



## A Study of the Effectiveness of Methodology of Teaching Environmental Education on Student Teachers

### KEYWORDS

Methodology of teaching, Environmental Education, Student-teachers

### Dr. Rakesh Ranjan

Asst. Professor, Waymade College of Education  
Near GCET College, Bakrol Road, Vallabh vidyanagar,  
Anand-388120, Gujarat

### Ms. Amita Unnikrishnan

Lecture, Waymade College of Education  
Near GCET College, Bakrol Road, Vallabh vidyanagar,  
Anand-388120, Gujarat

**ABSTRACT** *Whether it is for need or greed, the environment bears the brunt of the mindless misuse and abuse of its resources. The student community needs to be sensitized towards the irreversible damage being caused to the environment and the ways and means to prevent them. Acquiring and transmitting the requisite knowledge, skills, attitude and values can arrest environmental degradation.*

*The role of the teachers and teacher educators has become paramount in such a situation. Hence, the investigators made an attempt to study the effectiveness of methodology of teaching environmental education on student teachers.*

### Environmental Education

#### Meaning

A number of definitions of Environmental Education cited by various authorities state that it is the learning process that increases knowledge and awareness about environment and related challenges, develops necessary attitude, skills and expertise to address these challenges with motivation and commitment. Though the term is often used to imply education within the school system, it also implies all efforts to educate the public in general.

#### History Abroad

Internationally, Environmental Education gained recognition when the UN Conference on Human Environment held in Stockholm, Sweden, in 1972, declared that Environmental Education must be used as a tool to address global environmental problems. Soon after this conference, the UNESCO-UNEP launched the International Environmental Education Programme (IEEP) in 1975, whose objective was to promote exchange of information, experience, research, curricula and international cooperation in the area of Environmental Education.

Subsequently, an international workshop was held in Belgrade in 1975, which emphasized that 'Environment Education should be lifelong, interdisciplinary, involve active global participation and foster values of local, national and international cooperation'.

An Inter-governmental Conference was organized at Tbilisi, USSR in 1977, by UNESCO and UNEP primarily to discuss the various needs of Environmental Education which recommended development of necessary skills, knowledge, values, attitudes and understanding among individuals and social groups about the environmental problems. It also emphasized the pre-service and in-service training of teachers in Environmental Education.

#### History in India

The concern for the environment gained momentum in India with the establishment of the Department of Environment by the Government of India in 1980 and a Ministry of Environment and Forests (MoEF) in 1985. The Ministry acknowledged Environmental Education as a key to the success of any overall environmental strategy and set up a 'Centre of Excellence' (CEE) in Environmental Education in 1984 to plan the agenda and set the pace for Environmental Education in the country.

Environmental Education was introduced as a regular course

in formal school education following the directive by the honourable Supreme Court of India on the 18<sup>th</sup> of December, 2003. Today Education Departments accept Environmental Education as an essential part of education.

The National Policy on Education, 1986 stated, "There is a paramount need to create a consciousness of the environment. It must permeate all ages and all sections of society, beginning with the child. Environmental consciousness should involve teaching in schools and colleges".

#### Importance of Environmental Education

Today, there is an urgent need to create awareness among people to protect the environment. The importance of Environmental Education can be listed as under.

- 1) It helps the economy and leads to welfare of human society.
- 2) It helps in solving the different issues like pollution measures, over exploitation of natural resources, food problems, and leads to sustainable development.
- 3) It helps to find ways and means to maintain ecological balance.
- 4) As population is increasing day by day, we need large amounts of food and other resources. Also required are different disposal methods for removal of waste which can only be possible by Environmental Education.
- 5) It helps in inculcating the correct attitude and values, encouraging environmental protection and understanding of interdependence of nature and man.

#### Environmental Education and Teacher Education

Education, when meted out to the young minds, can prove to be the most effective in terms of reaching out to the masses and so is the case of Environmental Education. What better way could there be to reach the young minds, but through the teachers.

To create environmentally concerned citizens of the world, teachers imparting Environmental Education play a major role in developing sensitivity towards the environment among the student fraternity and groom them into responsible citizens of the world. It is during the pre-service stage that the prospective teachers learn how to teach Environmental Education and hence it is extremely important that they pick up skills to deal with Environmental Education effectively. Once these skills are imbibed by the student teachers only then they would be able to pass on the same sense of responsibility towards the environment to the students.

The investigators made an attempt to study the effectiveness of 'Methodology of Teaching Environmental Education' offered to the student teachers of Sardar Patel University.

### Statement of the problem

A Study of the Effectiveness of Methodology of Teaching Environmental Education on Student Teachers

### Objectives of the study

- To study the Effectiveness of Methodology of Teaching Environmental Education subject on Student Teachers
- To give suggestions to improve the Effectiveness of Methodology of Teaching Environmental Education

### Population of the study

The population of the study includes all the student teachers opted Environmental Education as a subject in the B. Ed. programme of the Sardar Patel University.

### Sample of the study

The sample is constituted of 20 student teachers opted Environmental Education as a subject in the B. Ed. programme of the Waymade College of Education.

### Tools

Questionnaire and Semi-structured interview were employed as tools to collect data.

