

GUIDING ENVIRONMENTAL STEWARDSHIP: THE VITAL ROLE OF EDUCATORS

Dr Chittibabu Putcha¹, Dr Rajit Kumar Elamadurthi², Dr. Veerendra Singh Matsaniya³, Dr. Anita Kumari⁴

¹Assistant Professor, Department of Lifelong Education DHSGVV, Sagar, MP, India.
cbputcha@dhgsu.edu.in

²Assistant Professor, Department of English Vardhaman College of Engineering
Hyderabad, India
dranjitphd@gmail.com

³Assistant Professor, Department of Economics, DHSGVV, Sagar, MP, India. E-mail:
vsmtsaniya@gmail.com

⁴Assistant Professor, Education Department of Commerce DHSGVV, Sagar, MP, India. E-mail: pujaanita@gmail.com

Abstract:

Etymologically, environment means surroundings. It is some total of external factors, substances and conditions which influence organisms without their intrinsic part. Environmental education entails acknowledging values, elucidating concepts, and fostering skills and attitudes essential for comprehending and valuing the interconnectedness among humanity, its culture, and the biophysical surroundings. It aims to cultivate an understanding and appreciation of this intricate relationship.

The contributors shed light on research findings concerning the environmental behavior of teachers and their service. This paper delves into how teachers interact with and contribute to their surroundings within the context of environmental issues and educational strategies, fostering sustainable practices within educational institutions.

Environmental education serves as a bridge between individuals and their surroundings, promoting a holistic understanding of the interdependence between humanity and the environment. Through informed education and proactive engagement, individuals can strive towards a more harmonious relationship with their biophysical surroundings, ensuring the sustainability and well-being of both present and future generations.

Key words:

Environment, Education, Awareness, Teacher, Challenges, Society

Introduction

Our existence as human beings is inherently intertwined with society. It is within this societal framework that education finds its application and significance. No form of education can be considered complete without being imbued with a human touch. This principle is especially evident in fields such as medicine and engineering, where students come to understand the vital intersection between humanity and their technical disciplines.

Medical and engineering students, for instance, come to appreciate the importance of human factors within their respective fields. A doctor's grasp of the psychological nuances of patient care, including the impact of treatment on a patient's psyche, underscores the necessity of incorporating social and human sciences into medical education. Such understanding not only enhances medical practice but also fosters meaningful doctor-patient relationships.

In today's globalized world, the importance of social and human sciences extends beyond technical disciplines. Environmental education, exemplified by Green Education (GE), exemplifies this trend. Environmental issues are inherently linked to human behavior and societal structures. Therefore, incorporating environmental education into various spheres of knowledge and professions is imperative in addressing global challenges.

The integration of social and human sciences alongside technical education reflects the interconnected nature of human society. Recognizing this interconnectedness is essential for cultivating well-rounded professionals capable of addressing the multifaceted challenges of the modern world.

What is Environment?

According to Oxford Dictionary the environment is the surrounding objects, circumstances of life a person on street. So environment consists of land, atmosphere and the water it can be further said that the total eco-system i.e, the dependence of Biotic and A biotic constitutes the environment.

According to M.V.V. Rao 'the environment is the sum total of all: physical, chemical, biological and sociological factors which compose the surroundings of Man'.

The broad classified components of environment are the

Atmosphere

Hydrosphere

Lithosphere and

Biosphere

Crisis and challenges

Today man is living in a world of crisis. The social economic, political and value crisis are some of the threats which the humanity faces and these threats are quite alarming. Added to this, in the recent decades, the reverential crisis has become another important factor which has made everyone, in the world to think of its gravity.

Environmental Stewardship

Environmental education/stewardship is a holistic process aimed at fostering an understanding of the interdependence between humans and their surroundings. It emphasizes values, concepts, skills, and attitudes necessary to appreciate and sustainably manage the natural environment, promoting responsible behaviour and informed decision-making for a sustainable future.

Effective environmental education, akin to quality education in general, should guide students beyond their immediate observations and encounters to foster a comprehensive understanding. It should nurture their capabilities deliberately. This process does not occur randomly but requires intentional design. Various subjects and facets within the school curriculum address the dynamic relationship between humanity and its surroundings. The National Policy on Education (NPE) of 1986, among other directives, emphasizes that environmental conservation is a fundamental value. Alongside other essential values, environmental protection must be seamlessly integrated into the curriculum at every educational level. Furthermore, the policy underscores the imperative to instill in students an awareness of environmental issues, their significance, and the skills necessary for sustainable stewardship.

