EDUCATION AND ENVIRONMENTAL RESPONSIBILITY: A CULTURAL PATTERN IN THE CLASS ROOM AMONG THE HIGHER PRIMARY STUDENTS FOR A GREENER SOCIETY

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Abstract - Nature is where we belong and its our responsibility and respect to preserve conserve and sustain the environment. Educational institutions play an important role to create awareness among the students for a sustainable environment. Responsible use of natural resources, bio-diversity have been part of the educational system. The traditional practices and customs have enabled one to keep the environment healthy. The study is based on primary and secondary data. The study has been conducted on primary students about the responsibility of creating a greener environment. A questionnaire has been administered to the students relating to the study by convenient sampling method. The main focus of this study was to find out the responsibility of the students for greener society within and outside the classroom. The second objective was to evaluate the activities by the students to create awareness. And thirdly to find from the students the action oriented activities for economic sustainability for future generations. Lastly to study cultural pattern as a way of life for a Greener society The study found that the respondents are somewhat responsible for saving planet earth. Talk on various factors like climate change, global warming, and competitions such as essay, skit, painting, and best out of waste, etc. have been conducted to create awareness and to sustain environmental protection.

keywords - Education, environment, sustainability, cultural pattern, greener society

INTRODUCTION

The environment includes human and natural surroundings. Our planet earth with its picturesque flora and fauna is an awesome place to live in. The cry of our planet earth is echoed as it gets hurt due to over pollution and damaging its image. Responsibility and discipline are taught in the school to care for mother earth. Education produces responsible citizens and is to ensure to maintain the quality of its citizenry. Just like the family takes the responsibility of building its family customs and traditions; our earth is our home and each citizen should take the responsibility to preserve and protect the environment. Social and Environmental Responsibility should be the motto of the educational institutions and it should be the cultural pattern of the society.
RATIONALE OF THE STUDY

Global earth is facing the trauma of environmental challenges such as climate change, global warming, droughts, floods, water scarcity, and pollution. Awareness of the effects and consequences of environmental issues is not alone will solve the problem. Environmental issues should be the responsibility of educational institutions as a cultural and structure pattern in classroom teaching. Healthy, protective, and green surroundings are very essential for a safe learning environment. Healthy practices bring children closer to nature, as far as possible engage them in taking care of it. Through this study on Education and Environmental responsibility: A cultural pattern and structure in the classroom among the higher primary students for a Greener society the researcher wishes to recreate awareness about the responsibility of the students in protecting the environment. Protecting and saving the planet earth should be their way of life. As the mother takes care of their children, the children should from its early stage start respecting and protecting mother earth.

OBJECTIVE OF THE STUDY

- To find out the responsibility of the students for greener society within the classroom.
- To evaluate the activities by the students to create awareness.
- To find from the students action-oriented activities for economic sustainability for future generations.
- To study cultural pattern and structure in the classroom among the higher primary students for a Greener society.

METHODOLOGY

Details’ regarding the present study is based on the data collected from both Primary data as well as secondary sources. A structured questionnaire was prepared and administered to higher primary students studying in the 6th and 7th standards for collecting data. The data has also been collected from various sources like research journals, articles, and websites.

Sample size

The sample size was 200. The data was collected from 200 students from Teresian Higher Primary Institutions, Mysuru. The students selected for the study belongs to the age group of 11 to 14 year belonging to 6th and 7th standard. Both male and female students were selected. Through random sampling, the samples were selected.

Limitations

The following were the limitations of the study.

- The study may not give accurate and reliable data as the primary students have not understood some of the concepts.
- The students already had a preconceived idea about environmental protection and other related topics.
- Few students were not interested to answer the questionnaire.
FINDINGS

Some of the findings of the study are the following

**Table 1: Age group of the respondents**

<table>
<thead>
<tr>
<th>Age Group in years</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-11</td>
<td>18(22.5)</td>
<td>28(23.3)</td>
<td>46(23)</td>
</tr>
<tr>
<td>11-12</td>
<td>42(52.5)</td>
<td>56(46.6)</td>
<td>98(49)</td>
</tr>
<tr>
<td>12-13</td>
<td>19(23.7)</td>
<td>35(29.1)</td>
<td>54(27)</td>
</tr>
<tr>
<td>13-14</td>
<td>01(1.2)</td>
<td>01(0.8)</td>
<td>02(1.0)</td>
</tr>
<tr>
<td>Total</td>
<td>80(100)</td>
<td>120(100)</td>
<td>200(100)</td>
</tr>
</tbody>
</table>

Note: Figures in Parentheses are percentages

Environmental responsibility is created among the students at the primary school itself. The above table shows that 49 percentages of the respondents belong to 12 years of age group. About 27 percentages of the respondents belong to the age group of 13 years, 23 percentages belonging to 11 years and the mean age is 13.3 respectively. The respondents are aware of their rights intellectually but constant reminder and action oriented plan to nurture this social responsibility belong to the institutions.

