



## RESEARCH ARTICLE

### AWARENESS AND PUBLIC EDUCATION FOR ENVIRONMENTAL POLLUTION: A PERSPECTIVE

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#### ABSTRACT

In present scenario, due to the anthropogenic activities, environmental degradation increase in an alarming rate. In order to achieve acceptable level of environmental sustainability, the citizens must be empowered with essential knowledge. Educational institutions are the places where contact of the society is more. Therefore it is necessary to study environmental awareness level among the student community. Present study attempts to know the awareness level against environmental pollution among the secondary students. Data were collected using questionnaire randomly from 997 students. Data were analyzed by mean, SD and z-test. This study revealed that students are aware about the environmental pollution. But male are more aware than female. The private school, English medium and urban student are more aware than Government school, Assamese medium and rural student respectively. Compulsory environmental education at all level in the education system may most appropriate strategy towards environmental protection leading to decrease pollution in society.

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#### INTRODUCTION

Environmental education is the process of recognizing value and clarifying the concept in order to develop skill and attitudes necessary to understand the interrelatedness of man, his culture and his biological surroundings. Environmental awareness is an approach towards learning environmental issues. During the last thirty years, environmental issues have become increasingly important for people throughout the world (Sundaravalli 2012). In recent years there has been a growing concern in India regarding the steady deterioration in country's environment. Unplanned development, rapid industrialization, poor sanitation, inadequate waste management, contaminated water supplies and unprecedented growth in population with its accompanying poverty are recognized as being the main causes of environmental degradation (Sharma 2003; Sexton and Adgate 2000). These problems are undoubtedly greatest in the developing world affecting the health of a large numbers of people in different ways. As the above indicates, most pollutants are of human origin. They derive from human activities such as industry, the energy production and use, transport, domestic activities, waste disposal, agriculture and recreation. So for that we should create environmental awareness among people for the sake of our green planet.

It is not only a question of air and water pollution but also includes elimination of diseases, hunger, malnutrition and poverty, destruction of forests, extermination of wildlife, erosion of soil and accumulation of waste and many more. Hence, there is an urgent need for the proper management of environmental crisis before it threatens our existence. The role of students would go a long way in achieving such desired goals (Thote 2013). A properly planned syllabus and activities appropriately calculated and executed will bring the desired change. In order to hasten their awareness towards environment, it is necessary to know what levels of awareness they possess towards environment. The present study is trying to find out level of environmental awareness among the secondary level students.

#### MATERIALS AND METHODS

The present study was conducted on 997 numbers of secondary level students (standard IX and X) of different Government and private school of both urban and rural areas of Kamrup (M) and Kamrup (R) districts. A questionnaire was used to collect the data on the role responses of students which constructed by the investigator himself. The questionnaire contained a total of 36 questions in the form of objective (yes/no) type questions. One mark was given to each of the correctly answered question. Therefore the maximum score was 36 and the minimum score was zero.

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**Table 1. Categorisation of students according to different categories**

Category	Group of students	No. of Students
Medium of school	Assamese	494
	English	503
Type of school	Government	435
	Private	562
Gender of student	Male	547
	Female	450
Locality of school	Urban	527
	Rural	470

**Table 2. Number of students (N), value (M), standard deviation (SD) and Z-value of students of different category**

Category	N	M	SD	Calculated value of z	Table value of z at 5% level of Significance
Medium of Students					
Assamese	494	30.44	4.53	1.84	1.96
English	503	33.00	4.81		
Type of school					
Government	435	30.61	4.53	0.579	1.96
Private	562	32.78	4.79		
Gender of students					
Male	547	34.82	5.17	0.824	1.96
Female	450	30.57	4.76		
Locality of school					
Rural	470	31.10	4.76	1.78	1.96
Urban	527	36.46	5.25		

Random sampling technique was used to collect the data through questionnaire by visiting the respective school. The category-wise distributions of the students are presented as given in the Table 1. The obtained data were analyzed by using statistical tools viz. mean, standard deviation (SD) and z-test (Barman 2013). To do this SPSS-19 software was used.

### Hypothesis

There will be no significance difference in environmental awareness ability between the students belonging to Assamese and English medium school, Government and private school, Male and Female students and rural and urban school students.

### RESULTS

From the present study, it is clear that 97.39% of students performing well (getting marks 50% and above) and only 2.61% of students are not performing well (getting marks below 50%) to achieve the basic knowledge in environmental education. The overall mean value of environmental awareness of students was found to be 30.71, which indicates a better level of environmental awareness. It is inferred from the table 2 that there is no significant difference between students belonging to Assamese and English medium school in their environmental awareness as the calculated value of z is smaller than the tabulated value at 5% level of significance. The mean value of English medium students is slightly higher which reveal that they have more environmental awareness. It is inferred from the Table 2 that there is no significant difference between students belonging to government and private school in their environmental awareness. However more awareness is observed in case of students studying in private school in comparison to students studying in Government school as their mean value is higher.

It is also reveal from the Table 2 that there is no significant difference between male and female students in their environmental awareness. From the mean value we observed that the environmental awareness of male students is superior to that of female students. When compared between rural and urban school students, the finding revealed that there is no significant difference between them in their environmental awareness. Higher mean value of urban school students indicates that they have more environmental awareness when compared with rural school students (Table 2).

### DISCUSSION

The present study thus provides us an insight to the level of environmental awareness among secondary level students. It is very much evident from the present study that secondary level students have fairly good environmental awareness. But a few of them are not having enough awareness. In the present study, male students, students from urban areas, students studied in private and English medium school have more environmental awareness than that of female students, students from rural areas, students studied in government and Assamese medium school respectively. English medium students had more environmental awareness in comparison to Assamese medium students which may be due to having more study materials including both national and international level publications in English medium. Male students are more aware about the environmental issues in comparison to female students because male students are normally so much attached with the society and actively participate in different social works. Again urban areas students are more aware about the environmental pollution. The reason behind this case may be the family background and educational qualification of the parents. Further parents of the students' studying in private schools are qualified and well established; hence they may have more awareness against the environmental degradation than that of

Government school (Astalin 2011). Students are a great force and can play a big role in protection of environment if they are timely guided and helped regarding the understanding of environmental issues. So to increase the performance of students and to strengthen the environmental education, the process of environmental education must be encouraged in schools where the students become aware of environmental issues (Sharma 2003). Moreover, the environmental based project or out-of-class activities should be given to students. The environmental day should be celebrated all over the India for strengthening awareness programme. Parents and teachers should try to inculcate knowledge about environment among students and develop positive and healthy attitude towards environment from the very beginning of their childhood (Thote 2013).

One most important approach is the compulsory environmental education at all level in the education system as directed by Supreme Court is the most appropriate strategy towards environmental protection. Environmental awareness is the integral part of a healthy environment and plays vital role for creating such environment (Astalin, 2011; Briggs, 2003). This is the crucial time that environmental awareness and environmental sensitivity should be cultivated among the masses particularly among youths. For the awareness of society it is essential to work at a grass root level. So the whole society can work to revive and rejuvenate our environment for better future of our coming generations.

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