STUDY OF ENVIRONMENTAL AWARENESS AMONG SENIOR SECONDARY SCHOOL STUDENTS in relation to their gender and academic stream

Dr. (Mrs.) Navdeep Kaur
Assistant Professor,
Department of Education,
Guru Nanak Dev University, Amritsar
E-mail: negkaur@gmail.com

Abstract
Since its evolution environment has remained both a matter of awe and concern to man. The frontier attitude of the industrialized society towards nature has not only endangered the survival of all other life forms but also threatened the very existence of human life. The realization of such potential danger has necessitated the dissemination of knowledge and skill vis-a-vis environment protection at all stages of learning. Therefore, learners of all stages of learning need to be sensitized with a missionary zeal. This may ensure transformation of students into committed citizens for averting global environment crisis.

The advancement of science and technology made the life more and more relaxed and man also became more and more ambitious. With such development, human dependence on environment increased. He consumed more resources and the effect of his activities on the environment became more and more detectable. Environment covers all the things present around the living beings and above the land, on the surface of the earth and under the earth. Environment indicates, in total, all of peripheral forces, pressures and circumstances, which affect the life, nature, behaviour, growth, development and maturation of living beings.

Irrational exploitation (not utilization) of natural resources for our greed (not need) has endangered our survival, and incurred incalculable harm. Environmental Education is a science, a well-thought, permanent, lasting and integrated process of equipping learning experiences for getting awareness, knowledge, understanding, skills, values, technical expertise and involvement of learners with desirable attitudinal changes about their relationship with their natural and biophysical environment. Environmental Education is an organized effort to educate the masses about environment, its functions, need, importance, and especially how human beings can manage their behavior in order to live in a sustainable manner.

The term ‘environmental awareness’ refers to creating general awareness of environmental issues, their causes by bringing about changes in perception, attitude, values and necessary skills to solve environment related problems. Moreover, it is the first step leading to the formation of responsible environmental behaviour (Stern, 2000). With the ever increasing development by modern man, large scale degradation of natural resources have been occurred, the public has to be educated about the fact that if we are degrading our environment we are actually harming ourselves. To encourage meaningful public participation and environment, it is necessary to create awareness about environment pollution and related adverse effects. 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 gross root level. So the whole society can work to save the environment.
EMERGENCE OF THE PROBLEM

Awareness and involvement of the civil society is a precondition of checking environmental degradation. This large scale environmental degradation has caused a global concern about the conservation and protection of the earth’s environment. Hence, efforts are being made for inculcating environmental consciousness or awareness among the masses. It is education which can make the human being conscious and knowledgeable about environment and environmental problems. Moreover, awareness is essential for the action. The main purpose of environmental education in schools is to acquaint and sensitize the young minds to the environmental problems and concerns, to inculcate in them healthy personal and social attitude and behaviour towards environment. Hence, it is necessary to know how far the school students are aware about environment and environmental problems.

STATEMENT OF THE PROBLEM

STUDY OF ENVIRONMENTAL AWARENESS AMONG SENIOR SECONDARY SCHOOL STUDENTS IN RELATION TO THEIR GENDER AND ACADEMIC STREAM

DELIMITATION OF THE PROBLEM

The present investigation was delimited to the following areas:
1. The present study was delimited to boys and girls of arts and science stream of senior secondary schools.

OBJECTIVES

The present study had following objectives:
1. To study the environmental awareness among senior secondary school students.
2. To compare the environmental awareness among senior secondary school students in relation to their gender.
3. To compare the environmental awareness among senior secondary school students in relation to their academic stream.

HYPOTHESES

The present study had following hypotheses:
1. Majority of senior secondary school students were aware of environment.
2. There will be no significant difference in environmental awareness among boys and girls of senior secondary school.
3. There will be no significant difference in environmental awareness among science and arts students of senior secondary school.

RESEARCH DESIGN

The present study comes under the domain of descriptive research.

SELECTION OF TOOL

Environment Concept Achievement Test (ECAT) is used for collection of data which was prepared and standardized by Dr. S.K. Bawa, Dean, Faculty of Education, Lovely University Phagwara, Punjab. The test measures the environment concept achievement of the students of tenth, eleventh and twelfth grades.

STATISTICAL TECHNIQUES

The following statistical procedures were used to analyze the data.
1. Descriptive statistics: Mean and standard deviation were used to analyze the data.
2. Inferential statistics: ‘t’ test was applied to compare the results obtained through descriptive statistics.
3. Graphics statistics: To have a pictorial view of the scores of different variables, graphics statistics was used.