**Figure 1: Gender of the respondent**

The data from above figure depicts the gender distribution of the respondents. The data reveals that 40% of the respondents were male and 60% of the respondents were female respectively. Responsibility to save the environment is been instilled irrespective of gender.
Figure 2: Religion of the Respondent

The figure above reveals the religious background of the respondents. Majority of the respondents 81 percentage of them were Hindus, 9 percentage of the respondents were Christians, 6 percentage of them follow Muslim religion and while other 4 percentage of the respondents were Jain respectively.

Environmental issues

At the primary level, the students are taught to know more about the environment in which we live. Its nature, protection, cares for the earth has been part of the school curriculum. Through various educational tools, children are enabled to explore environmental issues and have created awareness to take action-oriented steps to improve the environment.

Greener society for a sustainable future is the responsibility of every individual. Educational institutions play an important role in imparting, inculcating in the students for the preservation of nature for future generations. Social responsibility has been taught to them within and outside the classroom at the primary level itself. Education and the socialization of behaviour to protect nature has become a way of life.

Just like the customs and traditional practices of our civilization and religious practices have been taught at our home. The school our second home teaches the students the cultural practices of being responsible to save our mother earth by simply practicing switching off the lights and fan when it is not used, keeping the environment clean and tidy and planting trees on various occasions. Water is a renewable but exhaustible resource and it may exhaust if we use it without any concern and thus saving water to restore natural resources has been one of the practices taught by the teachers and institutions to protect the environment.

Responsibility of the students for greener society

On Mahatma Gandhi Jayanti it was stated that the planet earth, the air that we breathe, the land we use and reuse, the water, etc are not an inheritance from our ancestors but it is God’s gift to each one of us as a loan from our children. What we receive without expecting anything that has to be given back the way we received. It is the responsibility of the citizens to take care of nature for future generations. The global campaign about connecting with nature should become part of everyone in the country to reap the benefits of our ancestors. To teach responsible behaviour to save and protect the environment has to be instilled in us and to our younger generations. We need to listen to our Prime Minister Shri Narendra Modi who reminds the whole world for the protection of the environments and adopting the climate-resilient lifestyles.
Table 2: Responsible behaviour of the students

<table>
<thead>
<tr>
<th>Responsibility in switching off fan &amp; light</th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Often</td>
<td>29(24.1)</td>
<td>23(28.7)</td>
<td>52(26)</td>
</tr>
<tr>
<td>often</td>
<td>31(25.8)</td>
<td>09 (11.2)</td>
<td>40(20)</td>
</tr>
<tr>
<td>Sometimes</td>
<td>54(45)</td>
<td>38 (47.5)</td>
<td>92 (46)</td>
</tr>
<tr>
<td>Neutral</td>
<td>01 (0.8)</td>
<td>04 (5.0)</td>
<td>05 (2.5)</td>
</tr>
<tr>
<td>Never</td>
<td>05 (4.1)</td>
<td>06 (7.5)</td>
<td>11(5.5)</td>
</tr>
<tr>
<td>Total</td>
<td>120 (100)</td>
<td>80 (100)</td>
<td>200 (100)</td>
</tr>
</tbody>
</table>

Note: Figures in Parentheses are percentages

Responsible behaviour towards saving the mother earth needs to be reminded over and over again as the students are overfed with information intellectually. In reality, the students have ‘no care attitude’ as we retrospect the behaviour of the students that they leave lights and fans turn on while they go out for some activity period.

The above table exhibits the responsible behaviour of the respondents towards switching off fan and light when not in use. As a whole, the students are not responsible because they do not feel the belongingness to the institutions. The data reveals that the respondents are very often responsible (26%) while a majority of them revealed that they are sometimes (46%) responsible and 5.5% expressed that the respondents never took any responsibility in fulfilling their duty to save mother earth. Further, the chi-square test revealed a significant difference ($X^2 = 9.8602; P$-value is 0.42849) revealing that the respondents are somewhat responsible to save mother earth.

