

International Journal of Innovative Research in Science, Engineering and Technology

(A High Impact Factor, Monthly, Peer Reviewed Journal)

Visit: www.ijirset.com

Vol. 8, Issue 7, July 2019

Environmental Education

Dr. Sandip Kumar Srivastava

Associate Professor in B. Ed Department, Shri Lal Bahadur Shastri Degree College, Gonda, Uttar Pradesh, India

ABSTRACT: Environmental education is a process that allows individuals to explore environmental issues, engage in problem solving, and take action to improve the environment. As a result, individuals develop a deeper understanding of environmental issues and have the skills to make informed and responsible decisions.

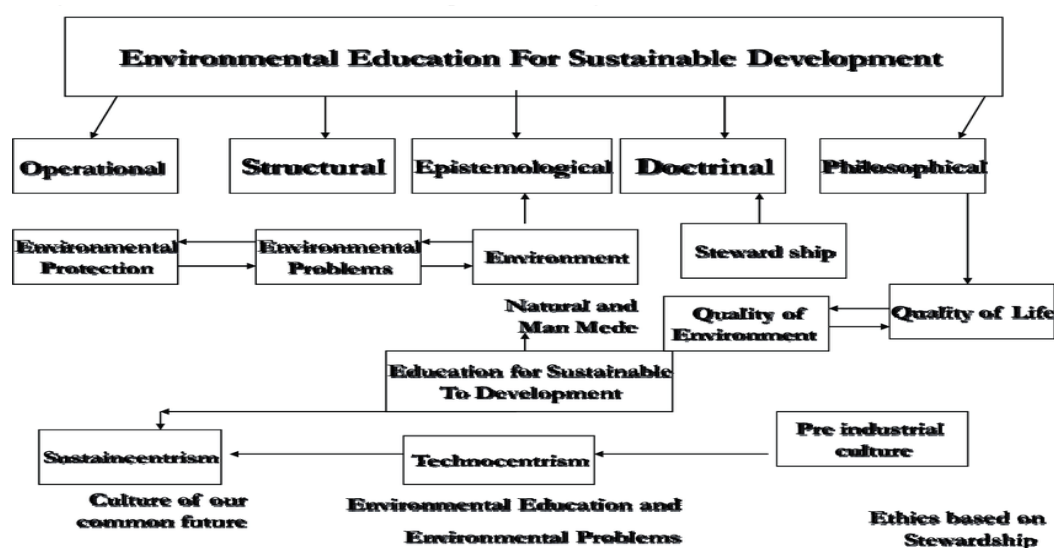
The components of environmental education are:

- Awareness and sensitivity to the environment and environmental challenges
- Knowledge and understanding of the environment and environmental challenges
- Attitudes of concern for the environment and motivation to improve or maintain environmental quality
- Skills to identify and help resolve environmental challenges
- Participation in activities that lead to the resolution of environmental challenges

Environmental education does not advocate a particular viewpoint or course of action. Rather, environmental education teaches individuals how to weigh various sides of an issue through critical thinking and it enhances their own problem-solving and decision-making skills.

KEYWORDS: environmental, skills, teaches, motivation, quality, issues, action

I. INTRODUCTION



Environmental education (EE) refers to organized efforts to teach how natural environments function, and particularly, how human beings can manage behavior and ecosystems to live sustainably. It is a multi-disciplinary field integrating disciplines such as biology, chemistry, physics, ecology, earth science, atmospheric science, mathematics, and

