



REVIEW ARTICLE

**REDUCE, REUSE AND RECYCLE: SENSE OF RESPONSIBILITY IN MAHATMA
GANDHI GLOBAL VILLAGE**

***¹Dr. Umakant Chanshetti, ²Ms. Sangita Shah and ³Er. Aniket Chanshetti**

¹Associate Professor, Department of Chemistry, Arts, Science and Commerce College, Naldurg,
Osmanabad 413 602 (MS) India

²Dharitri Vidyalaya, Aliabad, Naldurg, Osmanabad 413 602 (MS) India

³Lecturer, Siddheshwar Women's Polytechnic College, Solapur 413 002 (MS) India

ARTICLE INFO

Article History:

Received 21st June, 2014

Received in revised form

06th July, 2014

Accepted 20th August, 2014

Published online 18th September, 2014

Key words:

Reduce, Reuse, Recycle, Solid Waste,
Global Warming, Global Village.

ABSTRACT

To bring awareness among the society since the last century, the perception of environmental education started. With the advent industrialization, followed by urbanization & rapid progress made in Science & Technology causes the degradation of our environment. The man not only used the nature, changed the nature but spoiled the nature beyond repair. So, Ministry of Environment and Forest of Government of India introducing a uniform syllabus and making the subject compulsory from primary to post graduation level. By this syllabus it is possible to inculcate the awareness of this issue in the right stage of their life. Reducing, Reusing, and Recycling: Environmental Concerns Mahatma Gandhi Global Village, Boramani, Dist: Solapur is designed a curriculum to alert students and try to create a sense of responsibility to the environmental consequences of the solid wastes we throw away.

Copyright © 2014 Dr. Umakant Chanshetti et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

Scope of Environmental Education

The importance of EE cannot be disputed. The need for sustainable development is a key to the future of mankind. The degradation of our environment is linked to continuing problems of pollution, deforestation, solid waste disposal, issues related to economic productivity and national as well as ecological security. The increasing level of global warming, the depletion of the ozone layer and a degradation of biodiversity have also made everyone aware of growing environmental issues. The United Nations Conference on environment and development held in Rio de Janero in 1992 and the World Summit on Sustainable Development at Zoharbex in 2002 have focus on the developing condition of our environment. It is clear that no citizen of the earth could not ignore the environmental issues. Environmental awareness and its Management has become part of health care sector. Managing environmental hazards and preventing disaster has become the prime need of every citizen of the earth. In spite of the developing status of the environment, the formal study of environment has so far not received adequate attention in our

academic performances. Hon'ble Supreme Court directed to introduce a basic course on environment for every student from primary to higher education.

Sense of responsibility

Environment is not a single subject it is an integration of several subject that include both Science & Social studies. To understand all the different aspects of our environment we need to understand biology, chemistry, physics, and geography, economics and population issues.

We live in a world in which natural resources are limited. Water, air, soil, minerals, oil etc are all a part of our life support systems. Without these the life itself would be impossible. But now a days the use of these resources increases by mankind for our luxurious life. We waste or pollute large amount of clean water, we create more and more materials like plastic that we discard after a single use and we waste large amount of food, which is thrown away as garbage. Industries creates solid waste byproducts that are discarded, as well as chemical that flow out as liquid waste and pollute water and gases that pollute air. Increasing amounts of waste cannot be managed by natural processes. These increased wastes accumulate in our environment, which leads to variety of diseases and other adverse environmental impacts now seriously affecting all our lives. Air pollution leads to

***Corresponding author: Dr. Umakant Chanshetti**

Associate Professor, Department of Chemistry, Arts, Science and
Commerce College, Naldurg, Osmanabad 413 602 (MS) India.

respiratory diseases, water pollution to gastro intestinal diseases and many pollutants are known to cause cancer. Improving this situation will only happen if everyone begins to take actions in our daily lives that will help to preserve our environmental resources. We cannot expect local body or governments alone to manage the safeguarding of the environment nor can we expect other people doing something to prevent environmental damage. We need to do it ourselves it is a responsibility that each of us must take on as one's own. As to create awareness among the citizen we can catch the young minds. We can inculcate the awareness of this subject in the right stage of their life. If we begin to ask the questions to the students –

1) How we can prevent increasing waste which damages the environment?

2) In what ways could we reduce, reuse & recycle the resources?