Sustenance of natural resource

Natural resources are essential for the sustenance of life. Nature nurtures our well being, it gives us the priceless gifts of water, air, soil, etc. These are our life-supporting system to live on the earth harmoniously. Waste of any of the natural resources is harmful to the earth and the entire human being and all its creatures. Water is a priceless gift and overconsumption of water may lead to complete depletion or loss of natural resources. Individual responsibility to save the water begins at home and then at the school level. Training should be given to the students along with constant awareness of their irresponsible behaviour and its impact on nature. The research was done to renew the role of student’s responsibility in restoring and sustaining the natural resources like water and to keep the environment clean and unpolluted.

Table 3: Responsibility of students for sustenance of natural resource

<table>
<thead>
<tr>
<th>Less wastage of water.</th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Often</td>
<td>46(38.3)</td>
<td>33(41.2)</td>
<td>79 (39.5)</td>
</tr>
<tr>
<td>often</td>
<td>39(32.5)</td>
<td>22(27.5)</td>
<td>61(30.5)</td>
</tr>
<tr>
<td>sometimes</td>
<td>31 (25.8)</td>
<td>19 (23.7)</td>
<td>50(25)</td>
</tr>
<tr>
<td>neutral</td>
<td>00</td>
<td>03(3.7)</td>
<td>03(1.5)</td>
</tr>
<tr>
<td>never</td>
<td>04(3.3)</td>
<td>03(3.7)</td>
<td>07(3.5)</td>
</tr>
<tr>
<td>Total</td>
<td>120 (100)</td>
<td>80 (100)</td>
<td>200 (100)</td>
</tr>
</tbody>
</table>
The above table reveals the responsible behaviour of the respondents towards sustaining the water without wastage. Students are responsible individually but in a group, they are restless and irresponsible. The data shows that the respondents are very often responsible (39.5 %) while some of them revealed that they are sometimes ( 25%) responsible and 3.5 % expressed that the respondents never took any responsibility in fulfilling their duty to conserve the priceless gift of nature. The data also reveals that the girls never lost their responsible behaviour may be due to the motherly nature of woman, save the earth. Chi-square test static is \( X^2 = 5.104 \); P-value is 0.276796 revealing that the respondents waste less water and female respondents are more responsible for sustaining natural resources.

**Environmental activities to safeguard mother earth**

Environmental problem is a global issue. Educational institutions, mass media, and the public play a major role in creating environmental awareness. Taking motto like go green campus and cleanliness drive can draw attention from the public for a greener society.

**Table 4: Activities to create awareness**

<table>
<thead>
<tr>
<th>Activities</th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sapling plantation</td>
<td>64 (53.3)</td>
<td>32 (40)</td>
<td>96 (48)</td>
</tr>
<tr>
<td>Rallies</td>
<td>10 (8.3)</td>
<td>15 (18.7)</td>
<td>25 (12.5)</td>
</tr>
<tr>
<td>Essay, skit competition</td>
<td>25 (20.8)</td>
<td>16 (20)</td>
<td>41 (20.5)</td>
</tr>
<tr>
<td>Best out of waste</td>
<td>13 (10.8)</td>
<td>16 (20)</td>
<td>29 (14.5)</td>
</tr>
<tr>
<td>Manure out of kitchen waste</td>
<td>08 (6.6)</td>
<td>01 (1.2)</td>
<td>09 (4.5)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>120 (100)</td>
<td>80 (100)</td>
<td>200 (100)</td>
</tr>
</tbody>
</table>

The environmental issues, its problems, effects, and impacts have been taught to the primary children from standard one onwards. The important day like world environment day, earth day Van Mahotsav Day, etc. has been celebrated year after years keep in view saving mother earth. Talk on various factors like climate change, global warming; essay competition, skit competition, painting competition, best out of waste, etc. have been a regular feature in the schools. Instead of a bouquet of flowers medicinal and other plants have been given as a gesture of welcome during programmes. Use kitchen wastes for manure purpose have been taught in the school to preserve a clean and healthy environment.

The study found that students are aware how to preserve the environment, most of the respondents 48% of them revealed that planting as sapling was common feature while other respondents also revealed that essay competitions (20.5) best out of waste (14.5) Rallies (12.5) and manure out of kitchen waste (4.5) was some of the practices that have been institutions were inculcating in the students regarding greener society. At the primary level, education can play much more to inculcate a positive mentality among the students to save mother earth and make a greener society for all.
Cleanliness and awareness

Cleanliness is a learning behaviour which enhances one’s body, mind, and everything around us. Cleanliness is called the beginning stage of health. Stay healthy and stay safe is very essential for harmonious living. The importance of being healthy and cleanliness has been taught in educational institutions. Personal hygiene, washing of hands and keeping personal and classroom clean and tidy, environmental cleanliness, and Swachh Bharat Abhiyan scheme, etc has been part of educational tools to instill cleanliness among the students. The child learns cleanliness at home and careful use of natural resources has been taught by their parents.