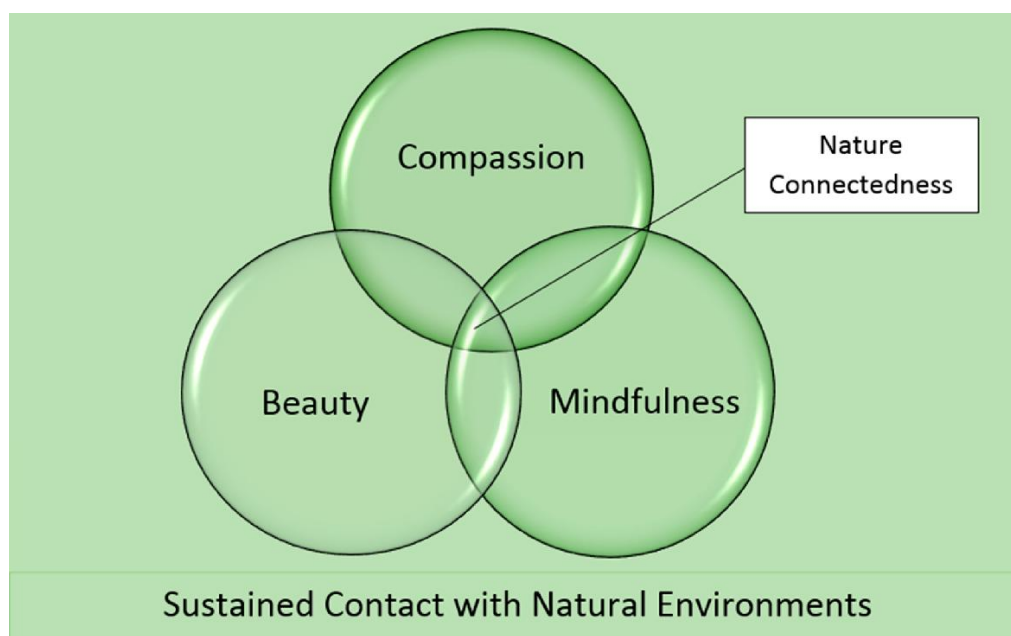
International Journal of Innovative Research in Science, Engineering and Technology

(A High Impact Factor, Monthly, Peer Reviewed Journal)

Visit: www.ijirset.com

Vol. 8, Issue 7, July 2019

geography. The United Nations Educational, Scientific and Cultural Organisation (UNESCO) states that EE is vital in imparting an inherent respect for nature among society and in enhancing public environmental awareness. UNESCO emphasises the role of EE in safeguarding future global developments of societal quality of life (QOL), through the protection of the environment, eradication of poverty, minimization of inequalities and insurance of sustainable development (UNESCO). The term often implies education within the school system, from primary to post-secondary. However, it sometimes includes all efforts to educate the public and other audiences, including print materials, websites, media campaigns, etc.. There are also ways that environmental education is taught outside the traditional classroom. [1] Aquariums, zoos, parks, and nature centers all have ways of teaching the public about the environment.



The environmental education theme above premised on a vast network of related environmental substance, ideas and concepts help us to instrumentally see things as functions of each other, and to understand logically how nature operates as a critical life-support system of the human race. They also allow us to order and interpret our place in nature and our moral consideration and ethical responsibility toward it. It is also apparently clear from the above educational theme that environmental education or environmental literacy for that matter is concerned with the conceptual connections, knowledge and understanding as well as general awareness of the relationship between human and natural systems and processes. The above educational theme also demonstrates succinctly that environmental education building from the first ring predominance moves in an ascending-progressing order of an unbreakable chain of knowledge in different aspects of environmental, biological, and human interconnectedness.[2,3]

Environmental education involves the interchange of knowledge to build values, attitudes and skills that prepare individuals and communities to collaboratively undertake positive environmental action . However, to be effective, education cannot be a unidirectional transfer of information; it must rather be a collective construction that includes the social reality and the traditional knowledge of local communities . Concerning amphibians, general interest in their conservation is closely linked to people's personal experiences coupled with their perceptions of the importance, usefulness and beauty of these animals . Engaging local people in activities that raise awareness of conservation issues and promote enjoyable experiences with amphibians has the potential to foster future positive attitudes towards these animals. To help build environmental consciousness among the local population, we offered training courses for local

