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ENVIRONMENTAL EDUCATION- INITIATIVES AND EFFORTS

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ABSTRACT

Environmental Education is an important educational concern. This study deals with initiatives and efforts to protect environment and environmental Education for school students. Environmentalists have taken a very strong position after the United Nations Conference on Human Environment at Stockholm in 1972, which was a major event for those concerned with the quality of world's environment. Environmental Education is a way of implementing the goals of environmental protection. Environmental Education is not a separate branch of science or subject of study but should be carried out according to principle of lifelong integrated education. National Environmental Awareness Campaign (NEAC, 2000-2001), started in 1986 for creating environmental awareness at all levels of society. A comprehensive multi-dimensional and multidisciplinary approach is adopted within the main objective of environment as 'medium of instruction'.

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INTRODUCTION

Environment is the aggregate of all the conditions that support living things. In turn, living things, including humans, are all interactive parts of the environment. The environment consists of both natural and human-made systems. The state of the natural environment ultimately determines the quality and survival of life on Earth. Education in its traditional form is not sufficient to meet the immense challenges posed by the phenomenon of unsustainable living. New educational approaches are required to achieve necessary changes in the lifestyles and to be successful in combating waste in developing a new ecological vision and in fostering a sense of global solidarity (Mayor, 1997). Environmentalists have taken up environmental protection aspects in a serious way. They have taken a very strong position after the United Nations Conference on Human Environment at Stockholm in 1972, which was a major event for those concerned with the quality of world's environment. One of the major recommendations of the Conference resulted in the creation of United Nations Environmental Programme (UNEP). Many educationists and environmentalists have stressed on the environmental literacy for all (Knimiller, 1983). Environment has now become the concern of all; the academicians, intellectuals, scientists, policy makers and government across the continents (NCERT, 2000).

Widespread and systematic concern for environmental issues has grown the world over particularly after the 1960s. The UN World conference on the environment in Stockholm in 1972, the Earth Summit held in Rio de Janeiro in 1992, the Global Forum, 1992 and the activities organized by the International NGO Forum show that Environment is on the agenda of the International community.

Environment is defined as a surrounding of conditions influencing development or growth. It can be understood as a system which includes all living and non-living things; i.e., air, water, soil, vegetation, flora and fauna. Man is a slave of environment. The child may have all kinds of abilities but they cannot be developed fully without a proper environment. Environment starts influencing the child from the stage of embryo. This influence has been called 'Social Heredity' (Altman, 1975). The developing countries need abundant material growth to fulfill the basic needs of their people, but they cannot afford to repeat the mistakes of industrial countries (Shukhla and Sharma, 2001). Decades ago, when environment was not a buzz word, Mahatma Gandhi said, "The earth provides enough to satisfy everyman's needs, but not everyman's greed" (Malhotra, 1987). The relationship between environment and humankind is indeed deep and has recognized from the Vedic period. Environment protection starts by creating awareness among the people so that it becomes part of their lifestyle. The key to achieving this goal lies in environmental education and its related program.

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According to UNESCO (1977) there are main five objectives of environmental education (Sahu, 2004). These objectives are as follows:

- (i) Awareness- to develop awareness and interest among the pupils about environment and its protection.
- (ii) Knowledge- to impart basic knowledge of environment and its associated problems.
- (iii) Attitude- to inculcate positive attitudes, feelings towards environment and to motivate them for participating in the activities of environmental improvement and protection.
- (iv) Skill- to help them to acquire the skill for identifying and solving environmental problems.
- (v) Participation- to provide an opportunity to be actively involved at all levels in working towards the resolution of environmental pollution.

Besides these five objectives of UNESCO, there are two other objectives, these are:

- (i) To develop environmental consciousness among the children and make them aware about its health implications.
- (ii) To develop the ability to understand the environment and its contribution to the living beings.

ENVIRONMENTAL EDUCATION

In true sense of the term, the origin of environmental education concept goes back to 1899 when Scottish Professor of Botany, Patrick Geddes, known as the 'Father of modern Environmental Education', founded in Edinburgh (England) a unique establishment, the 'Outlook Tower', to improve upon the existing environment and education. He was the first to make the vital link, fundamental to environmental education, that the quality of environment and education were closely interdependent and a child brought into the realities of his environment would not only learn better but would also develop a creative attitude towards the environment (Saxena, 1993). The term Environmental Education (EE) was first used in 1960 at an IUCN (International Union for Conservation of Nature and Natural Resources) meeting held at Paris (IUCN, 1970). Environmental Education is a way of implementing the goals of environmental protection. Environmental Education is not a separate branch of science or subject of study. It should be carried out according to principle of lifelong integrated education. (NEAC) started in 1986 for creating environmental awareness at all levels of society, was continued during the year with the main theme, as, "Keep our Environment Clean and Green" (Srivastava, 2005).

