



Creating awareness towards environmental education among students at higher secondary level

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Abstract

Environmental education is become a key to solve environmental problems and key to maintain sustainability globally. The growth of human beings and plants life can be developfully in friendly environment that is conclusive to growth. Since, the present problems result largely from ignorance and different of continued misuse of the environment can, however, be altered by creating awareness among people of how man's activities effect the environment for good or ill. It's mainly focused on environmental awareness and practices related to various factors like causes of pollution, conservation of soil, forest, air, etc., energy conservation, conservation of human health, conservation of wild life and animal husbandry. It also discusses environmental practices among college students with regard to the usage of plastic and its disposal, alternative for plastic, toilet usage, its use in the cultivation of saplings, rainwater harvesting and also their participation in environment related programmes. The target was high school students because environmental education is part of their curriculum; they can implement what they learnt. Keeping in the view the importance of environment the present study was undertaken to study the awareness among students towards environmental education. The status of environmental education in higher school education system is really not satisfactory and there is need to standardized and upgrade the education system as whole.

Keywords: creating awareness, environmental education, students at higher

Introduction

Environment is the total outer physical and biological system within which human beings and other organisms live. It covers the atmosphere, water, land, minerals, vegetation, oceans, forests, living organisms and everything else around us including outer space. It is a whole, highly complicated system having many interacting components.

The Oxford Advanced Learners' Dictionary defines environment as the natural world in which people, animals and plants live. There has always been a strong interaction between people and their environment. Man is a part of nature and his survival is very much dependent on the quality of the environment. The increasing human demands have been exerting great pressure on nature's precious resources, agricultural land, energy sources, forests etc. resulting in environmental degradation. Man has created an imbalance in the environment by its haphazard exploitation to fulfill his needs. If environmental pollution keeps on increasing at the present rate, the very existence of life on earth is endangered. Environmental Education is not a subject of study but it is an approach to impart education regarding environment. The principle of environmental Education is that it makes the learning experiences problem-based for understanding the environment and the hazards of pollution on human health. Environmental education deals with a broader concept of establishing relationship of man with the natural surrounding. It aims not only in imparting knowledge and understanding of man's total environment but also focuses on inculcating skills, attitudes and values necessary to understand and improve the environment. Environmental education addresses issues of population explosion, exhaustion of natural resources and

pollution of the environment and sheds light on methods of solving them.

Objectives of Environmental Education

Following objectives of Environmental Education have been formulated for both formal and non-formal education at all levels at the first inter-governmental Conference of UNESCO (1977) on EE which was held at Tbilisi:

1. **Awareness:** To develop an awareness of environment & sensitivity (feeling & attitudes) to the total environment & it's allied problems.
2. **Knowledge:** To help an individuals and social groups acquire basic understanding of total environment and its associated problems.
3. **Attitude:** To help individuals and social groups acquire values, strong feelings of concerns for the environment and the motivation for actively participation in its protection and improvement.
4. **Skills:** To help acquiring skills for identifying & solving environmental problems.
5. **Participation:** To provide an opportunity for an active participation or practice at all levels in working for solution of environmental problems.
6. **Evaluation Ability:** To develop an ability for evaluating environmental components & educational programmes in terms of economic, social, cultural, aesthetic & educational factors.

For any Nation to achieve objectives of EE, all the above stated objectives should be part of the Curriculum at School and College level. For Success of any type of Education, it is essential to

provide it from the basic level from school. The first attempt to make environmental education was based on emphasizing acquisition of knowledge through processes of science using local environment in general Science for class I-VIII (Prahraj, 1991). To meet these objectives, a number of guiding principles were framed for those involved in developing EE programmes and materials of various kinds.

Need For Creating Environmental Awareness among Higher Secondary School Students

Looking into the degradation of environment the concern for environment has taken a boost. The best way to sensitize and educate people with regard to environment and its related issue is through education. With the advances in Science and technology, human beings have manipulated the physical environment and caused environmental imbalance by creating a number of environmental problems like pollution of air, water and land, deforestation, soil erosion, extinction of species, depletion of natural resources, global warming and many more. To enable students to confront the present challenges and shape a better world for themselves and for future generation it is imperative to integrate environment in school education. It has been already recommended by NCERT that students, especially at upper primary stage, be taught environmental education in an interdisciplinary way to enable the students to understand the changes taking place all round and to make them aware about problems to drinking water, health, nutrition etc. Despite these initiatives taken up to impart environmental education to the students of upper primary stage, it is necessary to find out whether the students have actually developed an affective concern and positive attitude for conserving their nature.

In order to provide environmental education, there were several initiatives by the government in terms of establishing ECO-CLUBS in schools, so that students are involved in various activities instead of just learning about issues theoretically. As the major objectives of Eco-Clubs in schools is to develop skills and attitude among students with regard to preservation and conservation of environment. It has also been suggested that school environmental education programmes can potentially reach a wider audience than the student population through the process of intergenerational influence (Ballantyne *et al.*, 1998a). Some environmental education activities and approaches, for example, encourage students to discuss environmental issues and actions with their parents and other adults in the community (Ballantyne *et al.*, n.d.). However, the extent to which involvement in such projects leads to students, their parents and other adults in the community developing an increased appreciation of the relationships between people and environments and enhanced insights, commitments and skills for acting on behalf of the environment remains unclear. This leads to the need to expand the delivery system of EE at primary and upper primary levels from conventional style to field based "learning-through-experiences" by enhancing extra-curricular activities. However, schools tend to have insufficient expertise, experience and resources for such outdoor education. It has been widely observed that the "limited resources" is a major challenge in expanding formal education, especially at the primary level. The international community declared "no government seriously committed to achieving Education for All will be thwarted in this achievement by lack of resources"

Objectives of the Study

- To develop environmental awareness among higher secondary school students

- To study the environmental awareness among the higher secondary school students.
- To study the difference in environmental awareness of higher secondary school students with respect to gender.
- To forward some suggestions for developing environmental awareness among students

Hypothesis of the Study

There exists no significant difference in environmental awareness of higher secondary school students with respect to gender.