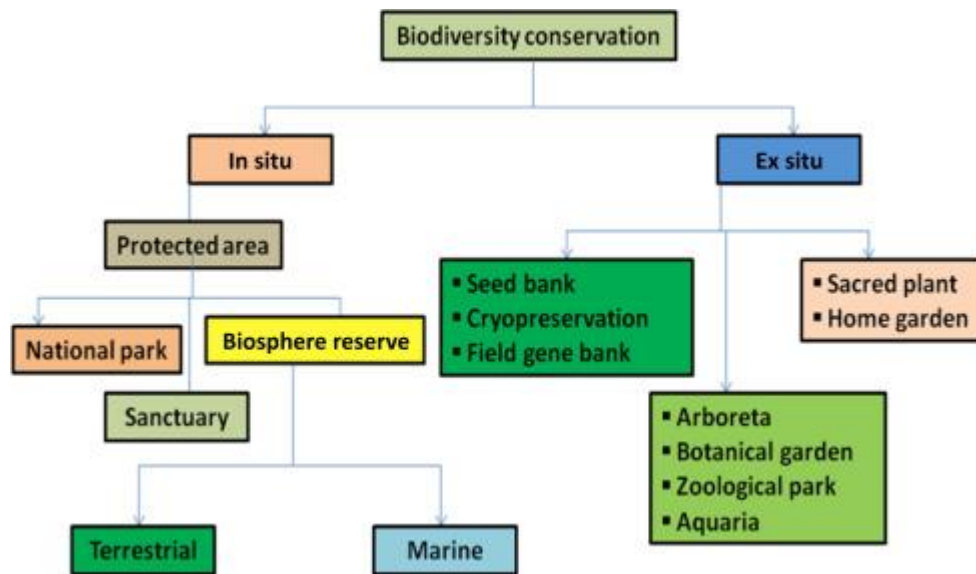
International Journal of Innovative Research in Science, Engineering and Technology

(A High Impact Factor, Monthly, Peer Reviewed Journal)

Visit: www.ijirset.com

Vol. 8, Issue 7, July 2019

schoolteachers and created a website about the Admirable Redbelly Toad including general information about the species, the threats to its survival and how everyone can help reduce these impacts.[4,5]



II. OBSERVATIONS

Some of the components of environmental education are:

- a. Awareness and sensitivity
- b. Knowledge and understanding
- c. Promotion of positive attitudes
- d. Skills development
- e. Improved inclusion.

Environment education encompasses, both environmental training and information.

Benefits of Environmental Education as the Following:

- a. Imagination and enthusiasm are heightened
- b. Learning transcends the formal settings
- c. Tolerance and understanding are supported

International Journal of Innovative Research in Science, Engineering and Technology

(A High Impact Factor, Monthly, Peer Reviewed Journal)

Visit: www.ijirset.com

Vol. 8, Issue 7, July 2019

- d. Integration of sub-national, national and international standards
- e. Biophobia and nature deficit disorder declines
- f. Communities are strengthened
- g. Responsible actions for environmental management becomes more acceptable.

However, all of the above becomes sub-utilized until competent approaches are employed. When member of environmental management institutions are educated, and training and information are in accordance with the cooperative model and Popperian thoughts, personnel saddled with responsibilities become better equipped at contributing effectively at driving such institution toward holistic environmental management.[6,7]



III. DISCUSSION

All ecologists have much to offer in terms of environmental education. In particular, ecologists who are faculty in universities can contribute in many ways, including the following:

1. By participating in environmental-studies classes. Environmental studies is an interdisciplinary field, but its foundation is ecological, and this core material should be interpreted and taught by ecologists.
2. By helping other faculty to integrate environmental case materials across the curriculum. There are opportunities to include environment-related information into the teaching materials of virtually all university-level subjects, from the physical sciences, through the natural sciences and medicine, to the social sciences. Ecologists have much to contribute to achieving this pervasive integration. They can do this by encouraging the process, by participating in multidisciplinary workshops, and by helping academics in other disciplines to discover and interpret appropriate case materials.

