Environmental Education And Its Importance In School Curriculum Rashidi Roquyiya¹

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<u>Abstract</u>

Environmental education (EE) is a process that helps people become more conscious of their surroundings and learn the knowledge, skills, attitudes, experiences, and motivation necessary to take action, both individually and as a group, to address current and future environmental issues. Through the process of environmental education, people can learn about environmental problems, solve them, and take steps to protect the environment. People have a deeper grasp of environmental issues as a result, and they are more equipped to make wise choices. It also teaches people to consider all sides of a situation in order to act responsibly. Environmental education does not promote any one idea or strategy over another. It promotes positive attitudes, skills of management, awareness about environment, its proper utilization, and maintenance of peaceful, healthy and green environment. This paper presents the goals of environmental education, its importance for school education and status of environmental education in school curriculum.

Keywords:- Environmental Education, School Curriculum, Knowledge, Skill, Attitude, Status.

Introduction

Environmental education is a process of learning that broadens people's knowledge and awareness of the environment and the problems it faces, develops the skills and knowledge needed to deal with those problems, and nurtures attitudes, motivations, and commitments to make wise decisions and take responsible action (UNESCO, Tbilisi Declaration, 1978).

The goal of environmental education is to create a populace that is knowledgeable about the biophysical environment and the challenges it faces, aware of how to contribute to their solution, and inspired to do so. *Stapp, W.B., and others (1969)*. When correctly understood, environmental education should be a complete, lifelong education that adapts to a world that is changing quickly. It should equip the student with the knowledge of the world's most pressing issues as well as the abilities and qualities necessary to contribute positively to the improvement of human existence and the preservation of the environment while taking ethical principles into consideration.

Elements of Environmental Education:

The basic elements of Environmental Education are:

- Sensitivity to Environmental issues and Environmental Awareness
- Knowledge of the environment, including Environmental Challenges.
- Concern for the environment and a desire to maintain or improve Environmental Quality
- Abilities to recognise and address Environmental Issues
- Taking part in actions that help to solve Environmental Problems

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• Environmental education does not promote any one idea or strategy over another. Instead, environmental education teaches people to consider all sides of an issue.

Environmental Education's Goals and Objectives are as follows:

Environmental Education seeks to raise public knowledge of environmental problems, investigate potential solutions, and create the groundwork for informed, active participation on the part of individuals in environmental protection and the wise and responsible use of natural resources. The following guidelines for environmental education are provided by the resolutions:

- The environment as a shared human legacy.
- The shared responsibility of upholding, preserving, and enhancing environmental quality in order to contribute to the preservation of human health and the ecological balance;
- The requirement for the cautious and deliberate use of resources;
- How each person can help protect the environment by his or her own conduct and action
- Environmental education's long-term goals are to enhance environmental management and offer adequate responses to environmental problems.
- Give people the chance to learn the skills, information, and values necessary to safeguard and enhance the environment.
- Encourage students to look at and analyse the environment from a number of viewpoints, including the physical, geographical, biological, social, economic, political, technological, historical, aesthetic, and ethical ones.
- Encourage active participation in tackling environmental issues and raise students' understanding and curiosity about the environment.
- There is a strong connection between environmental education and the other cross-cutting themes found in other subject areas.

It is crucial to achieve the following objectives in terms of knowledge, skill, and attitudes in order to effectively implement environmental education.

Knowledge:

People should acquire information and comprehension of environmental issues so they may make educated decisions regarding the environment.

- The environmental natural processes that occur.
- How human activity affects the environment.
- The comparison of various historical and contemporary contexts.
- Concerns with the environment, such as the greenhouse effect, air pollution and acid rain.
- Legal measures at the local, state, and international levels to manage and protect the environment;
- The process by which environmental policies and choices are made.
- How the environment affects human existence and livelihood.
- Conflicts that may occur around environmental concerns like the sharing of river water.
- How previous choices and deeds have affected the environment.
- The significance of forethought, design, and aesthetic consideration.
- The importance of effective action to protect and manage the environment.

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Skills:

There are six cross-curricular competencies that have been identified as essential for environmental education.