Delimitations of the Study

1. The present study is delimited to only two Government higher secondary schools.
2. In this study, 100 students of class X which includes 50 male students and 50 female students have been taken.

Research Method

Descriptive research method has been used in the present study.

Sample

100 students of class X of Government higher secondary school students were selected as sample of the study.

Sampling Technique

In the present study the researcher has used Random sampling technique.

Tool Used

The tool used in the study was Environment Awareness Ability Measure (EAAM). This scale comprises of 51 items and can be successfully used from 14 to 21 years age group of both sexes. Each item alternative is assigned a weight ranging from 2 (agree) to 0 (disagree) for positive items. In case of negative items, range of weights is reversed from 0 (agree) to 2 (disagree). The score of an individual is the sum total of scores. According to the scoring principle, the maximum score for this scale is 102 and the minimum possible score is 00. In this study, the investigator administered the tool after getting permission from the concerned head of the institution.

Table 1: Norms have been prepared for the Environment Awareness Ability Measure (EAAM) Scale

S. No.	Range of Scores	Awareness Level
1.	99 & above	Extremely High
2.	87 to 98	High
3.	75 to 86	Above Average
4.	59 to 74	Average/Moderate
5.	47 to 58	Below Average
6.	34 to below	Extremely Low

Statistical Techniques used

The data was analysed by using descriptive statistics such as mean and standard deviation and inferential statistics like t test.

Analysis and Interpretation of Data

Objective-1

To study the environmental awareness among the secondary school students.

The following table presents the Environmental Awareness of Secondary school students.

Table 2: Environmental Awareness among secondary school students

Variable	Sample	Mean
Environmental Awareness	100	76.46

According to the norms given in the Environment Awareness Ability Measure (EAAM) Scale given in table 1 the range 75-86 is considered above average. Thus from the mean value shown in table 2, we can conclude that the secondary school students possess above average level of environmental awareness.

Table 3: Mean, S.D and t- values of Environmental Awareness of Secondary School Students with respect to gender

Variable	Gender						t-value	Interpretation
	Male			Female				
Environmental Awareness	N	Mean	SD	N	Mean	SD	1.37	Not Significant
	50	78.35	11.09	50	74.58	13.44		

From table 3 it is found that the number of male students is 50 and female students is 50 and the mean of male and female students is 78.35 and 74.58 respectively. The 't' value is not significant at both 0.01 and 0.05 level. Therefore, the hypothesis is retained. So, it can be concluded that there is no significant difference in environmental awareness of secondary school students with respect to gender.

Findings of the Study

1. The study revealed that majority of the higher secondary school students possessed above average level of environmental awareness.
2. There exists no significant difference in environmental awareness among male and female higher secondary school students.

Suggestions

To develop environmental awareness among students some suggestions are given below:

1. Environmental education aims at creating awareness and developing responsible behaviour of the individual towards the total environment. Therefore, imparting environmental education amongst the students should be given utmost priority.
2. The curriculum should attempt to create a commitment among students to protect the environment and conserve nature and its resources. The relevance for real life situation can be emphasized at the secondary stage.
3. Co-curricular activities should be organized properly in schools and colleges to develop an awareness among students on environmental problems and conservation.
4. Environmental topics having relation with the problems of the society should be included in textbooks.
5. The teacher should encourage the students to see T.V. programmes, to read newspapers and to hear the radio news as regard to the environment. He should use environmental teaching aids like charts, models of environment, etc to teach the students about environment.

Conclusion

Various efforts are being taken to develop environmental awareness among the students. National Environment Awareness Campaign (NEAC) had been launched by the Ministry of

Objective-2

To study the difference in environmental awareness of secondary school students with respect to gender. This objective has been analysed with the help of t test. The result found on the basis of this objective is shown with the help of the following table.

Environment and Forests (MOEF), Government of India. This campaign was initially organized in 1986, with the objective of creating environmental awareness at the national level and since then it has become an annual activity. In this campaign, nominal financial assistance is provided to NGOs, schools, universities, research institutes, army units, etc to raise awareness and action-oriented activities. In the formal system of education, various programmes of environmental education have been incorporated at different levels of education. Environmental Education develops proper attitude, awareness and behaviour about the environment among the students and guides them in the right direction. It also enables them to realize their obligations towards the environment so that they can contribute significantly towards the conservation and protection of the environment. Moreover, imparting environmental education to the students would not only make them aware about various environmental issues and consequences of their action on environment but would also help them to adopt environmentally ethical lifestyles. Therefore, if we want to live in a clean, healthy, safe and secure environment for a long time and wish to hand over a clean and safe earth to our future generations, we must give topmost priority on creating environmental awareness amongst the students through environmental education.

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