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Study of Awareness, Attitude and Knowledge about Environmental Education in High School and Higher Secondary School Students

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Abstract: *Environmental Education have been introduced as a subject compulsory for all the students of Arts, Science and Commerce in the undergraduate level by University Grants Commission (UGC) and in the school level by National Council of Education Research and Training (NCERT) and State Education Councilsof almost all the states of India. The Assam Higher Secondary Education Council has introduced a new subject "Environmental Education" from the academic session 2012-2013. The main objective of the subject is to provide an exposure to the students about different aspects of the environment. The present study is aimed at assessing the responsibility performed by the educated communities. The present study was done by survey method and data was collected by using an environmental awareness scale and collected data was analysed with the help of Statistical Package for the Social Sciences(SPSS-24). In the present study it is found that in regard to awareness and knowledge high school students are superior to higher secondary students but on the contrary, higher secondary students are superior in attitude.*

Keywords: *Attitude, Awareness, Environment, Environmental Education*

I. Introduction

In India, theUniversity Grants Commission (UGC) decided to introduce Environmental Education as a compulsory subject for all the students of Arts, Science and Commerce in the undergraduate level. The Assam Higher Secondary Education Council (AHSC) has introduced a new subject "Environmental Education" from the academic session 2012 - 2013 for the HS 1st year class with a view to create interest and awareness among the learners on the Environment.The main objective of the subject is to provide an exposure to the students to know more about different aspects of the environment.

The intergovernmental conference on environmental education (UNESCO, 1978)recommended the primary categories of environmental education curriculum goals and objectives of (a) awareness,(b) knowledge,(c) attitude,(d) skills, and (e) participation. As early as 1932,George Counts urged educators to utilise education as an agent of change in order to address social issues of his days. Ornstein and Huskins(1998) drew a parallel of Counts' position on the role of education in social reforms to those of modern-day proponents of social deconstructionism as society faces the challenges of "racial, ethnic and sexual inequality; poverty, unemployment and welfare; computers and Technology; political oppression and war; environmental pollution, diseases, hunger, AIDS and depletion of the earth resources". The role of the teacher, according to social constructivist curriculum planner, is to serve as an agent of change and reform by making students aware of problems confronting humanity and by creating opportunities for students to solve such problems. Madsen(1996) explained that environmental awareness, knowledge and commitment are necessary to achieve environmental protection and restoration. Madsenexplained that the public must have basic knowledge of environmental problems.

Overall this process is left in the hand of educated communities that can train their new generations towards becoming responsible citizens of the environment. The present study is aimed at assessing the responsibility performed by the educated communities i.e. students, and also to assure whether the present curriculum of environmental education of AHSC is sufficient for achieving its goal or not.

Statement of the Problem

The main problem is assumed off;

"STUDY OF AWARENESS, ATTITUDE AND KNOWLEDGE ABOUT ENVIRONMENTAL EDUCATION IN HIGH SCHOOL AND HIGHER SECONDARY SCHOOL STUDENTS".

II. Objective

There are following objective of the study;

- To study the awarenessabout the environmental education among the students of high school.
- To study the awarenessabout the environmental education among the students of higher secondary school.
- To study the knowledge about environmental education amongthe students of high school.
- To study the knowledge about environmental education among the students of higher secondary school.
- To study the attitude about environmental education amongthe students of high school.
- To study the attitude about environmental education among the students of higher secondary school.

Hypothesis

The null hypothesis in assumed of;

- There is no significant difference in the awareness between students of high school and higher secondaryschool about environmental education.
- There is no significant difference in the knowledge between students of high school and higher secondary school about environmental education.
- There is no significant difference in attitude between students of high school and higher secondary about environmental education.

III. Methodology and Procedure

Method

This problem can be studied by various method viz. observation method, which analyse what will be or what will occur in natural condition. By careful observation of the students and their parents for the study period their attitude knowledge and awareness about environmental education could be easily studied. But this method could not be followed due to the paucity of time at the disposal of the investigator. He used survey method with specifies the present status of the subjects used in any study in terms of conditions, practices, beliefs, attitudes, process, effects or trend etc.

Sampling

In this study the investigator gave due consideration to the term sampling. He felt it very difficult rather impossible to conduct the investigation on a large population due to paucity of time. So he preferred limited sample and a sample, if selected properly, is considered to be a representative of a large whole.

Keeping in view the time and financial consideration, he selected one district of Assam i.e.Tinsukia district.Out of all the students studying in Tinsukia district, he selected students randomly from Vivekananda Vidyalay HS School, RastriyaVidyalay, SoumarVidyapeeth, and BalikaVidyamandir. He distributed 100 questionnaire copies to each high school and higher secondary students. Out of 200 questionnaire copies, 72 students of high school and 56 students of higher secondary returned their copies.