The Ministry (2000-2001) (MoEF, 1998) interacted actively with the University Grants Commission (UGC), National Council of Educational Research and Training (NCERT) and the Ministry of Human Resource Development (MHRD) for introducing and expanding environmental concepts, themes, issues etc., in the curriculum of schools and colleges". The role of students should go a long way in strengthening the environmental education for society. Environmental education is a process which develops awareness, knowledge and understanding of the environment, positive and balanced attitudes towards it and skills which will enable students to participate in assessing the state of the environment (Das et al., 1987). When we talk about Environmental Education, we are

thinking about education that is intimately connected with the environment. It is education about the environment, education through the environment, and education for the environment.

Education about the environment

1. Provides understanding of how natural systems work.
2. Provides understanding of the impact of human activities upon these systems.
3. Fosters environmental awareness and concerns.

Education through the environment

1. Gives reality, relevance and practical experience to learning through direct contact with the environment.
2. Develops important skills of data gathering and field investigations.
3. Develops aesthetic appreciation.

Education for the environment

1. Develops an informal concern and sense of responsibility for the environment.
2. Develops the motivation and skills to participate in environmental improvement.
3. Compatible with the wise use of environmental resources.

INITIATIVES FOR PROMOTING ENVIRONMENTAL EDUCATION

Environmental education has been an area of concern in all curriculum development programmes in India. The movement of Basic Education launched by Mahatma Gandhi in 1937, was perhaps the first serious attempt at relating education in schools to local environmental needs. The essential elements of Basic Education were: productive activity in education; correlation of curriculum with the productive activity and the social environment; and intimate contact between the school and the local community (Khoshoo, 1995). The best that Basic Education had to offer was incorporated in the Report of the Education Commission (1964-66) so as to relate it to the life, needs and aspirations of the nation. For the primary stage, the Report recommended the aim of teaching science in the primary school should be to develop proper understanding of the main facts, concepts, principles and processes in the physical and biological environment".

Chittibabu (1987) describes the interaction between education and environment. (a) Education creates the urge for a clean environment. (b) It inculcates in the young minds the basic principles of sanitation and hygiene (c) It helps pupils and students to appreciate the need for conservation of our multifaceted heritage. (d) It teaches newer and environmentally safe technologies. The national documents, like the Report of the Education Commission (1964-66) and Curriculum for the 10 year school: An Approach Paper (1975), all emphasized the need of environmental education (Malhotra 1987). The environmental education at higher level in India is provided by the Universities, Research Institutes, Schools of Planning and Management, Agricultural Universities, Engineering Colleges and a number of other agencies. Some of them have defined programmes of environmental education and the others have included some components of

environment in their curricula. The introduction of environmental education programme requires the involvement and participation of teachers, students and administrators etc. (Swain, 1997). NCERT did pioneering work in Environmental Education by not only developing a modern curriculum for formal school system which incorporates environmental education concepts, but also prepared text-books and other instructional materials, teaching aids and audio-visual materials.

It is said that the professional development of teachers begins with pre-service and gets renewed through in-service programme (NCTE, 1998), so that the teachers coming out of the new system could inculcate skills of problem solving, decision making, life-long learning, ability to work together, sharing and conservation of resources (NCERT, 2005). Besides NCERT has extended these ideas to a larger section of school community through its teacher training programme and extension service to states (NCERT, 2001). In addition, another effort of NCERT is the inclusion of topics such as habitat alteration, deforestation, pollution, climate change, bio-diversity conservation in science and social science textbooks at secondary level (NCERT, 2006). This effort goes in tune with the decision of Hon'ble Supreme Court of India to make Environmental Education a compulsory subject (NCERT, 2004). The Indian Constitution enjoins the "state to take measures to protect and improve the environment and to safeguard the forests and wildlife of the country" (Article 48-A). It also makes it a "fundamental duty of every citizen to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have ecological compassion for the living creatures" (Article 51 A (g)).