Developing a profound awareness of the environment is crucial and expected to extend across all age groups and societal segments, starting from early childhood. It is imperative that environmental consciousness becomes a pervasive element in educational institutions, from schools to colleges. This integration should not be limited to specific subjects but should permeate the entire educational journey. By incorporating environmental awareness into the educational

process comprehensively, individuals can cultivate a deep understanding of ecological issues and their implications for the planet. This approach ensures that every member of society, regardless of age or background, is equipped with the knowledge and mindset necessary to make informed decisions and take responsible actions towards environmental preservation and sustainability.

Environmental education focuses on the biophysical environment and its associated challenges, which stem from human interactions with the environment. It involves recognizing values, clarifying concepts, and developing skills and attitudes to understand the interconnectedness between humans, culture, and the environment. Environmental education guides decision-making and informs behaviour regarding environmental issues, promoting responsible actions and sustainability.

Global endeavours have resulted in a broad consensus regarding the essential principles and objectives of environmental education, encompassing:

1. Cultivating awareness and concern regarding the interconnectedness of economic, social, political, and ecological factors in both urban and rural settings.
2. Offering every individual the chance to gain the knowledge, values, attitudes, commitment, and skills required to safeguard and enhance the environment.
3. Encouraging the adoption of new behavioral patterns among individuals, groups, and society as a whole to promote better environmental stewardship.

When planning to incorporate environmental education into the curriculum, it's crucial to consider the three interconnected components:

- 1. Education about the environment.**
- 2. Education for the environment.**
- 3. Education in or through the environment.**

The environment not only supplies essential resources like water and air but also instills a profound sense of belonging in each individual. This includes fostering both individual and mass awareness, promoting environmental stewardship, and enhancing the quality of the environment. Through these efforts, positive environmental change can be achieved, leading to a sense of accomplishment and progress.

Need for Environment Education:

Environmental education is indispensable in addressing the complex challenges posed by the interplay between human activities and the natural world. Firstly, it cultivates awareness about environmental issues, fostering a deep understanding of the interconnectedness between human actions and environmental consequences. This awareness is crucial for informed decision-making and proactive engagement in sustainable practices.

Secondly, environmental education equips individuals with the knowledge, skills, and attitudes necessary to mitigate and adapt to environmental changes. In a rapidly evolving world facing pressing issues such as climate change, biodiversity loss, and pollution, such competencies are vital for fostering resilience and promoting environmental sustainability.

Moreover, environmental education promotes a sense of responsibility and stewardship towards the environment. By instilling values of respect, care, and appreciation for nature, it encourages individuals to adopt environmentally-friendly behaviors and advocate for positive environmental action within their communities.

Furthermore, environmental education fosters interdisciplinary learning, integrating concepts from various fields such as science, social studies, and ethics. This holistic approach enables individuals to comprehend the multifaceted nature of environmental issues and develop comprehensive solutions that address ecological, social, and economic dimensions to nurture environmentally literate citizens capable of contributing towards a more sustainable and equitable future for all.

Role of Students and Teachers

Students who are environmentally conscious, often referred to as green students, play a pivotal role in preserving the environment and advocating for environmental ethics on a broader scale. They represent potential agents of change within society, capable of making significant contributions to safeguard our environmental resources. Green students are instrumental in raising awareness about environmental issues and can actively participate in initiatives aimed at conserving natural resources and protecting animal habitats.

Role of an Educator

Teachers play a crucial role in environmental education as they serve as guides and facilitators in nurturing environmentally literate individuals. Firstly, teachers provide structured learning experiences that raise awareness about environmental issues, such as climate change, pollution, and habitat destruction. Through engaging lessons and activities, they help students understand the interconnectedness between human actions and the health of the planet.

On the other hand, teachers instill environmental values and ethics by modeling environmentally responsible behavior and encouraging students to develop a sense of stewardship towards the environment. By integrating environmental themes across various subjects, teachers demonstrate the relevance of environmental education in different aspects of life, fostering a holistic understanding of sustainability.

Furthermore, teachers empower students to take action by providing opportunities for hands-on learning and involvement in environmental projects and initiatives. They guide students in conducting research, implementing solutions, and advocating for positive change within their communities.