Selection of Tools

Self-constructed questionnaire was used as tools for data collection. The tool was constructed to measure awareness, attitude and knowledge about the environment. Awareness, defined as concern for what is happening in the environment, was examined with a series of questions enquiring about the influences, the perception and concerns of local environmental issues. Attitude, defined as the acquisition of values, feelings and motivation towards the environment, was examined using questions regarding a balance between social responsibility and environmental interest, government regulations and political actions taken to protect the environment. Knowledge, defined as an understanding of the basic fundamentals in the environment, was measured with questions regarding basic fundamental ecological concepts and regional issues.

Both the questionnaire used for evaluating higher secondary students and their parents where identical. The questionnaireconsisted of 35 questions with 4 different modalities of questions: -

- Four point Likert-type response scale
- Yes or no questions
- True or false questions (agree or disagree)
- Selection of proper response

Question number 1to 14 was for awareness, 15 to 27 for attitude and question number 28 to 35 was for knowledge.

Several trials of the instrument were conducted with a group of experts to refine the instruments to its final version. The participant experts consisted of Mr. S. Brahmachari, Mr.DheerajThapa, Ms.Shrabanti Bora, Mr.DigantaDutta, Ms. Rita Das, students of higher secondary classes and their parents. The results and

comments from this group were used to evaluate the instrument, to observe consistencies and to refine the instrument.

Administration of Test

The author himself distributed the questionnaire among the students with proper instruction and clearance of queries. The students were allowed to answer the question and return the same to the author voluntarily.

Scoring

Thescores of each sections were added separately and divided by the total scores of the section and lastly each results were multiplied by hundred. This formula provided scores in units of percentage.

Data Analysis

Data were entered into a research database utilising the statistical package for the social sciences (SPSS 24) for the purpose of analysis. Descriptive statistics were used to describe the levels of awareness, attitudeand knowledge of the participant groups towards the environment.

Difficulties Encountered In Collection of Data

Following difficulties encountered in the collection of data-

- Many people did not cooperate properly.
- Most of the people feared of leakage of their personal views so did not cooperate freely and frankly as needed.
- It was time consuming too and took much time in making people ready for the test.
- The presence of different language speaking people like Assamese, Bengali, Hindi, English etc. created some communication problems during the test.
- As felt by the investigator, there was a great manipulation in the answer given by the responder.

IV. Result and Discussion

Table No. 1. Scores of High School Students

	Mean	**Median**	**Mode**	**Std. Dev.**	**Skewness**	**Std. Error of Skewness**
Awareness	59.51	60.70	62.50	7.08	.275	.283
Attitude	33.120	32.690	32.69	11.67	1.683	.283
Knowledge	72.289	66.66	66.66	11.09	.330	.283

Table No. 2. Scores of Higher Secondary School Students

	Mean	**Median**	**Mode**	**Std. Dev.**	**Skewness**	**Std. Error of Skewness**
Awareness	56.07	55.35	55.35[a]	10.17	.887	.319
Attitude	34.24	27.88	27.88	16.74	.572	.319
Knowledge	66.57	66.66	61.11[a]	15.13	-1.411	.319

a. Multiple modes exist. The smallest value is shown.

On comparing the scores of high school students and higher secondary students we found that in awareness, the mean score of high school students (59.51) are more in comparison to that of the higher secondary students (56.07). In attitude,the mean scores of high school students (33.12) are lower than that of the higher secondary students (34.24). In knowledge, the mean score of high school students(72.28) are again higher than that of the higher secondary students (66.57).

In term of skewness, for high school students, all the three variables that is awareness, attitude and knowledge are positive (.275, 1.68, and .330 respectively with standard error .283, .283 and .283). In case of higher secondary students, awareness (.887, std. err. .319) and attitude (.572, std. err. .319) are positive but knowledge is negative (-1.411, std.err..319).

V. Conclusion

From the above results, it is concluded that in regard to awareness and knowledge high school students are superior to higher secondary students but on the contrary higher secondary students are superior in attitude.

Limitation of the Study

- The study is limited only to some places because it is not possible to visit each and every place in limited time.
- As the study is done in Assam which is a multilingual state, the investigator faced a lot of communication problem with the responder.

- Most of the data used is primary data so its authenticity depends upon the authenticity of responses of the responder.
- Most of responders were feared of leakage of their personal information so it is a great chance that they have manipulated their responses.

VI. Recommendation for Additional Research

At present the Environmental education is included in the curriculum of higher secondary schools in almost all states of India. There are some enthusiastic public policy makers in local communities and government to develop effective environmental education programs as related to local concerns such as smart growth development.An essential part of programs development is a valid evaluation tool. In order to refine the instrument it is recommended that the study undergoes a rigorous statistical analysis beyond the scope of this investigation to determine relationships among the dependent factors and the participating groups.

The present study has focused on students who are in 1st year and 2nd year of Higher Secondary Schools. Future study could examine the changes in levels of awareness, knowledge and attitude on the student and parent population over time to evaluate the results of environmental programs run by government and government agencies.

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