

BOTTLENECKS FOR ACHIEVING ENVIRONMENTAL EDUCATION OUTCOMES IN INDIA

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ABSTRACT

In the present form, a huge technological growth and its applications led a transformation which is vigorous to the environment. The development of awareness among mankind about the condemn, neglected, greedy and suicidal economic and technological practices that collapse the natural balances can only be brought through environmental education in which guidance of behaving correctly and for taking action must contain. Honorable Supreme Court of India had directed implementation of environmental education as a regular formal course in school and college education system in India. The main objectives of Tbilisi conference on as environmental education defined environmental outcomes as awareness, knowledge, attitude, skill and participation for the protection of environment. In India, the environmental education outputs were different form the environmental education outcomes due to some variables. The present writing is the review of a research on environmental education outputs with related to awareness, attitude, behavior, participation as considerable factors among students in India. It was observed that the outcome which has been proposed in the Tbilisi conferences are not able to achieve to that extent as it was expected. Variables such as gender, socio-economic background, medium of instruction, board of education, stream and family background governs the outputs for environmental education in India.

Keywords: Environmental education; environmental education outcomes; formal environmental education; bottlenecks; variables

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Introduction

The environmental problems have become a concerning issue for human society with the progress of industrialization, urbanization and adoption of modern technologies in agriculture in the modern era of technology and development (Khan, 2013). A great important change in the attitude of societies towards nature and environment can be brought about by education (Kaur, 2013). The people can be sensitized about environmental issues through the process of education that learn about and from environment are environmental education (Singh, 2011). Taking into consideration the importance of education for control of environmental problems in 1977 an international conference on environmental education was organized at Tbilisi, Georgia. This conference was the pioneer for setting up environmental education throughout the world. The outcomes intended for environmental education includes awareness, knowledge, attitude, skills and participation. The outcomes are intended results that the environmental education programmes aim to achieve and outputs are the result that actually environmental education programmes has achieved or its real situation of the programme result (Alison and Michelle, 2014). This study attempts to assess to what extend these outcomes which was put forth in Tbilisi conference has been achieved in India. If not, then what are the bottlenecks which hinder in achieving the objectives of environmental education and further suggestions to overcome these bottlenecks.

Environmental Education in India

On 18th December 2003 in a Writ Petition No 860 of 1991, the Hon'ble Supreme Court of India in its decision delivered the general instruction to the NCERT to set up a pattern of curriculum for the environmental education to study at different status. All the States and educational groups in the country were directed by the Supreme Court to take environment as mandatory topic in all courses in schools up to the higher secondary level from the academic year 2004-05 (Indian Institute of Ecology and Environment, 2015). The formal education sector plays a very important role in environmental education and awareness by exposing the younger generation to the information, issues, analyses and interpretations on environment and development (Introduction Environmental Education, 2015).

Environmental Education Outcomes vs. Outputs

According to McNamara (2002), “evaluation is doing the right program activities to bring about the outcomes that believe to be needed”. Any desired changes that result from environmental education programs are planned to improve aspects of social–ecological systems, including human well-being are Environmental Education outcomes (Russ, 2014). To improve programs moving onward and to acquire support, environmental education outcomes assist in it and also help to evaluate the overall impact of a program (Alison and Michelle, 2014). The evaluation of Environmental Education outcomes are primarily focused on measuring environmental knowledge, awareness, attitudes, skills and pro-environmental behavior (Russ, 2014). Environmental Education outcomes that are universal are based on the Declaration of the Tbilisi, Georgia 1977. The objectives of environmental education which are categories in different forms are as follow:

Awareness – to help social groups and individuals acquire an awareness and sensitivity to the total environment and its allied problems.

Knowledge – to help social groups and individuals gain a variety of experience in, and acquire a basic understanding of the environment and its associated problems.

Attitudes – to help social groups and individuals acquire a set of values and feelings of concern for the environment and the motivation for actively participating in environmental improvement and protection.

Skills – to help social groups and individuals acquire the skills for identifying and solving environmental problems.

Participation – to provide social groups and individuals with an opportunity to be actively involved at all levels in working toward resolution of environmental problems (Igbokwe-Blessing, 2012).

Environmental Education Outcomes in India

The way for the protection of environment is an environmental education through which knowledge, comprehension, values, attitudes, skills, abilities and awareness was created among individuals and social groups (Abbas and Singh, 2014). Shahnawaj (1990) studied environmental

awareness and attitude of secondary and higher secondary teachers and students in Rajasthan and found that female students possessed significantly more awareness than males. It was concluded that socio-economic status and gender had an effect on environmental awareness among students.

Sengupta *et al.*, (2010) revealed that science student's scores on environmental awareness and behavior were less than that of arts students and on basis of gender effect, girl students were observed to be more environmental aware.

Ghosh (2014) concluded that, students possess strong positive correlation between environment awareness and attitude towards environmental education. Gender was not an affecting factor for environmental awareness and attitude, male and female students both were equally environmentally aware and had environmental friendly attitude. There was considerable variation in environmental awareness among secondary school students with respect to the settlement. Socioeconomic status was also responsible for environmental awareness and attitude as socioeconomic status goes up it guide to the optimistic environmental awareness among students.

Behera and Samal (2015) revealed that gender was not affecting factor of environmental knowledge of secondary school going students in West Bengal. Localities and topographical region was a factor responsible for significant difference between rural and urban secondary school students in relation to their environmental knowledge.

According to Barman (2015), a comparative study of environmental awareness among secondary level students showed that males of rural area, private school and English medium school were found to be more aware about their environmental problems as compared to female. On the other hand, female students of urban area, Government school and Assamese medium had higher environmental awareness than male students.

A study of attitudes towards environmental awareness among senior secondary school students of Aligarh city of Uttar Pradesh found that gender and types of residing (i.e. own house or rental

houses) does not appreciably contribute towards environmental awareness of senior secondary school students but a significant difference between senior secondary school students studying in private and those studying in government senior secondary school was discovered (Khan, 2013). The reason was concluded for higher environmental awareness among students of private senior secondary schools may be the family background and educational qualification of parents.

Gopinath (2014) reported that girls' students had higher awareness about environment. The urban area students were more aware than rural area students and it also found that Malayalam medium schools students had higher level of awareness regarding the environment.

Shivakumara *et al.*, (2015) stated that male and female students of science and social-science courses did not differ significantly in their environmental awareness and further no significant effect of gender on environmental awareness was observed. The results of science students of Bangalore in relation to gender revealed that female students had higher awareness than male students. It has been illustrated that females had higher level of environmental awareness than males.

Abbas and Singh (2014) concluded that university students had higher environmental awareness, and positive attitude towards environment, but low level of participation in environmental protection activities and improvement. Students being aware of environment, and environment related problems alone, does not make them contribute actively in the protection and improvement of environment. There could be factors other than being knowledgeable about the environment that may stimulate students' participation level.

Conclusion

In schools it was essential that a proper education should begin at a very early level that initiated the motivation for awareness about nature (Gopinath, 2014). The literature shows that environmental education outputs in India vary from the outcomes of environmental education as highlighted by the Declaration of Tbilisi (1977). Significant factors governing the outputs in India were gender, background such as streams, school board, lack of facilities, media exposure, urban and rural locality, parents education qualification, socioeconomic status of students. To overcome these gaps between environmental education outcomes and outputs in India, it is

essential that factors influence on the outcomes of environmental education programme can be minimized or reduced by providing superior facilities and an educator for environmental education in all schools and colleges for effective implementation of objectives of environmental education.

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