### Delimitation

The study is delimited to three aspects of Environmental Education i.e. awareness, understanding and application

### Data analysis

Content analysis was used to analyze the data.

### Findings

The findings of the study are briefly discussed below.

- All the respondents stated that environmental problems mean the problems associated with the environment and caused due to man-made and natural reasons, deterioration of environment and disturbance of balance of environmental resources.
- A majority of the respondents said that environmental problems in their area can be solved through measures undertaken by the residents of that area i.e. through proper disposal of garbage, creating proper drainage, planting trees and generating awareness among the people regarding environmental problems and their probable solutions while the rest of the respondents did not believe in their own potential to bring about a positive change in the environment.
- The most commonly stated ways of interacting with the community to address environmental issues were awareness campaigns on proper disposal of wastes and planting of trees, discussion on how to reduce house pollution, joining an environmental club and get involved in bird watching and discussion on issues and resolutions.
- The most commonly stated answers on being asked what is Environmental Education were
  - It a subject that deals with the concept of environment, its issues, possible solutions and sensitization of the students towards environment.
  - It is that education which leads to conservation of environmental resources and generates awareness about the harm caused to the environment due to various human activities.
- All the respondents think that Environmental Education will benefit the students and society at large and so Teaching of Environmental Education should be a compulsory component of all B.Ed. courses as it would

help in creating awareness and eventually bring about a gradual social change.

- A majority of the respondents were of the opinion that the students of Environmental Education will be better equipped to tackle the environmental problems of today whereas the rest of the respondents disagreed with this opinion of their counterparts but they agreed to it that the students of Environmental Education will definitely have better knowledge about the same.
- All the respondents said that the college did not directly get engaged in any activity concerned with improving the environment but did so indirectly. The respondents stated that the college carried out activities like action research to bring about awareness among the people, community outreach programmes, skits, drama, bird watching, snake show, etc.
- All the respondents said that the college had no official associations with any of the clubs or organizations working for environment but unofficially they were linked with Vallabh Vidyanagar Nature Club. None of the respondents were sure about the aims of the club but they believed that it might be creating awareness among the people about nature.
- All the respondents responded that Environmental Education had helped them become more sensitive towards their surroundings. They have not only become aware of environmental problems but also feel the strong desire to rectify the problems.
- All the respondents were satisfied with the syllabus of Methodology of Teaching Environmental Education of the college but they felt that the teaching could be made more effective by showing environmental documentaries, holding group discussions and nature tours, conducting group projects and case studies.
- A few of the respondents stated that the teachers of Environmental Education need to acquire special education and training to teach the subject, whereas a majority of the respondents were not in favour of the same as they felt that a teacher of Environmental Education could be effective if she puts theory into practice and also encourages the students to do so.
- All the respondents suggested that the teacher of environmental education needs to be well read and informed, should attend workshops and conferences, should be a part of environmental projects, should give examples in the class and should write on environmental issues and encourage students to do the same.

### Findings vis. a. vis. Awareness, Understanding and Application of Environmental Education among the student teachers

From the above mentioned findings, it can be deduced that the students who opted for Methodology of Teaching Environmental Education had, through the course, developed awareness and a good understanding of environment and related issues. However, though the course was practical to some extent, the students demanded that they wanted some hands on experience which would not only help them contribute to improvement of environmental conditions but would also equip them as future teachers of Environmental Education. The course was successful enough to develop a feeling of responsibility for the environment and the important positions that they would hold as teachers of Environmental Education.

### Conclusions and Educational Implications

- Teacher educators should create link with clubs and NGOs working in the field of environment and arrange

for activities in co-ordination so that student teachers are exposed to firsthand experience.

- Teacher educators should arrange for activities such as celebration of various days related to environment, competitions, debates, elocutions, etc. which would lead to sensitization of student teachers towards environment.
- Student teachers should be exposed to field based work in order to develop a good understanding of environment, have a broad understanding of environmental problems and to come up with probable solutions.

- Teachers should also be well equipped with the knowledge, methods and learning material in order to impart the correct information and inculcate the right attitude towards environment in their students.
- Teacher educators should work on providing conducive conditions for environmental education. Throughout the B.Ed. programme deliberations on issues related to the environment should be carried out using the current events during the teaching learning process.

**REFERENCE**

- Bhanumathi R. (2003). Environmental education strategies and approaches. New Delhi: Reliance Publishing House. | Caldwell L .K. (1993). Strategies in Hemispheric cooperation for environmentally sustainable development. La Education, Vol. XXXVII, No 115 | Das R. (1996). Environmental education and sustainable development" in Sustainable development strategy (Indian context). New Delhi: Mittal Publications. | Govinda R. and Mangalagiri A. (1990). Environmental Education handbook for educational planners. New Delhi: National Institute of Educational Planning and Administration. | Khoshoo T.L. (1986). Environmental priorities in India and sustainable development. New Delhi: Indian Science Congress Association. | Vijayalakshmi S. (2003). Environmental education: Concerns and strategies" In Environmental Issues (edited by M. A. Sudhir and M. Alankara Masilamani), New Delhi: Reliance Publishing House.