These questions will begin to live lifestyles that are more sustainable and will support our environment. So we start the experiments/ activities to build the sense of responsibility to *Reduce, Reuse & Recycle at Mahatma Gandhi Global Village Public School, Boramani, Dist: Solapur*

Think Globally Act Locally

Reduce, Reuse and Recycle

Global Village, a happy and sustainable abode of learning centre based on Gandhian educational concept i.e. *Nai Talim*. It was started in 2011 at Boramani village of Solapur district. While remaining within the formal frame work of the educational system, the Global Village tries to explore the innovative ideas within it, not merely in terms of activities but questioning and reframing the core aspects of education, namely Teaching, Learning and Evaluation. Education is not just about what happen in the classrooms. It is also in the school governance structures, in the maintenance of school grounds and facilities, in after school club special events and special days in the school calendar and so on. Education for sustainable development can infuse the whole of the school curriculum. The different aspects of Global Village School life are illustrated in a model of school curriculum as follows

- Interdisciplinary Learning
- Action Project
- Team Project
- Community Knowledge
- Resource Use
- Teaching and Learning Method
- Quite Time in Nature
- School Ground
- Democratic Practices
- Knowledge and Values
- Students Club
- School Calendar

All the elements in this curriculum model affect the educational experiences of young minds in school. Here we

focus only on the action projects. Environment studies can be broadly divided into three parts

- a. Learning through the Environment.
- b. Learning about the Environment.
- c. Learning for the Environment.

All these aspects often intermingle as they are interlinked & complimentary to each other.

Activities at Global Village

Here are some activities we do at Global Village based on 3 R Principle. Students think and prepare the list of all the things that used by following these questions

1. What can we do to reduce waste?
2. How can we reuse the articles, those normally throw away?
3. What can we recycled & reuse?

Activity -1: Exercises in self learning about environment

Attempt to assess the level of damage to the environment due to our actions that have occurred. Then estimate the damage you are likely to do. We use the plastic, water, food and electrical energy as an example for the above exercise.

Example- Plastic

Plastic is an amazing lightweight material that can be made into all sorts of things, but when we use plastic items once and then throw them out, we create a huge amount of waste every day. Think about all the articles we use daily that made from plastic. List the articles of plastic which are frequently used – Plastic bags, bottles, ball pens, toys, cones, cups, glasses, flowers, balls etc



When we reduce, reuse & recycle, we

- Save natural resources
- Save space in our landfills

- Save energy
- Reduce pollution
- Save money

Students separate the recyclable and biodegradable wastes in school. The biodegradable waste put into vermi compost heap and from the non degradable waste they separate plastics, paper, glass, other metallic scrap. After doing this successfully for a sustained period in the school children will carry the message to their villages where they live.

Reuse of plastic

For watering the plants and garden spends used the water bottle & put them around the plants and everyday they fill with water experience the drip irrigation



The used plastic bags, cups and glasses reused in nursery for the preparation of siblings of plants.



For decoration or for giving gift on any occasion students are encouraged to make things themselves using waste material rather than purchasing expensive gifts, which is best from waste.



Example Water

Water plays vital role in our life

How much do we really need water?
How much we waste water during-

- Brush our teeth?
- Have a bath?
- Wash the cloths?
- Wash the utensils, car, cycle etc?

By these question students get realized & start the audit of water and aware about water & try to reduce the need, recycle the waste water. When fourth standard students actually measure the water of a leaking tap for one minute and then multiply to find out how many liters per hour & then per day, the urgency for repairing leaking taps is driven .

Example- Electrical energy

Now a days we could not live or imagine to live without electricity, but everyone should take care and put a step to save electrical energy for better tomorrow.

When we ask the question, everyone get realized

- How much electricity we use every day?
- Where does it come from?
- How can we save or conserve energy?

After such questioning students answer and promise to save energy by following the rules

- Turn off lights and fans as soon as we leave the room.
- Use tube lights and energy efficient CFL bulbs that save energy rather than bulbs. A 40 watt tube light gives as a 100 watt bulb.

- Keep the bulbs and tubes clean. Dust on it decreases lighting levels by 20-30 %
- Switch of TV, Radio or Computers as soon as the programme is over.

Conclusion

The Reducing, Reusing and Recycling efforts taken at Global Village results into better promotion of waste management in an effective manner. These practices inculcate the sense of responsibility towards environment protection values among the students who respond in all situations. That is bound to be so even when they become adult. But it is with this belief that we act now, that where ever they are and whatever they are doing as adults, they will not be indifferent to social and environmental problems, that they will face issues boldly, adopt an eco-friendly life style with conviction and stands in revolt against the destructive developments.

REFERENCES

- ‘Best Practices Guideline for Teaching Environmental studies’ published by Unicef.
- ‘Reduce. Reuse, Recycle: Alternative for Waste Management’ Fahzy Abdul Rahman, NM State University.
- Environmental Education, Editors, Jayshree Deshpande, Vikram Reddy.
- The Multidisciplinary Nature of Environmental Studies for Undergraduate Course, UGC Report.
