
School Children's Understanding and Attitude towards Environment

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ABSTRACT

Environment is every humans concern and we all are responsible for taking care of it. 'Protection of Environment' is one of the core areas of National Policy on Education 1986 and the environment concerns have been covered in school curriculum and textbooks developed by National Council of Educational Research and Training with an aim to make children sensitive to the environment. This research study traces the understanding about environmental concerns among the secondary stage learners and their attitude towards these concerns in their daily life. However, the analysis of this sample study revealed that there is much which needs to be accomplished.

Key words: environment, concern, attitude, school, children, textbooks, daily life.

Introduction

Taking good care of the environment that nurtures us is one of the most significant concerns of human beings. Over the centuries human beings' control over the environment has increased, and as people have begun to mould the surroundings more and more to suit their needs, there is need to generate sensitivity among them. It has been imperative now more than ever before to nurture and preserve the environment (NCERT 2005, p.6). National Council of Educational Research and Training is one of the pioneer organisations in India to have realised the need of introducing the environment education in the school curriculum at the early stage. EE has been one of the priority areas of concern in all the curriculum development programmes at NCERT (1975, 1988, 2000 and 2005) (Sharma & Pandya 2015, p.13). 'Protection of Environment' is one of the core areas of National Policy on Education 1986 and the school curriculum of 1988, 2000 and National Curriculum Framework 2005 persevere in making children sensitive to the environment.

National Curriculum Framework 2005 is based on 21 focus groups which were constituted on various themes and one of the focus group 'Habitat and Learning' suggested in its report that environmental education can be best taught in an infused manner. Accordingly, NCERT has taken care that environmental concerns are infused in different curricular areas in a graded manner till Class X. Different activities and project works are suggested in the textbooks to provide live contact with the world around them (NCERT 2011, p.xi). Environmental issues range from exploitation of natural resources to all kinds of pollution – land, air and water – to global warming, human rights to ecological justice to social justice to conflicts to issues of the 'commons' (any shared resources such as atmosphere, rivers, oceans, and so on) and much more (Shimray 2016, p.5). The environmental concerns have been covered in all school textbooks developed by NCERT with an aim that goals of environmental protection and improvement must be achieved but if we observe around we find that in daily life environmental concerns are neglected by people. Humans have changed the biosphere in very many ways, with wide-ranging and long-lasting effects (Goudie & Viles 2003, p.19). The aim of learning in the school should not be just to pass and move to next grade rather be a sensitive and caring citizen who think rationally and acts responsibly.

Fundamentally, however, EE is characterized as a learning process, whose ultimate goal is to educate and encourage people in engaging in more sustainable and environmentally responsible practices (Biedenweg, Monroe & Wojcik 2016, p.22). The Position Paper of National Focus Group on Habitat and Learning (NCERT, 2006) states that:

The main focus of EE should be to expose students to the real-life world, natural and social, in which they live; to enable them to analyse, evaluate, and draw inferences about problems and concerns related to the environment; to add, where possible, to our understanding of environmental issues; and to promote positive environmental actions in order to facilitate the move towards sustainable development (NCERT 2006, P.4).

Objective

This sample research study was taken with the following objectives:

- To analyze school children's understanding about environmental concerns given in the textbooks.
- To analyze their attitude towards environmental concerns in their day to day life.

Methodology

To examine and gauge the students attitude towards environment, survey research is preferred, since published data pertaining to the issues selected for the study is not available at micro as well as macro level. As, the main problem of field survey is to obtain representative data points, hence, intensive survey technique has been adopted to acquire the relevant data through a well designed questionnaire. The questionnaire had eighteen questions related to various topics which learners had studied at upper primary and secondary level like conservation of electricity, water, garbage disposal, air pollution, tree plantation and reuse of resources. The present study is based on primary survey of 276 secondary stage students from Government Senior Secondary

School, Chakarpur and Government Senior Secondary School, Nathupur in district Gurgaon - Haryana. The study is based on data analysis, interview and observation done in these two schools. The textbooks studied by learners at upper primary stage and secondary stages were reviewed for the environment component. The textbooks developed by NCERT and printed by the state board were followed. The activity books which were developed by the state board for upper primary stage had various activities to sensitise the children about environment. Teachers who were teaching at the secondary stage and parents who visited the school on parent-teacher meeting day were also interviewed informally to find out their observations about their wards and their own attitude towards various environmental concerns. An attempt was made to find out how much they know about these environmental concerns which are also associated with their daily life and whether they are sensitive towards them and make conscious efforts to conserve or protect them.