RESULTS AND DISCUSSION

HYPOTHESIS I

“Majority of senior secondary school students will aware of environment”.

The first hypothesis was framed to analyze the level of environmental awareness among senior secondary school students of science and arts stream. In this, mean and standard deviation of the whole group was calculated. After that the percentage of the students having higher environment concept achievement, average environment concept achievement and lower environment concept achievement was calculated. The results of the analysis are shown in the table 1.
Table 1

Showing percentage distribution of the students classified according to their level of environmental awareness

<table>
<thead>
<tr>
<th>Level of Environmental Awareness</th>
<th>Percentage of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher Environmental Awareness</td>
<td>10%</td>
</tr>
<tr>
<td>Average Environmental Awareness</td>
<td>69.5%</td>
</tr>
<tr>
<td>Lower Environmental Awareness</td>
<td>20.5%</td>
</tr>
</tbody>
</table>

It is clear from the table 1 that 79.5% of the students have average and higher environmental awareness. 69.5% have average environmental awareness and 10% have higher environmental awareness. Only 20.5% of the total sample is having lower environmental awareness i.e. they are not aware of the environmental issues. Hence our hypothesis that “Majority of the students will be aware of environment”, stands accepted.

HYPOTHESIS II

“There will be no significant difference in environmental awareness among boys and girls of senior secondary school”.

This hypothesis was tested by calculating mean and S.D of test scores of male and female students. The hypothesis was further examined by applying 't' test. The result of the analysis is shown in the table 2.

Table 2

Showing Mean, S.D and t value of boys and girls students

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>SE_D</th>
<th>t-Ratio</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Awareness</td>
<td>Boys</td>
<td>100</td>
<td>48.9</td>
<td>4.4</td>
<td>0.62</td>
<td>2.5</td>
<td>Significant at 0.05 level</td>
</tr>
<tr>
<td></td>
<td>Girls</td>
<td>100</td>
<td>50.45</td>
<td>4.31</td>
<td>0.62</td>
<td>2.5</td>
<td></td>
</tr>
</tbody>
</table>

It is clear from the table 2 that t-ratio of significance difference of means in environmental awareness between boys and girls is 2.5> 1.96 which is statistically significant at 0.05 level of significance. Therefore hypothesis, “There exists no significant difference in environmental awareness among boys and girls of senior secondary school” stands rejected. It is found that there is significant difference in environmental awareness among boys and girls of senior secondary school students. Girls are more aware than boys.

HYPOTHESIS III

“There will be no significant difference in environmental awareness among science and arts students of senior secondary school”.

This hypothesis was tested by calculating mean and S.D of the test scores of science and arts students of senior secondary school. The hypothesis was further examined by applying ‘t’ test. The result of the analysis is being shown in the table 3.

Table 3

Showing Mean, S.D and t value of science and arts students

<table>
<thead>
<tr>
<th>Variables</th>
<th>Educational Stream</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>SE_D</th>
<th>t-Ratio</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Awareness</td>
<td>Science</td>
<td>100</td>
<td>51</td>
<td>3.93</td>
<td>0.50</td>
<td>5.3</td>
<td>Significant at 0.05 level</td>
</tr>
<tr>
<td></td>
<td>Arts</td>
<td>100</td>
<td>48.35</td>
<td>3.35</td>
<td>0.50</td>
<td>5.3</td>
<td></td>
</tr>
</tbody>
</table>

It is clear from the table 3 that the t-ratio of significance of difference of means in environmental awareness between science and arts is 5.3> 1.96 which is statistically significant at 0.05 level of significance. Therefore hypothesis, “There exists no significant difference in environmental awareness among science and arts students of senior secondary school” stands rejected. It is found that there is significant difference in environmental awareness among science and arts students of senior secondary schools of Hoshiarpur district. Science students are more aware than arts students.
FINDINGS

It can be concluded from the analysis and interpretation of the results that the
(a) Girls are more environmentally aware than boys,
(b) Science students are more aware of the environment than arts students,
(c) Majority of the students of the senior secondary schools are aware of the environment.

CONCLUSION

Environment Education has great importance as our lives to a large extent depend on our response to emerging problems related to the environment. Environment education is a lifelong process and it has to be an academic response to social change i.e. transformation from frontier society to sustainable society. Therefore, Environment Education should enable students to analyze, evaluate and draw inferences about problems and issues related to environment.

BIBLIOGRAPHY