They include:

- Effective communication.
- Knowledge of problems.
- Study techniques.
- Ability to solve problems.
- Individual talents.
- Information technology and social skills.

Attitudes:

If educators want their students to cherish the environment and recognise their responsibility in preserving it for future generations, they must actively encourage favourable environmental attitudes. Supporting the growth of the attitudes and character traits indicated below will aid in the process.

- An appreciation for environmental protection and concern.
- An interest in other earthly life.
- Attitude towards improved health and well-being.
- Unbiased analysis of environmental issues.
- Respect for the opinions of others.
- Deference to evidence and logical argument.
- Capacity to accept the opinions of others.

Recommendations on Curricular Framework of Environmental Education

- It envisages the place of EE in the school curriculum.
- Place of EE vis-à-vis other subjects of study.
- Mode and strategy of inclusion of chapters at different levels.
- EE in terms of time and allocation of marks.
- Development of syllabi and instructional material for dissemination at different levels of school education.

The organized global efforts started with the First United Nations Conference on Human

Environment opened at Stockholm in June 1972. Consequently, United Nations Environmental Programme (UNEP) was formed and International Programme in Environmental Education (IEEP) was launched by UNESCO and UNEP in January 1975. Environmental Education became centre of focus of environmental and educational movement after the Inter-Governmental Conference on Environmental Education held at Tbilisi in 1977. The world conservation strategy (1980) was drawn up by the IUCN, UNEP and the WWF In collaboration with UNESCO and FAO. Another important document 'North-South – A

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Programme for Survival" The Report of the Independent Commission on International Development Issues (Brundtland 1987) had great impact on environmental Education globally. The Agenda 21, the report of the United Nations Conference on Environment and

Development (UNCED) held in Rio-de-Janeiro, Brazil (1992) calls upon the member states to raise public awareness and intensify education and training related to environment and development. In India, taking initiative from Stockholm summit 1972, it incorporated environmental concern in the constitution through 42nd Amendment in 1976. Environment has become a priority in policy statements, Planes and Strategies especially after 1980. As most of the environmental problems are development induced as well as unavoidable consequences of livelihood extraction, a lot of phenomena are quite contradictory to the EE we

impart in schools. There are certain situations to which we just cannot say "no" instead of the fact that though we know the potential harmful effect of the activity. Thus, a new paradigm of development and environment has to be the order of the day.

Since 1930, India's educational system has included some environmental topics in its curricula. The Kothari commission (1964-66) also advocated that EE should a part of basic education and be connected to people's needs and aspirations for a better life. The report advised that "the primary schools' goals of teaching science should be to develop proper comprehension of the key facts, concepts, principles, and processes in physical and biological environment" at the primary level. A serious thought about EE in schools started after the National Council of Education Research and Training (NCERT) circulated its Discussion Document (2000) inviting comments from concerned agencies. It was revealed that the document was miserably lacking environmental concern at school curricula. Towards the end of the last century four major reviews of EE in the country were published by Centre for Environment Education (CEE 1998), C.P.R. Environmental Education Centre (CPREEC 1999), TheNational Curriculum for Elementary and Secondary Education — A Framework formulated in 1988 (NCERT; 1988) marked the first concerted and systematic effort to bring EE into the school curriculum. This took an "infusion" of environmental concerns and a whole range of environmental concerns were infused into the NCERT model test books published between 1987 and 1989 (NCERT 1987-89)

The First Consultation on the Academic Aspects of Environmental Education (EE) in Schools in New Delhi was organized by NCERT on February 13 and 14, 2004. At the conference were seventy people: teacher educators, principals of teacher training colleges, prominent non-governmental organizations (NGOs), NCER, senior academics working in departments or centres of environmental studies, environmental science, environmental ecology, botany, regional development, geography, marine biology, etc. at different universities; distinguished scientists; environmentalists; officials of federal and state governments with environmental responsibilities; and soon. A second consultation regarding the implementation of EE in schools took place on March 13, 2004. Attending the meeting were 72 representatives, including state directors of education, presidents/chairpersons of school boards/councils, directors of state councils for educational research and training (SCERTs), and notable scientists, environmentalists, and NCERT professors. In response to comments, the first draft that NCERT academics wrote and presented during the First Consultation was revised. The Second Consultation received comments on this revised version as well as recommendations for further enhancements. During these Consultations, a range of topics were covered through group interaction, open house talks, plenary presentations, and consolidation of recommendations.