Table 5: cleanliness –personal and environment

<table>
<thead>
<tr>
<th>Cleanliness drive</th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always</td>
<td>98 (81.6)</td>
<td>51 (63.7)</td>
<td>149 (74.5)</td>
</tr>
<tr>
<td>Most of the time</td>
<td>17 (14.1)</td>
<td>21 (26.2)</td>
<td>38 (19)</td>
</tr>
<tr>
<td>sometimes</td>
<td>03 (2.5)</td>
<td>08 (10)</td>
<td>11 (5.5)</td>
</tr>
<tr>
<td>never</td>
<td>02 (1.6)</td>
<td>00</td>
<td>02 (1.0)</td>
</tr>
<tr>
<td>Total</td>
<td>120 (100)</td>
<td>80 (100)</td>
<td>200 (100)</td>
</tr>
</tbody>
</table>

Note: Figures in Parentheses are percentages

The above table shows the attitudes towards cleanliness both personal and environmental. Cleanliness drive has been part of education and the students actively participated in it. The data shows that the respondents were always (74.5%) keep themselves and the surroundings clean and tidy while some of them revealed that they are most of the time (19%) are aware of their duty of keeping their room and environment clean and tidy but failed to do so because of their careless behaviour while 5.5 % of the respondents felt they are clean but failed to do it in action and 1.0 respondent revealed that they have never kept their rooms and environment clean. Chi-square test static is X² =11.9993; P-value is .007386 revealing that the respondents keep up their personal hygiene and environment for a greener society.

Reduce use of plastic bag

Plastic pollution is one of the biggest reasons behind the decrease in marine wildlife and an increase in land waste and waterways. The use of plastic bags, plastic water bottles damage the environment. Consequence and its impact is a known factor to humanity. Indifferent attitude towards it is the most dangerous. Only during world environment day celebrations, we take the pledge to keep our mother earth clean but we failed to keep up the promise. India is fighting plastic pollution but not able to control this evil practice. According to the Business Standard report 2016, India produces 15,000 tonnes of plastic waste almost every day of which 6000 tonnes remain uncollected and littered. Reduce the use of the plastic bag is the need of the hour and the educational institutions should play a major role to save the environment and for a greener society.
Table 6: Reduce use of plastic

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Often</td>
<td>20 (16.6)</td>
<td>16 (20)</td>
<td>36 (18)</td>
</tr>
<tr>
<td>Often</td>
<td>21 (17.5)</td>
<td>14 (17.5)</td>
<td>35 (17.5)</td>
</tr>
<tr>
<td>Sometimes</td>
<td>56 (46.6)</td>
<td>29 (36.2)</td>
<td>85 (42.5)</td>
</tr>
<tr>
<td>Not at all</td>
<td>23 (19.1)</td>
<td>21 (26.2)</td>
<td>44 (22)</td>
</tr>
<tr>
<td>Total</td>
<td>120 (100)</td>
<td>80 (100)</td>
<td>200 (100)</td>
</tr>
</tbody>
</table>

Note: Figures in Parentheses are percentages

The data demonstrate that the respondents very often (18%) tried to reduce the use of plastic things in the school. The majority of the respondents i.e. 42.5% of them feel they should reduce the use of plastic bags to save the mother earth from plastic pollution. The plastic-free campus was a slogan of the institutions but negligence from the management, staff, and students have not yet fulfilled this project work. Chi-square test static is $X^2 = 2.6165$; $P$-value is .454607 revealing that reducing the use of plastic campus and the complete ban should be the main aim to save the mother earth from plastic pollution.

**Breathe fresh air**

World Health Organization states that breathing pure and cleaner air reduces various sicknesses such as heart disease, lung cancer, and respiratory diseases such as asthma and also can reduce the risk of stroke. An air purifier from Blue air removes airborne pollutants and thereby greatly reduces the health effects associated with breathing bad indoor air.

Breathing fresh air is everyone’s right. Fresh air keeps the students healthy and the mind sharp. Studies have found that the brain uses 20% of the body’s oxygen supply and fights off illness; it makes blood cells stronger enough to kill any bacteria and germs lurking. It also improves the mood and helps them to learn in a positive and conducive environment. The above table shows that 98.5% of the students feel that they can breathe fresh. A healthy
environment is suitable for learning and teaching. Chi-square test static is $X^2 = 0.9024$; $P$-value is $0.342132$ revealing that the respondents are able to breathe fresh air in their respected educational institutions.