Teachers also serve as role models and mentors, inspiring students to become active participants in environmental conservation efforts. Through their guidance and support, teachers empower students to become informed and responsible global citizens who are committed to protecting and preserving the environment for future generations. Overall, the role of teachers in environmental education is pivotal in shaping environmentally conscious individuals who are equipped to address the environmental challenges of the 21st century.

Activities in environmental education

1. **Nature walks:** Organize outdoor excursions to natural environments such as parks, forests, or beaches, allowing students to observe and appreciate biodiversity firsthand.
2. **Waste audit:** Conduct a waste audit within the school or local community to analyze waste generation, recycling practices, and opportunities for waste reduction and recycling initiatives.
3. **Gardening:** Establish a school or community garden where students can learn about plant growth, soil health, and sustainable gardening practices.
4. **Recycling projects:** Initiate recycling programs within the school or community, involving students in the collection, sorting, and recycling of materials such as paper, plastic, and glass.
5. **Environmental art projects:** Encourage students to express their understanding of environmental concepts through creative mediums such as painting, sculpture, or photography.
6. **Energy conservation campaigns:** Organize campaigns to raise awareness about energy conservation practices and implement strategies to reduce energy consumption within the school or community.

7. **Environmental debates:** Facilitate debates or discussions on current environmental issues, encouraging students to critically analyze different perspectives and propose solutions.
8. **Eco-friendly initiatives:** Implement eco-friendly initiatives such as composting, rainwater harvesting, or solar energy projects, involving students in the planning and implementation process.
9. **Wildlife observation:** Set up bird feeders, insect traps, or wildlife cameras to observe and document local wildlife species, fostering an appreciation for biodiversity and ecological interactions.
10. **Community outreach:** Engage students in community outreach activities such as organizing environmental clean-up events, participating in tree planting drives, or collaborating with local conservation organizations. These activities promote civic engagement and foster a sense of environmental stewardship among students.
11. **Plantation:** Plantation play a vital role for environmental conservation, biodiversity, carbon sequestration, and sustainable land management practices etc.,

Importance of Case Studies

Case studies are vital as they provide concrete examples of how theories and concepts are applied in real-world situations. They offer a deep, contextual understanding of challenges and solutions, allowing for critical analysis and reflection. In education, case studies illustrate best practices and lessons learned, making them powerful tools for teaching and learning. They enable students and educators to explore complex problems, understand different perspectives, and develop practical skills in problem-solving. By studying real-life cases, learners can bridge the gap between theory and practice, enhancing the ability to apply knowledge effectively in their own contexts and two such case studies are given below.

Case Study 1- Eco-Schools Program, Kerala

Overview: Kerala's Eco-Schools program, an initiative led by the Centre for Environment Education (CEE), is an active movement toward promoting environmental education in schools. The program engages students and teachers in sustainable practices, such as waste management, water conservation, and biodiversity conservation, making environmental stewardship a central part of the curriculum. Schools are encouraged to implement green projects, such as creating kitchen gardens, composting, and rainwater harvesting systems.

Impact: This program has empowered educators to lead sustainability initiatives in schools, transforming campuses into eco-friendly spaces and fostering a sense of responsibility in students towards the environment.

Case Study 2 - Sundarbans Mangrove Conservation Education, West Bengal

Overview: In the Sundarbans, a unique educational initiative has been launched to educate local communities about the importance of mangrove conservation. Non-governmental organizations (NGOs) and local schools are involved in raising awareness among students and villagers about the ecological significance of mangroves in protecting the region from climate change impacts, such as rising sea levels and cyclones. Educators play a crucial role in integrating traditional knowledge with modern environmental science to foster local stewardship.

Impact: This educational effort has resulted in increased community participation in mangrove reforestation programs and a deeper understanding of the relationship between healthy

ecosystems and disaster mitigation.

Hurdles in Environmental Education

Environmental education faces several hurdles that impede its widespread adoption and effectiveness. One significant challenge is the lack of prioritization of environmental education within educational systems and curricula. Many educational institutions prioritize traditional academic subjects over environmental topics, leading to limited instructional time and resources allocated to environmental education.