International Journal of Innovative Research in Science, Engineering and Technology

(A High Impact Factor, Monthly, Peer Reviewed Journal)

Visit: www.ijirset.com

Vol. 8, Issue 7, July 2019

WORLD ENVIRONMENT DAY



3. By integrating case material from environmental ecology into their own specialized classes in ecology. Many ecological principles can be effectively illustrated using case materials from environmental ecology. A pedagogical integration of fundamental and environmental ecology would allow ecologists to be trained in the basics of their discipline, while still achieving a core literacy about the ecological effects of human activities.
4. By facilitating the development of environmental curricula in public and high schools. Usually, students at preuniversity levels of the educational system have little exposure to ecology or to environmental issues. There are many opportunities to integrate ecological and especially environmental issues and information into the curriculum at all levels of the educational system. The involvement of ecologists would facilitate this important process.
5. Achievement of a public that is literate about the causes and consequences of the environmental crisis is a necessary component of any strategy to resolve these predicaments. Ecologists must be centrally involved in this educational process.

IV. RESULTS

A growing tribe of educators are using innovative education tools as a catalyst to further goals of environment protection as well as the global sustainable development agenda. While the quantitative impact of environmental education in building environmental leaders is hard to measure, some environmentalists are seeing a huge change in the awareness levels through education while others are not convinced that education is generating anything beyond general nature lovers. Varied learning approaches are making environment education more accessible, an important factor especially as the world and India are going slow on progress on global education commitments. Environment education in India was made compulsory in formal education in schools through a Supreme Court judgement in 2003. The judgement has resulted in over 300 million students in 1.3 million schools receiving some environmental education training, according to a UNESCO study.[8,9]

International Journal of Innovative Research in Science, Engineering and Technology

(A High Impact Factor, Monthly, Peer Reviewed Journal)

Visit: www.ijirset.com

Vol. 8, Issue 7, July 2019



“Education can play a major part in the required transformation into more environmentally sustainable societies, in concert with initiatives from government, civil society and the private sector,” said a 2016 UNESCO report titled Education for people and planet which pushes for education as one of the tools for dealing with the environmental crisis caused by human behaviour. The report said, “Education shapes values and perspectives. It also contributes to the development of skills, concepts and tools that can be used to reduce or stop unsustainable practices.”[10,11]

V. CONCLUSION

The most hazardous event of the present century is rapid degradation of environmental quality. The population explosion creates situation like more people needing more food, more energy and more things of daily use, such as housing, clothing and automobiles. As a result, we use more water resources, fertilizers, pesticides and sophisticated machines for production and in turn, increase the level of air pollution, water pollution, soil pollution, noise pollution besides disturbing balance between biotic and a biotic components in the ecosystem. All these conditions cause diseases and death of flora and fauna. Similarly, the indiscriminate use of renewable and non-renewable physical resources leads to severe problems.[12,13]

International Journal of Innovative Research in Science, Engineering and Technology

(A High Impact Factor, Monthly, Peer Reviewed Journal)

Visit: www.ijirset.com

Vol. 8, Issue 7, July 2019



Education acts as a powerful tool in the socio-economic transformation of a society, community and nation. It sharpens the eye of knowledge, develops awareness and makes mind logical. Teacher being the agent of social change, play an active role in shaping the behaviour of children to promote desire for environmental awareness. Teachers adopt age/level specific strategies to impart environmental education. Apart from usual classroom teaching, teacher can play their significant roles as –

- (i) Providing opportunity to observe local environment features, problems and phenomena and changes in community.
- (ii) Allowing children to classify living and non-living things on the basis of criteria chosen by children themselves.
- (iii) Helping them to draw obvious inferences from their observation and such classification.
- (iv) Organizing out of class activities based on learning on immediate environment.
- (v) Co-relating the environmental issue while teaching the curricular subject.
- (vi) Creating awareness on renewal and non-renewal resources.
- (vii) Enabling students to acquire basic knowledge and understanding of the total environment, its problem and role of human being.
- (viii) Encouraging students in acquiring social values through active. Participation in environmental protection activities.
- (ix) Providing ample knowledge and skill regarding Gandhian concept of development. Apart from these the teacher should tell students the fundamental duties of Indian citizen with regard to environment as incorporated in part IV-A of Indian Constitution to protect and improve the natural environment including forest, lakes, rivers and wildlife and have compassion for leaving creatures.[14,15]