Findings & Implications

The study shows that school children have good understanding about environmental concerns which are given in their textbooks. But when these concerns appear in their daily life they tend to ignore them. Sensitivity cannot be evoked by merely giving the material in the text. Their attitude and concerns towards environment needs to be changed by an impetus to move from merely environmental awareness to environment respecting behaviour which should be practised by everyone in their everyday life.

Saving electricity gives the most climatic leverage, because it takes 3-4 units of fuel (in socialist and developing countries, often 5-6 units) to generate a single unit of electricity, so saving that unit displaces many units of fuel, mainly coal, at the power plant (Lovins 1991, p.215). In India major chunk of energy demand is met through the coal reserves which are exhaustible resources. The concept of saving energy has been dealt in upper primary stage as well as secondary stage. Hundred percent students agreed that lights and fans should be turned off while leaving the room to conserve electricity but only 67.03 percent said that they switch off the lights and fans when they leave the room and only 7.97 admitted that they turn off the lights and fans of a vacant room if they are passing by. Student's attitude towards saving electricity was indifferent despite 100 percent awareness. Teacher and parents also informed that most of the time fans and lights were left on while leaving the rooms by them as well as the students.

True, a single drip won't waste much water, but think about each faucet in your home dripping a little bit all day long (USGS 2016). This thought did not occur in the mind of those 17.03 percent students who could not realise its importance but 82.97 percent students agreed that lot of water is wasted due to dripping of taps. Surprisingly little more i.e. 85.14 percent said that they close the tap properly after using it to avoid dripping. 10.87 percent students said that they will turn off the tap properly if they find a tap is left dripping by someone else. Water conservation has been dealt at all the levels in the textbooks. Teachers added that dripping taps were never reported by any student in the school though in one school three taps were dripping due to fault in the tap.

Most of the solid waste that people produce are deposited in open dumps, buried in sanitary landfills or burned in incinerators (Myers & Spoolman 2013, p.382). 92.03 percent students concurred that litter should always be thrown in the waste bin. 86.96 percent

mentioned that they always throw the litter in the waste bin. No one had ever picked up the litter spread by others and thrown in the waste bin. Wrappers of toffees, chips, pencil shaves, eatables, paper were noticed regularly in the classrooms, play grounds, corridors in both the schools. However, the day questionnaires were filled by the students there was less litter noticed in the classrooms.

Although burning dry leaves is banned under the Environment Protection Act and is punishable with up to 5 years of imprisonment and Rs. 1 lakh fine, people do not mind and flout the law (Agrawal 2016, p.217). 80.07 percent of the students were of the view that dried leaves should not be burned and 75 percent had seen and knew people who burn leaves. None of them had ever made any effort to put off the fire of burning leaves. They had read in the textbooks about the hazardous effects of burning leaves and litter. There were many trees in the campuses of both schools and dried leaves were regularly gathered by the gardener. Though it was mentioned that leaves are not burned but traces of burning were seen in the campus. Most of the parents did not mind burning a small heap of dried leaves and were unaware of the law.

In the periphery of the school campus, along the rear and wings, a thick belt of large shady trees should be planted to bring down noise and cut down dust and storms (Randhawa & Mukhopadhyay 1986, p.515). All the students agreed that more trees should be planted as they are beneficial for the environment and 63.04 percent had planted trees in school during *Vanmahotsav* as well as at their home. 11.96 percent mentioned that if they will find a sapling in a dying state they will shift it to a safe place. There were eco clubs in both the schools and teachers sensitised about planting trees in the morning assemblies and classes. Various activities like *Vanmahotsav*, painting competition to spread awareness etc. were regularly done in the school. Students enjoyed doing all these activities and knew the importance of trees but majority of them were insensate in their views if they saw a sapling which needed attention to survive.