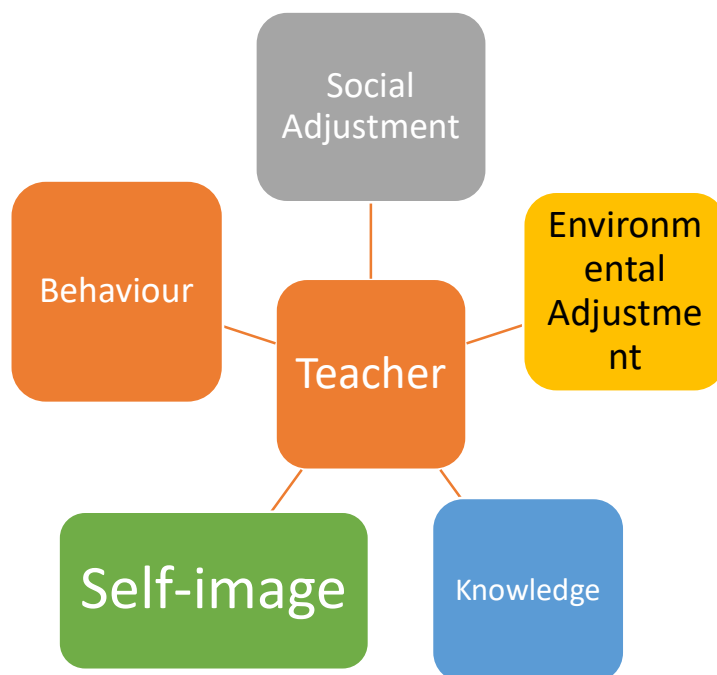
Additionally, there is a shortage of qualified educators with expertise in environmental science and education. Without adequately trained teachers, delivering high-quality environmental education becomes challenging. Moreover, inadequate funding and resources for environmental education programs hinder their development and implementation.

Furthermore, cultural and societal attitudes towards the environment can pose barriers to effective environmental education. In some communities, there may be a lack of awareness or understanding of environmental issues, leading to resistance or apathy towards environmental education initiatives.

Another hurdle is the complexity of environmental issues themselves. Concepts such as climate change, biodiversity loss, and sustainable development are multifaceted and require interdisciplinary approaches to understanding and addressing them. This complexity can be overwhelming for educators and learners alike, making it challenging to convey these concepts effectively.

Lastly, competing priorities and interests, such as economic development and political agendas, may overshadow the importance of environmental education. Without widespread recognition of the urgency and relevance of environmental issues, efforts to promote environmental education may struggle to gain traction and support. Addressing these hurdles requires coordinated efforts from policymakers, educators, communities, and stakeholders to prioritize environmental education and overcome these barriers effectively.

MODEL OF ATTITUDE BEHAVIOUR



Conclusion

The environmental consciousness of teachers is paramount in fostering a genuine commitment from students towards environmental responsibilities. Beyond imparting theoretical knowledge, teachers must prioritize practical environmental awareness. By engaging students in hands-on activities, field trips, and real-world problem-solving, educators can instill a deeper understanding and appreciation for environmental issues. This approach cultivates a sense of sincerity and personal connection to environmental stewardship, empowering students to actively engage in conservation efforts and adopt sustainable practices in their daily lives. Thus, the role of teachers extends beyond the classroom, shaping environmentally conscious citizens equipped to tackle environmental challenges.

References

- [1] Dayakar Reddy, V. and Bhaskar Rao, D. (2006). Value-oriented Education, Edited Book, Discovery Publishing House, New Delhi. (2006).
- [2] Kamlakar Prasad Pandey, Sunita Wathre and Sandeep Pandey (2022). Role of teachers in environmental education among school children. International Research Journal of Education and Technology. Volume 04. Issue 11., Nov 2022
- [3] Mishra D.N. and Bipin Bhari Meshra, (20008). Global Environmental Moment. Some reflections from India, University New 46, (14).
- [4] <https://www.sahapedia.org/sundarbans-and-conservation-historical-perspectives-and-contemporary-challenges>
- [5] Mohan Rao, P. (2003). Environmental Education, Environmental Education-problems prospects, E.D. Ramesh G., D. Bhaskar Rao, Discovery Publishing House, New Delhi, (2003).

- [6] Parul Rishi (2003). Humanizing green education through participatory management, University news, 41(18), May 05-11-2003.
- [7] Saini L.D. and Sharma R.C. (1996). Environmental Education, Edited book. Kalyani Publishers, Ludhina, 1996.
- [8] Sukhwinder Kaur (2013). Role of Teachers in Imparting Environmental Education for Sustainable Development. International Educational E-Journal, {Quarterly}, ISSN 2277-2456, Volume-II, Issue-II, Apr-May-June 2013
- [9] <https://www.cceindia.org/>
- [10] <https://www.wwfindia.org/>