Themed Section: Science and Technology

A Study of Attitude of Secondary School Students Towards Environmental Education

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ABSTRACT

The present study pointed that the most critical goal of environmental education is to ensure that the necessary information, guidelines and training is imparted to children and adolescents regarding the ill practices that might harm the environment in the longer run. In addition, another important goal of environmental education is to educate the industrial production houses about the safer practices that need to be followed in order to ensure that minimum damage occurs to their surroundings and environment.

Keywords: Attitude, Secondary School Students, Environmental Education

I. INTRODUCTION

In last decade of the 20th century, the nation has untidily arrived at the conclusion of the healthy living. Its dire need is felt by the W.H.O. stressing on the need that we must achieve a stage where the rate of development should become faster than the rate of eco-deterioration. In the modern scenario, there is a crisis of environmental awareness proceeding negative code of behaviour towards environment. Impact of human activities cause's disequilibria in environmental problem is not a problem of local level, but it is a great threat to the whole world. Now it is time to awake and save our environment by developing attitude towards it.

Pressure from rapid population growth, uncontrolled and lavish consumption, urbanisation, industrial expansion and advances in science and technology have caused serious environmental problems. It is disequilibrium caused by certain factors in the established relationship between humanity other agencies and the environment. In today's changing modern social scenario, the major challenge facing present day society is the need of developing environmental values to protect and treasure our environment. Furthermore, a man will be able to establish right contacts with the environment only, when he understands his place in the world and his responsibilities.

To meet successfully the present very dangerous environmental situation, it is essential that everyone

makes a contribution and which will emerge from the environmental knowledge. It is universally acknowledged that education is an integral component of the educational system. It is intimately connected with society and is conditioned the ethos, culture and character of a nation.

Environmental Education is a process of recognising values and clarifying concepts in order to develop skills and added tools necessary to understand and appreciate the inter-relationship among man, his culture and his bio-physical surrounding. It creates an overall perspective, which acknowledges the fact that natural environment and man-made environment interdependent. It should consider the environment in its totality and should be a continuous lifelong process beginning at the pre-school level and continuing through all stages. It should be inter-disciplinary and examine major environmental issues from local, national and international points of view. It should utilise various educational approaches to teach and learn about and from the environment with stress on practical activities and first-hand experience. It is through this process of education that people can be sensitized about the environmental issues.

The key goals of environmental education are to develop a world population that is aware of, and concerned about, the environment and its related problems. In addition, the goal is to develop a cluster of citizens who have the knowledge, skills, attitudes, motivation and commitment to work individually and collectively towards solutions of current problems and the prevention of new ones.

It is an agreed fact the problem of environmental hazards has reached massive proportions in today's times. In such circumstances, it is almost impossible for a handful officials and authorities to handle the situation effectively. It is here that the goal of environmental education to create adequate awareness amongst various user groups becomes all the more critical. The aim is to educate those who are involved at the helm of affairs at locations which are the main causes of environmental hazards. If an appropriate measure of environmental education is imparted, then the goal of environmental education to minimize harm to the environment can be achieved effectively. It is widely accepted that the development of such awareness and attitude can be possible through providing environmental knowledge.

Environmental education projects are an ideal way to diversify your curriculum, try group teaching strategies, and bring the real world into the classroom in a strong academic context. Research shows that real-life handson learning effectively reaches and teaches children. In the past 25 years, environmental education has helped the people of this country to reach a new understanding. Today, more Americans than ever before understand that to ensure a good quality of life for ourselves and our children, we must act as responsible stewards of our air, our water, and our land.

Over the past generation, environmental education has helped this nation to harness the creativity, the imagination, and the tenacity of Americans from all walks of life and to put that creativity to work in the service of public health and our environment.

As a result, our nation has made tremendous progress in protecting public health and our environment. We no longer have rivers catching on fire. Our skies are cleaner. And U.S. environmental expertise and technology are in demand throughout the world. But more remains to be done. If we are to meet the environmental challenges of the next 25 years, we must deepen environmental awareness among all Americans. And we must involve many more Americans in protecting our health and the world we live in.

The Clinton Administration is committed to building a new generation of environmental protection, in which those who are affected by environmental decisions have the maximum opportunity to help make those decisions. An informed and involved local community always does a better job of environmental protection than some distant bureaucracy. If we are to move beyond environmental regulation to true environmental protection, Americans in businesses and communities throughout this country must be full and active participants in solving environmental problems.