The Centre for Environment Education (CEE), Ahmadabad is also involved in increasing consciousness about the environment among children and the general community. CEE has developed programme for school children, visitors to national parks and sanctuaries, users of media, the rural poor living in areas where there is severe shortage' of natural resources, the urban dwellers and the general public (CEE, 1994). The National Policy on Education, 1986 (NPE) states that "Protection of the Environment" is a value which along with certain other values must form an integral part of curriculum at all stages of education (NPE, 1986). The type of school is also a factor which can affect students environmental awareness (Baruah *et al*, 2011). Most of the students were found interested in environmental education in schools especially with regard to waste disposal, water usage and tree plant activity (Muthui, 2013).

EFFORTS FOR PROMOTING EFFECTIVE ENVIRONMENTAL EDUCATION

The following efforts are needed to promote Environmental Education effectively:

1. For a growing child, experiences related to Environmental Education need to occur continuously over a period of time from pre-school into adulthood so that understanding and motivation gained at each stage of life becomes an integral part at each stage of formal education right from pre-primary to university stage.

2. Environmental Education is a lifelong process and should not remain confined to formal system of education. It should form a part of non-formal education and adult education as well. We need more concerted efforts for success of Environmental Education.

3. In formal education, at all levels, curriculum should be prepared on interdisciplinary basis. It should include science, humanities and cultural contents and subjects such as history, geography, sociology, ecology, economics, biology, chemistry etc, to make the students understand various aspects of environment and its problems. The content of the curriculum should be rigorous. It should be based on well-researched facts and data. It should lay emphasis on three C's Connection, Concern and Care. The topics covered should be specific to learning stages and ages.

4. Environmental Education during early years should be based on the sense of wonder and joy of discovery. Children should be given an opportunity to bond with nature and feel it. They should develop a sense of kinship with the natural world.

5. At the secondary stage curriculum should lay emphasis on awareness, life experiences, conservation, and action skills. Since major aspect of Environmental Education is experience and relationship, experimental learning should be a major teaching strategy at secondary stage. Emphasis should be given to applied learning, learning by doing etc. Innovative teaching learning strategies like role playing, simulation exercises can be used by the teacher, leading to the sense of responsibility.

6. At the secondary and higher education stage co-curricular activities can be effectively organized for action with participation of students in environment related activities. The following co-curricular activities can be organized by Eco-Clubs in schools, under NSS and SUPW programmes: (i) Cleaning environment; (ii) Digging pits for the waste in the village; (iii) Growing plants; (iv) Organizing camps of population education. Besides, educational institutions, NGOs and government bodies can collaborate in organization of activities related to environment awareness like essay competitions, on the spot painting and poster designing competitions etc.

7. At the university stage much emphasis should be laid on knowledge regarding Sustainable Development based on experiences with conservation. Content must be based on science and technology, environmental engineering, health and social ecology. Practical and action-oriented research should be stressed upon such as sustainable use of energy, water and other natural resources, air, water pollution, soil erosion and their prevention and above all projecting future threats to a sustained development by human activities.

8. Under non-formal education system the department of Adult, Continuing and Extension Education in collaboration with NGOs can launch environmental awareness campaigns. Group discussions, lectures, print and electronic media, film, documentaries can be utilized for making general public aware on the need of maintaining balance and harmony between economic growth and environmental protection at local, regional and global level.

9. An environment-friendly teacher can transform the school, as well as the society. In order to help students grow in knowledge, skills and values, attitudes and awareness relevant to environment, teacher should not only be dispenser of information and knowledge but should also be manager to teaching-learning situations. Teacher should make suggestions to students to hear/watch news with regard to environment, watch TV programmes on environmental concerns, read newspaper and prepare learning aids such as charts, models showing environmental pollution and degradation.

10. In order to equip our students with necessary knowledge, skills and attitudes for environmental protection and Sustainable Development, we need not only pre-service training of teachers and teacher educators but we also need to focus on in-service training of teachers, teacher educators and professional groups in environmental education. Refresher courses, workshops and training programmes can be organized to equip in-service teachers and teacher educators with knowledge and skills required to teach this newly introduced subject in schools.

11. Environmental Education at community level can be strengthened through the mobilization of public services, local communities, and local religious and tribal leaders.