**Cultural pattern and structure**

Indian society eco-friendly and worship the nature. Indian society follows prudent lifestyles that are in harmony with nature. Respecting one's environment is respecting their mother which is integral to its tradition and ethics. The practice of Yoga, morning walks, organic fruits and vegetables, traditional way of cooking are some of the ways which are inherent in Indian society. Good health and happiness go well if there is a clean environment and these cultural practices are taught as an educational milieu. Students are citizens of tomorrow and they are future builders of the society. Keeping a very environmental friendly classroom is very suitable for healthy learning habit which produces healthy human beings. Classrooms are designed in such a way to facilitate the learning experience of the students.

**Table 7: cultural pattern and structure**

<table>
<thead>
<tr>
<th>Cultural pattern</th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very environment friendly</td>
<td>94(78.3)</td>
<td>54(67.5)</td>
<td>148(74)</td>
</tr>
<tr>
<td>not at all environmental friendly</td>
<td>04(3.3)</td>
<td>05(6.2)</td>
<td>09(4.5)</td>
</tr>
<tr>
<td>need improvement</td>
<td>22(18.3)</td>
<td>21(26.2)</td>
<td>43(21.5)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>120(100%)</td>
<td>80(100%)</td>
<td>200(100%)</td>
</tr>
</tbody>
</table>

Note: Figures in Parentheses are percentages

The above table shows that 74.3% of the respondents felt that the cultural pattern and structure in the classroom is very environment friendly. But few respondents 22% of them feel that the cultural pattern and structure in the classroom need improvement.

**Student’s action-oriented activities for environmental sustainability**

Protection of our planet earth is everyone’s responsibility. Educational institutions play a major role in promoting and inculcating some of the basic values to their students. Introduction of Three R’s: reduce waste, reuse resources, and recycle materials, should not be a theory that is taught in the environmental class but it has to be practiced in the day to day activities.

Few activities that are relevant for the present generations are the following:

- Project and assignment should be given to the students to create awareness and to preserve our environment
- Each student planting a sapling should be encouraged. Organizing tree planting day at school should be made compulsory and make them speak about the importance of the environment. Teachers constantly should remind them to switch off the lights and fan when it is not used and the preservation of water.
• Clean and hygiene environment: Create awareness to use dustbins and stop littering start in the classroom first and personal room.
• Rainwater harvesting etc. should be taken by both the teachers and the institutions for a greener society.
• Support the government and educational department in promoting clean environments.
• Take active part and involve students and teachers in Swachcha Bharat Abhiyan
• Influence the students in using a cloth bag for marketing and other purposes at home

Suggestions
• Follow the environment calendar drawn up by the Ministry of Environment, Forest, and Climate Change in the educational institutions for a greener society.
• Create awareness and remind each other the importance of environmental attributes –biodiversity, wildlife, flora, and fauna, etc to protect and preserve a sustainable environment.
• Many schools also produce plastic waste so teaching the students to switch over to cloth bags instead of a plastic bag, steel or glass bottle, and copper items instead of plastic should be introduced in the schools.
• Students suggest that on birthdays plant a tree or give as a gift a plant and protect it and do not cut the trees.
• Use a bicycle for a short distance or walk a mile to reduce air pollution and to breathe fresh air.
• Start loving nature and be friendly with the environment and save it.
• Start solid waste management and train the students its usage and make it part of Eco-club.
• Make the students green volunteers.
• Schools may go for an air quality audit and take action for the violation of the same.
• Heritage walking for a healthy loving of the monuments.

Conclusion

Primary education is an important stage in the development of overall personality. The child learns personal behaviour, social conscience and helping nature. At school they are taught values to live in harmonious way in the family and the society. So it is the primary responsibility of the educational institutions to spark the interest in caring and preserving the environment in the school itself.

The environmental issue, protection, conservation, and awareness is very essential to sustain the plant earth with more opportunities to obtain the necessary information, skills, outlook, and values that are very valuable to develop the environment for its present and future creation. Development, growth, progress is important for a country to grow economically but for the self-interestedness for the present generation, we put stress on the environment. Education persuades individuals to utilize energy and water more resourcefully and, recycle household waste. By increasing responsiveness and concern, education can give confidence to individuals to diminish their impact on the environment through more proficient use of energy and water supplies, especially in the region where the resource is scarce.
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