Different approaches were taken to environmental education at the primary, secondary, and upper secondary levels. Every student's education must include environmental education. It aids in promoting environmental awareness, which results in informed concern primary, secondary, higher secondary levels was treated in a different way. Environmental education is an essential part of every pupil's learning. It helps to encourage awareness of the environment, leading to informed concern for active participation in resolving environmental problems.

It was agreed to do two inperson national consultations on environmental education in schools to enh ance the analysis of individual and institutional consultations. It was swiftly implemented as an EVS subject beginning in class 1 so that young minds would be raised with the proper attitudes toward the environment. It is crucial that we seize this zeal and make the most of every chance to promote environmental awareness, knowledge, and care in the classroom. The curriculum-based, cross-curricular effort to promote environmental education should also be enjoyable for the student. In this regard, NCERT has released a book titled "Joy of the Environment" in association with the Centre for Environmental Education, Ahmedabad with lots of environmental activities, a handbook for teachers. Similar to this, a number of workshops were held to introduce educators from the state boards and school personnel to various facets of environmental education. In these discussions, specific implementation strategies for EE in schools were covered in detail.

The National Education Policy (NEP), India's first Education Policy for the twenty-first century, was presented in 2020. With a focus on education for sustainable development, the NEP is introduced. India's entire educational system needs to be reorganized if the country is to reach the set goals and targets, according to NEP. Higher educated people are usually more concerned about the environment and engage in activism to support and advance laws that protect the environment on a governmental level. Applying this kind of pressure is crucial to persuading states to come to the legally-binding accords necessary to control emissions. This feature makes the case for India's need for an environment education system that is both structured and dynamic even stronger.

Another notable effort by the Indian government to promote environmental education is the National Green Corps (NGC) program. Its primary goal is to give school children materials to learn about sustainable development and conservation, as well as to educate them about environmental challenges. Through the NGC program, students can become more environmentally conscious and inspired to take action to protect natural resources.

The Status of Environmental Education in School Curriculum

EE is imparted as EVS, which forms a common component of syllabus, prescribed by the States and CBSE. In Karnataka textbooks and workbooks from classes I to IV, environmental studies are in use. The textbooks for environmental studies which are prepared by N.C.E.R.T has taken cross curricular approach to teaching environmental concepts through language, mathematics about the environment. In classes I and II there is no separate EVS book. For classes III and IV, EVS textbooks are available. EE has been further reinforced under the art of healthy and productive living (AHPL) for which a single teacher's handbook has been developed for classes I to V. The textbooks lay emphasis on raising awareness levels and sensitising children about environmental concerns. Emphasis has also been laid

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on the need to organise learning in local specific contexts, which will provide more meaningful experiences to children. Aspects of indigenous knowledge have also been introduced. There are references and suggestions for conducting activities in and outside the classroom. The NCERT textbooks for environmental studies generally take a comprehensive view of the natural, physical, social and cultural environment.

The contents of textbooks present an extension and elaboration of the concepts introduced at the primary stage. The textbooks in Classes VI-VIII and in Classes contain environmental concepts by and large in the textbooks of science and social science. The textbooks of class V in the subjects of science, social science and language have environmental ideas infused with these subjects. The state of Uttar Pradesh deals with the environmental concepts and concerns in its textbooks for science and geography. These are also included in a single textbook of history and civics. The NCERT textbooks of 'Science' and 'Social Science' have incorporated such concepts in the textbooks. While most of the areas of EE have generally been covered, there is a need for the inclusion of more individual and group activities and project work in order to promote both the effective and cognitive domains of learning. Co-scholastic activities including organisation of plays, cultural programs, debates, mock parliament, discussions and community activities may help further in achieving the objective.