International Journal of Innovative Research in Science, Engineering and Technology

(A High Impact Factor, Monthly, Peer Reviewed Journal)

Visit: www.ijirset.com

Vol. 8, Issue 7, July 2019



Teaching methods used by teacher in a formal system of education integrate environmental component with the education are role play, discovery method, observation method, dramatization, storytelling, games and puzzles, project method, educational visit and excursion up to secondary stage of education, seminar, symposia, project, group discussion, action research. Research project can be used at higher level of education. Educational excursion and visit can be organized to study a chosen natural area, the culture of city or a town, the wild life, flora and fauna. The natural trails, cultural trails and zoo visits etc. will help the children to get firsthand knowledge of the environment. [16] Beyond the class room the cocurricular activities can also be utilized in form of debate, essay writing competition, wall magazine, news bulletin etc. on the topic related to environment. At the same time role of the teacher should be changed according to the new paradigm of education embodying the spirit of science democracy, and care for environmental, emphasis on number of key elements such as learning rather than teaching, building capacity of critical thinking and problem solved in along with local specificity in the context of a global education (NCF, 2005). At this juncture teacher's role becomes very vital.[17,18]

REFERENCES

1. Bloom, B.S. (1956). Taxonomy of Educational objective Hand Book: The Cognitive Domain, New York: Long Mans, Green and Co.
2. Pandey, S.N. (1990). Vidyalalay StarparParygran Shiksha. New Delhi: NCERT.
3. Singh, K. (2007). Creating an environment to educate about the environment J. School Science, New Delhi: NCERT.
4. Shukla, R.P. (2004). Environment education & value. Value education and Human Right, New Delhi: Sarup & Sons.
5. N.C.F.S.E. (2005). The National Curriculum frame work for school education. New Delhi: NCERT.
6. Pannerselvam, A and Mohana Ramakrishnan "Environmental science education" Sterling publication, New Delhi. (2005).
7. Nagarajan and Sivakumar.P "Environmental Education", Ram Publishers, Chennai.(2002).

International Journal of Innovative Research in Science, Engineering and Technology

(A High Impact Factor, Monthly, Peer Reviewed Journal)

Visit: www.ijirset.com

Vol. 8, Issue 7, July 2019

8. Veera Bala Rastogi and Jayaraj “Animal ecology and distribution of animals”, Kedar Nath Ram nath, New Delhi. (1984).
9. Lewis, Geraid E. “A Review of Classroom methodologies for environmental education”, The journal of environmental education, (1982).
10. Lange, Robert R. “Environmental Education Needs Assessment and Evaluation”, Colorado. (1980).
11. AFED 2017, Arab Environment in 10 years, Najib Saab. AFED 2019, Survey of Environmental Academic Programs in Arab Universities.
12. Amer, K., Adeel, Z., Boer, B., Saleh, W. (2017). The water, energy, and food Nexus in the Arab region. Springer, The Netherlands.
13. Biasutti, M., De Baz, T., Alshawa, H. (2016). Assessing the infusion of sustainability principles into university curricula. Journal of Teacher Education for Sustainability, 18 (2): 21-40.
14. Figueiro, P., Raufflet, E. (2015). Sustainability in higher education: a systematic review with focus on management education. Journal of Cleaner Production, 106: 22-33.
15. Gaber, A. Lotayef, M and Hassan, D. (2017) Environmental research in the Arab world: A bibliographic review, Chapter 8, AFED.
16. GEO-6 (2016a). Global Environmental Outlook: Regional assessment for Africa, United Nations Environment Programme (UNEP), 2016.
17. GEO-6 (2016b). Global Environmental Outlook, Assessment for West Asia, United Nations Environment Programme (UNEP), 2016.
18. Green Metric. 2017, University Rankings. <http://greenmetric.ui.ac.id/overall-ranking-2017/>