12. The media could also play a vital role in the effective implementation of Environmental Education programmes. Radio talks, television programmes, information packs, posters, slides and audio-visual material should be generated. Media can be very effective in non-formal environmental education programmes.

CONCLUSION

The emphasis of this study is on Environmental Education for achieving global sustainable development and global environmental sustainability that are now at the top of international environmental agenda. It is demonstrated that science and technology alone cannot deliver sustainable development. They can only assist the process, albeit to a limited extent. This is because in the final analysis how we treat nature and the natural environment is fundamentally determined by our attitude to them, and our attitude in turn is shaped by the moral and ethical values we hold. It is argued, therefore, that if we are at all serious about achieving desired results about environmental education in schools, we must adopt an entirely a different set of moral values that genuinely respect nature and her abundant benediction that sustains us and makes life on earth possible. In order for this to happen, it is argued that such genuinely environment –respecting moral values must be inculcated through the formal educational curricula- from pre-school through primary and secondary levels to the University level. Formal curricula (contents and pedagogy) for these levels should be outlined, giving equal emphasis in each case to both “end of the pipe” and “before the pipe” methods and strategies.

REFERENCES

- Altman, I. 1975. *The Environment and Social Behaviour*. Brooks Cole: California. "Centre for Environment Education (CEE)". envfor.nic.in. Retrieved 2007-11-21.
- Baruah, B.K., Das.B., Medhi,C. & Mishra A.K 2011. Environmental Awareness among tea labors towards local issues. *Advances in Applied Science research*, 2 (2), p.p 190-196.
- CEE, 1994. *Essential Learning in Environmental Education*. Centre for EE, Ahmedabad, India. p. 150.
- Chittibabu, S.V. 1987. Environmental education and management. In *Desh Bandhu & G, Uerberet (Eds.), Environmental education for conservation and developnzent.* (pp. 54-59). New Delhi: Indian environmental society.
- Das, B.C, Ghosh, S and Biswas, M.M 1987. Evaluation and monitoring of environmental education programmes with reference to energy issue in developing countries. In *Desh Bandhu and G.Berberet (Eds.). Environmental Education for Conservation and Development* (p.5 19). New Delhi: Indian Environmental Society.
- Desh Bandhu & G. Berberet (Eds.). *Environmental Education for Conservation and Development*. New Delhi: Indian Environmental Society.
- IUCN. (International Union for Conservation of Nature and Natural Resources) 1970. International working meeting on environmental education in the school curriculum. Final Report. USA: IUCN
- Khosho, T.N. 1995a. *Mahatma Gandhi: An Apostle of applied human ecology*. Tata Energy Research Institute, New Delhi.
- Knimiller, G.W. 1983. Environmental education for relevance in developing countries, *The Environmentalist*, 3, 173-179.
- Malhotra, P.L. 1987. The state of environmental education in India.
- MoEF, 1998. *India: Sustaining Development*. Ministry of Environment and Forest, Government of India, p. 107.
- Muthui, T.W 2013. An Assessment of the level of awareness/knowledge and practices of environmental management in schools in Kenya; A case study of public secondary schools in Nairobi Country.
- National Policy on Education. 1986. Ministry of Human Resource Development. New Delhi: Government of India.
- NCERT. 2000. *National Curriculum Framework for School Education*, New Delhi.
- NCERT. 2001. *Environmental orientation to school education: A training module for eastern region*, New Delhi.
- NCERT. 2004. *Environmental Education in Schools*, New Delhi.
- NCERT. 2005. *National Curriculum Framework – 2005*, New Delhi.
- NCERT. 2006. *Science Textbook for Class-IX*, New Delhi.
- NCTE. 1998. *Curriculum framework for quality teacher education* (National Council for Teacher Education, New Delhi), p. 137.
- Sahu Bhagirathi, 2004. *The new Educational Philosophy*. Swarup & Sons. p.p 361-362
- Saxena, A.B. 1993. *Making environmental education relevant in India*.
- Shukhla S.P; Shukla, N., Sharma B.C., 2001. *Planet protection*. New Delhi: Mittal Publications, p.157-162.
- Srivastava G, 2005. Environmental Awareness: A historical perspective. *J Indian Education*, 19(2):29-32.
- Swain, B. C. 1997. *Environmental Education: An evaluation*.
- UNESCO. 1977. *Source book in environmental education for Secondary School teachers*, UNESCO Principal Regional Office for Asia and the Pacific, Bangkok, Thailand).