The concepts of EE have been provided in the textbooks of science and social sciences in the states of few states. There are textbooks, namely science part-I (physical science), Science part-II (biological sciences) and geography. The environmental concepts both are at concrete and abstract levels. The concepts covered are: This is the stage of diversification. Students opt for either the academic stream or the vocational stream. The treatment of concepts becomes deeper and more discipline oriented since the content caters to the demands of the concerned subject, as an independent discipline a comprehensive view about EE is not available in the textbooks. Majority of the concepts are found in the textbooks of biology, chemistry and geography, which are optional subjects. Students opting for any one of these subjects would accordingly benefit in different aspects of EE.

Conclusion-

Though there has been a long history of EE component in our school curriculum; it has always been treated as secondary to other scholastic areas like sciences, social-sciences, mathematics, etc. The first aggressive thrust for EE at school level came in NCF 1986 and the document, Plan of Action, 1992. Environmental issues, environmental concerns and conservation were identified as core areas in the curriculum. Although, many state boards and CBSE emphasised the need to educate children about our environment, there was very little perceptible change in our approach to EE transaction. NCF-2000 & NCF 2005 has laid enormous emphasis on EE to the extent that it is projected as of grave concern in school curriculum that is as important as other school subjects. There has been an eternal debate on the mode of EE treatment in schools. While a few curriculum planners advocate an infusion model others insist on transaction EE as a separate subject in the schools. There are arguments and counter arguments with regard to both schools of thought. What is of greater importance is how EE is taught? What are the transactional strategies that have to be followed to make it effective so that it sensitises and motivates desirable action by the students. In this direction, orienting teachers, designing suitable, pragmatic activities that are regional and local specific are the urgent need. In this exercise, NCERT has initiated several levels of interaction with various educational functionaries such as administrators,

curriculum planners, teacher educators and teachers. A national level core team and regional level teams are conducting orientation programs, preparation of training manuals in EE collaborating with state boards to promote in the respective states. These efforts have to be vastly enhanced in order to bring about a level of awareness and action that will help conserving and improving the quality of our environment.

The attainment targets and programs and activities of study for science present opportunities for learning about environment through science, geography, civics, and social environmental aspects can be understood to a great extent. For example, energy sources, the process of life and the effect of human activity on the environment. The natural resources & conservation. Education for the EE is concerned with children persecutes like: Children should study aspects of their local environment, which have been affected by human activity. These may include, for example, farming, industry, and sewage disposal, mining or quarrying. Where ever possible this should be by first-hand observation, but secondary school, curriculum has some of the significant activities related to it, where highlighted. The range and origin of any raw materials, waste disposal procedures are some of the practical solutions to keep the environment clean, the theoretical inputs and solutions should have an appreciation so that when they become citizens, they can use specific design and technology Collins 1980, required to keep the "Environments" i.e., related to the outside world. These are home, school, parks, community places, business places and so on. History as a core curricular theme also can explain about details of contributions to environmental education. History helps pupils to appreciate how the environment has been shaped by human activity as well as natural change. Pupils can also apply historical skills to interpret written sources and physical remains, which gave dues to long-term changes in the environment.

References:-

1. G.V. and Anand V.V. Environmental Education in School Curriculum An Overall Perspective. Retrieved from

http://wgbis.ces.iisc.ernet.in/biodiversity/sahyadri_enews/newsletter/issue22/art5.htm.

- 2. Hari. Srinivas, *Defining Environmental Education*, retrieved from https://www.gdrc.org/uem/ee/1-1.html
- 3. NCERT 1986, National Policy on Education, Aurobindo Marg, New Delhi.
- 4. NCCI 1990. *National Curriculum Council, Environmental Education* 7 (Seven) Curriculum guidance book 1SBN-18772676251 NCC, Albion, Wharf .25.SK eldergate, yorky012xl.
- 5. NCERT 1992, Plan of Action, Aurobindo Marg, and New Delhi.
- 6. NCERT 2005, *National Curriculum Frame work*, NCERT edition, Aurobindo Marg, New Delhi. **Gopal.**
- 7. *Stapp*, *W.B.*, *et al.* (1969), *Defining Envvironmental Education* retrieved from https://www.gdrc.org/uem/ee/1-1.html
- 8. UNESCO (1978). Tbilisi declaration. Connect, III, 1-8 retrieved from https://www.scirp.org