Educational concerns about the environment can be viewed as a logical consequence of the change in the relationship between human beings and the natural world over the last two centuries, to the view that earth and its resources are valuable only in so far as they satisfy human needs. Clark explains that this attitude has had a greater negative influence on Nature than natural events such as earthquakes and volcanoes. This change has resulted in the over exploitation of both renewable and non-renewable natural resources with resulting unwanted waste materials, which have lead to pollution Lowe and Thompson. Dunlop and Van Liereargue that this view has been challenged by the new environmental paradigm of the exploitation of nature; and that the growth of the human economy should be balanced with environmental protection, so that people can again live in harmony with nature.

II. ATTITUDE

Attitude is an important concept to understand human behaviour. It is defined as a complex mental state involving beliefs and feelings. **Anastasia** (1957) defined attitude as tendency to react in a certain way towards a designed class of stimuli. Attitude has been define as a mental and neutral state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with it is related. People's attitude towards their profession has an effect on their performance. This case is also valid for the profession of teaching.

Meaning and definition of Environment:

Word "environment" is most commonly used describing "natural" environment and means the sum of all living and non-living things that surround an organism, or

group of organisms. Environment includes all elements, factors, and conditions that have some impact on growth and development of certain organism. Environment includes both biotic and a biotic factors that have influence on observed organism. A biotic factor such as light, temperature, water, atmospheric gases combine with biotic factors (all surrounding living species). Environment often changes after some time and therefore many organisms have ability to adapt to these changes. However tolerance range is not the same with all species and exposure to environmental conditions at the limit of a certain organism's tolerance range represents environmental.

III. DEFINITIONS OF ENVIRONMENT

Views OF Douglass and Holland:

"Environment is a word which describes, in the aggregate, all of the external forces, influences and conditions that affect the life, nature, behaviour and the growth development and maturation of living organism."

IV. TYPES OF ENVIRONMENT

Environment can be conveniently divided into two categories.

- 1. Natural Environment
- 2. Man-made Environment

V. MEANING AND DEFINITION OF EDUCATION

Education is the process of development of innate power of man which is natural, harmonious and progressive such development enables him not only to control his environment but also help him to improve his environment. It is education which makes the man good or bad man. According to this content its method since man is capable of making necessary adaptation. Education helps him to alter his behaviour and acquire new skills according to the demand of the new situations. For our self- development, education is the emerging need of the society. It tells us that how we can solve our problems, through which method we can solve it. Education is must for our social development, mental development and intellectual development.

According to Dr. Karan Singh

"Education has been life- long interest with me, as a lifelong student also a chancellor of several universities. Most recently I was a member of the UNESCO international commission on education for the twenty past centuries, the report of which was published in 1996 under the title "The Treasure within". I have written on various accept of educationist Essentially, I feel that education must address all the dimension of the human being – physical, intellectual, aesthetic, societal and spiritual.

VI. ENVIRONMENT EDUCATION

Environment Education is the new area of study of the discipline of education. With recent development and advances, environment education is virtually a new source of concern for educator, teachers and students. As with the rapid development in each area, there are problems-both internal and external ones to be confronted and resolved.

The area of 'environment education' has been discussed through at several national and international seminars, workshop and conferences. Most of the people have recognised the urgent need of environmental education, but only some have clear ideas and understanding about the meaning, purpose, needs and the courses of content of environmental education that need to be taught to the students of education. Therefore, an attempt has been made to explain the concept of 'environmental education'.

6.1 Meaningand Definition of Environment Education

The term 'Environment Education' has been discussed in various national and international seminars who tried to define it. Some of the definitions have been provided here to understand the concept.

According to MISHRA:

"Environment education appears to be process that equips human beings with awareness, knowledge, skills attitudes and commitment to improve environment."

According to SeminaratJammi:

"Environment education is a way of implementing the goals of environmental protection. It is not a separate branch of science or field of study. It should be carried

out according to the principles of lifelong integral education".

6.2 Objectives of the Environmental Education:

The objectives of the environmental education are part of the general objectives of education. These objectives of environment can be subsumed in the three domains viz.

- 1. Cognitive objective
- 2. Affective objectives
- 3. Psychomotor objectives

6.3 Principles of the Environmental Education:

- 1. Considering the environment in its totality that is natural, artificial technological, social, economical, political, moral, cultural and historical.
- 2. To consider Environment Education continuously from pre-school to higher levels both informal and non-formal education.
- 3. Considering environmental aspects in plans for growth and development.
- 4. Helping learners to discover the symptoms and the real causes of environmental problems.
- 5. Examining major environmental issuesfrom local, national and international point of view.

6.4 Environmental Education Programmes:

It involves a three-fold classification of environmental education based on different disciplines.