Recycling natural resources provides several benefits to the environment, Firstly, the recycling of materials reduces the need to use raw materials, extending the useful life of reserves of such resources (Mongillo & Warshaw 2000, p.304). 97.10 percent students were in favour of recycling of material to conserve resources and 94.93 percent had made paper bags, photo frame, tray, wind vane, decorative items with waste material in school projects. 64.85 percent had made decorative pieces at home with waste materials. Some students had made rough notebook from left over pages of old notebooks. 'Best out of waste' assignments were regularly given by teachers. Parents of girl child in particular mentioned that creative things like pen stand, decorative pieces are made by their daughters with plastic bottles, wools, beads, boxes etc which they have displayed in their homes.

Despite the policy emphasis on infusion approach of Environmental component at all levels of schooling and higher education, the area remains neglected or is at best given a symbolic treatment (Sharma 2015, p.3). The concepts given in the textbooks and the projects/activities suggested by teachers are carried out in a routine manner to just pass the exams. There is a need for the teacher to work as a facilitator to sensitise them about the environment issues and imbibe in their minds that this learning and understanding is for life long and not just to move to next level in school (Malik 2013).

Conclusion

Sensitivity towards environment has yet not imbibed in the young learners mind as a part of their lifestyle. The study has revealed that there is adequate awareness among the learners about various environment components though it needs to be strengthened about hazardous effect of small amount of pollution and laws. The casual approach towards environmental issues should change as environment is every humans concern and school children can be groomed from the beginning to understand and respect the environment and it should be reflected in their behaviour. This cannot be done by merely changing the curriculum and the textbooks, but needs a more fundamental change in the way that teaching-learning happens and the way that knowledge is viewed in the school (NCERT 2006, p.10). We firmly believe that change is not only possible but within reach if all of us begin to look at the problems differently and accept the collective and individual responsibilities required for wise stewardship of our earth (Saylan & Blumstein 2011, p. xii). A responsible attitude towards environment is needed where children implement in their daily life what all they learn in the school and textbooks. Teachers and parents can be role model in guiding the young learners.

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Table - I: School Children's Response towards Environmental Concerns

S.No.	Questions	Students Response		Students Response (in %)	
		Yes	No	Yes	No
Electricity					
1.	Lights and fans should be turned off while leaving the room to conserve electricity.	276	00	100	00
2.	Do you switch off the lights and fans while leaving the room?	185	91	67.03	32.97
3.	While passing by if you find that lights and fans on in a vacant room, do you turn them off?	22	254	7.97	92.03
Water					
4.	Lot of water is wasted due to dripping of taps.	229	47	82.97	17.03
5.	Do ensure to close the tap properly after using it to avoid dripping?	235	41	85.14	14.86
6.	Do you turn off the tap properly if you find a tap is left dripping by someone else?	30	246	10.87	89.13
Garbage/Litter					
7.	Litter should always be thrown in the waste bin.	254	22	92.03	7.97
8.	Do you always throw the litter in the waste bin?	240	36	86.96	13.04
9.	Have you ever picked up the litter spread by others and thrown in the waste bin?	00	276	00	100
Burning Leaves					
10.	Dried leaves should not be burned.	221	55	80.07	19.93
11.	Have you/your known ever burned leaves?	207	69	75	25
12.	Have our ever made any effort to put off the fire from burning leaves?	00	276	00	100
Planting Trees					
13.	More trees should be planted as they are beneficial for the environment.	276	00	100	00
14.	Have you ever planted a tree during <i>Vanmahotsav</i> or similar event?	174	102	63.04	36.96
15.	If you find a sapling in a dying state, will you shift it to a safe place?	33	243	11.96	88.04

Recycling/Reusing					
16.	Recycling of material should be done to conserve resources.	268	08	97.10	2.90
17.	Have you ever done a school project on 'best out of waste'?	262	14	94.93	05.07
18.	Have you ever made anything out of waste material for yourself/home/school?	179	97	64.85	35.14

Source: Field Survey