of this educational fore must bear responsibility for the role the play in forming opinions and facilitating, or hindering, the individual understands of environmental issues. This responsibility is not significant, yet it is often overlooked, and it is time that this state of affairs is changed to ensure that the potential to bring about positive change becomes a tangible reality. The admittedly ambitious aim of bringing about change to safeguard the environment can only be achieved if different players within society actually come to understand why they should take on such responsibility.

It is generally recognized that knowledge is the first step towards protection of the environment. Programmes on environment develop a sense of responsibility and solidarity which will guarantee the conservation and improvement of the environment. However, this educational process need not take place within the confines of the classroom. There are in fact three main sectors involved-

![Fig 1](image)

| formal educational institutional | such as the University, primary and secondary school |
| informal institutions | media |
| non formal institutions | such as nongovernmental organisations |

1.3 Objectives of the study
The primary objectives of the present study are:
1. To study the importance of environmental education.
2. To assess the sense of environment awareness and basic knowledge among the students.

1.4 Theoretical framework
It is now generally recognized that knowledge is the first step towards protection of the environment and so attempts are made to explore ways to sensitize our young, citizens about our environment. Several programmes to develop a sense of responsibility and solidarity which will guarantee the conservation and improvement of the environment were undertaken especially in developed countries. In the developing and third world countries such programmes are comparatively limited for want of sufficient environment-related research studies. The investigator likes to review the literature and studies with a view to ascertaining whether environmental education in study would be a base for the research in environmental problems that India is facing today.

The environmental/ecological education includes different aspects such as:
The investigator is concentrating in this literature review on that aspect of environmental education which is directly relevant and necessary.

1.5 Environmental education: Features

- concerns the interconnectedness between human and natural systems
- views the environment in its entity encourages participation in the learning process
- uses a broad range of teaching and learning techniques with stress on
- emphasizes active responsibility
- practical activities and first-hand experience
- is concerned with building an environmental ethic
- is an approach to education as a whole, rather than a subject

1.6 Environment-linked curriculum

The significant international endorsement of environmental education over the past 20 years or so has inevitably helped to shape the aims, objectives and planning of this curriculum area within schools and local educational authority in UK. Environmental education has been well established in the curriculum map of schools for some three decades. Local authorities, National organizations and individual schools and teachers have done a tremendous effort to promote its importance and to develop effective teaching and learning strategies. Palmer (1991) points out that in the National Curriculum of England, environmental education is reflected in the content of some subjects, notably Science and Geography, and he is of the opinion that because it is a cross curricular theme, it should be included both as a starting point and as unifying element. It should emphasize skills such as problem solving, study and communication skills, which are fundamental to environmental education, and are central to all subjects of the national curriculum. Environmental education is, thereby, ideally suited to be taught as a cross curricular theme, rather than as an individual subjects. Curriculum developers should attempt to link the curriculum of secondary education to the local environment and make it relevant to the community at large. (Palamar, 1995)

1.7 Out-of classroom Activities as Learning Experience

Rousseau the great philosopher (1712-1778) described in his book Emile, the methods of bringing the child in contact with nature and he stresses the importance of teaching the child in a natural environment. The child should be left to learn naturally. He learns in the contact of plants, animals, birds and natural objects. Palmer & Neal (1994) believe that there is no single right or wrong way to approach the
teaching and learning of environment in schools and whatever approach or combination of approaches is utilized, it is however, essential that firsthand experience of the environment are at the forefront of teaching and learning. Therefore, it is apparent that environmental education is based on as much firsthand experience as possible so that the idea of moving out of the confines of the traditional classroom is one well rooted in the environmental approach. The most valuable resource available to all schools is the environment itself and immediate neighborhood will provide ample opportunities for activities to observe record, analyze and interpret their own investigations. The most effective education about the biodiversity is often not transmitting new information, but rather fostering appreciation of what is already known, practical knowledge about biodiversity, its local use and ways to manage sustainably. An activity may be conceived under each head separately or under several heads at a time. For example, a biodiversity problem could be presented to students in the form of a moral dilemma, thus linking it with the social sciences. The teacher's role would be to present the problem and explain the dilemma to the students who individually, in small groups and all together would react through individual reasoning, group discussions and evaluation. The teacher would encourage students to experience personal conflict in the dilemma and to facilitate discussions which allow students to apply and evaluate their own levels of reasoning. At the close of the activity the teacher could amplify the particular problems used and link it with other wider issues Blum (1982) evaluated an environmental studies curriculum in terms of student perceptions of course usefulness for achieving various goals. Results were interpreted as evidence that all inquiry-oriented curriculums can have a positive effect on student's perception of the usefulness of school subjects. UNESCO, (1975) The United Nations Environmental Program (UNEP) in 1975 at the International Workshop on Environmental Education held in Belgrade charter) listed aims, objectives, key concepts and guiding principles of the environmental education programme. The comprehensive set of objectives for environmental education prepared at Belgrade are summarized as follows.
1. To foster clear awareness of and concern about economic, social, political, 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.

2. Conclusion
The basic aim of environmental education is clearly to show the social economic, political and ecological interdependence of the modern world in which decisions and actions by different countries can have international repercussions. Environmental Education is a process by which people develop awareness, concern and knowledge of the environment and learn to use this understanding to preserve, conserve and utilize the environment in a sustainable manner for the benefit of present and future generations. It entitles the will to take personal initiatives and social participation to achieve sustainability. It is intended for all types of learners, students, out-of-school youth, community leaders, policy makers and the general public to develop appropriate environmental-related skills.

Environmental education should in this regard help 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 is concerned with those aspects of human behavior, which are more directly related to man's interaction with the bio-physical environment, and his ability to understand these interactions.

3. References