- **1. Environmental Studies:** It is concerned with environmental disturbances and minimisation of their impact through changes in social sciences.
- **2. Environmental Science:** It deals with the study of the processes in water, air, soil and organisms which lead to environ damage.
- **3. Environmental Engineering:** It involves the study of technical processes used to minimise pollution.

VII. ENVIRONMENTAL EDUCATION IN INDIA

The environ scenario of India is very wide indeed. At the first level, special attention must be paid to the school going children and women. They are to be made aware to health, nutrition, and sanitation, hygiene, development, water and food contamination, fodder and fuel wood etc.Non- government organizations have to pay a significant role. In the Directory of the Dept. Of Environment, there are 200 NGO's which works in the area of Environment Education and awareness. Moreover, children are to be told the real meaning of wildlife. They are to be educated for plants, smaller animals and microbee etc. i.e. holistic approach to wildlife.

- 1. Formal Environmental Education
- 2. Non- Formal Environmental Education

VIII. Overall Attitudes of Students Towards Environmental Studies

Table 1 shows the overall attitude of students at secondary level in Karachi, Pakistan. An examination of table shows that students hold moderately positive attitude in most of the items of ROSE questionnaire (section D "Me and environmental challenges"). The participants responses were distributed among the five options (i.e. strongly disagree, disagree, neutral, agree, strongly agree). The findings revealed that Pakistani students generally have moderately favourable attitudes towards environmental issues. They seemed to be eager to find solutions to environmental problems and showed optimistic trends about the future

Table 1. Overall Attitudes of Students Items

	Mean	S.D.
1. Threats to the environment are not my business (-)	2.50	1.44
2. Environmental problems make the future of the world look bleak	3.74	1.29
3. Environmental problems are exaggerated (-)	3.17	1.26
4. Science and technology can solve all environmental problems	3.29	1.20

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5. I am willing to have environmental problems solve	3.79	1.00
even if this means sacrificing many goods		
6. I can personally influence what happened with the	3.59	0.95
environment		
7. We can still find solutions to our environmental	4.26	0.92
problems		
8. People worry too much about environmental	3.14	1.32
problems (-)		
9. Environmental problems can be solved without big	2.56	1.29
changes in our way of living (-)		
10. People should care more about protection of the	4.24	1.04
environment		
11. It is the responsibility of the rich countries to	2.67	1.34
solve the environmental problems of the world		
12. I think each of us can make a significant	4.13	1.05
contribution to environmental protection		
13. Environmental problems should be left to the	2.30	1.17
expert (-)		
14. I am optimistic about the future	3.70	1.12
15. Animals should have the same right to life as	3.91	1.14
people		
16. It is right to use animals in medical experiments if	3.46	1.21
this can save human lives		
17. Almost all human activity is damaging for	3.27	1.29
environment		
18. The natural world is sacred and should be left in	3.69	1.30
peace		
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IX. DISCUSSION

The results of the study explores that there is no significant difference in attitude towards environmental studies across gender. Boys and girls showed similar attitude. Literature on gender differences is still inconclusive. While some studies support gender differences others have not found any differences. Results of this study corroborate findings of internal Relevance of Science Education (ROSE) study where no differences were found between environmental attitudes of girls and boys (Schreiner &Sjoberg, 2004). Moreover, in her five-country comparison on the determinants of environmental attitudes, Weaver (2002) did not find significant gender effect in any of the participating countries (e.g. Great Britain, Russia or Japan) except USA. According to her finding in USA women showed a more positive attitude. Nevertheless, the results of the study do not match with a number of studies which have been carried out in the past to explore students'

environmental attitudes (Giffordet al., 1983; Worsley&Skrzypiec, 1998; Eagles &Demare, 1999; Tikkaet al., 2000; Tuncer et al 2007). A common theme of the study revealed that girls had higher mean scores on environmental attitude as compared to boys. Loughlandet al. (2003) also emphasizes the gender difference as one of the important factors influencing young people's concepts regarding the environment. As presented earlier, it is evident that overall comparison did not reveal any difference across gender; however, interesting patterns were observed on some of items.

X. CONCLUSION

This survey research aimed to investigate the differences between government and private schools students' attitude towards environment across gender at the secondary level. The study provides ample evidence that the overall attitude of students show that students are moderately engaged with environmental issues. There were significant differences between government and private schools students' attitude towards environment education. The study also explores that there is no significant difference in environmental attitude across gender.

The results of the study give us the overall impression of moderate attitude of students towards environmental issues. However, for positive changing of the prevailing level of attitude and hope among youth, there is a need of bringing change in different levels. For example, some rethinks needs to be done regarding curriculum content and structure, teaching methods, teacher education and in-service training, and development of suitable resources. It is my hope that these efforts will make youth of Pakistan environmentally informed and friendly citizen.

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