

## CULTIVATING ENVIRONMENTAL AWARENESS IN THE SOCIETY BY TEACHING AND LEARNING

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### ABSTRACT

*The word environmental awareness is self explanatory. It is our awareness to environment. Environment may be defined as the surrounding in which an organization dwells which include not only air, land and natural resources but also flora, fauna, human beings and their inter relations."-ISO Definition. Environmental awareness is most important for many environmental challenges like climate change, global warming, and water scarcity, Droughts, Deforestation and Pollution etc. Various teaching and learning methods like m-learning, e-learning and u-learning can be adopted to create environmental awareness. Environmental awareness at school/college level is very apt and appropriate. Students should be courage to take care of the environment not only for them but also their future generations.*

**Keywords:** *Environmental Awareness, Global Warming, Pollution.*

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### Introduction

Environmental awareness at school level is most effective because students at the school level can understand it very quickly and also school education provides a vast platform for creating awareness. A child brain is like a sponge, it soaks up all the information it perceives. Environment awareness should be a part of school/colleges curriculum. In school's Echo-School initiative was formulated to cultivate environmental awareness in the students from very early age. Environmental science is a topic not only at school level but also at college level. We are taught about environment conservation at different levels, like segregating waste, preparing compost, being part of awareness campaigns etc, so it is safe to say that we should also apply these principals in our daily life activities. Due to vast media coverage of environmental disasters, we have seen a surge of sympathy for environmental issues. The information of this research paper was emulated from the secondary data obtained from various books, magazines, journals and websites.

### Environmental Awareness Teaching and Learning

In the world of industrialization, the various activities like urbanization, infrastructural developments, emission from traffic, biodiversity depletion, and contamination of water bodies, soil and air have severely deteriorated the environment .Due to these changes severe ill effects occur on human health. The consistent use of a few conventional methods can do wonders in this case. The various methods which should be adopted to create awareness in the society about the environment are as:-

- **Display Boards:** We all use display boards. These display boards should be used as a newspaper on weekly basis which should cover one environmental issue/incident in detail with causes and consequences.
- **Mass Media:** We could use mass media channels to disseminate awareness amongst people about various issues. Below are given some websites which could be beneficial for creating environmental awareness.

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- **Gobar Times:** It is one of the most well known magazines for schools in India. It comes as a supplement with Down to Earth.
- **Environmental Health Student Portal:** It is run by the U.S. National Library of Medicine, but we should also take benefit of it.
- **World Resources Institute:** It curates very interesting information on the website <http://www.wri.org/>
- **Advocacy Campaigns:** According to it many organizations go to schools to conduct awareness program, e.g. quiz on wildlife or talks on conflict between man and wildlife. These types of programs should be done regularly to create awareness.
- **Workshops/Seminars:** Conducting one workshop a week or even a month can take a toll on students. It could put unnecessary pressure on students. Once a year, a school can serve as a platform for exchanging ideas. An institution can organize a seminar/workshop and invite students and teachers from other schools and professionals from related fields to create awareness and exchange relevant information.
- **Interest in Administrative Decisions:** Press informs the public about various decisions taken by the local administration, e.g. rain water harvesting to be made compulsory. Newspapers also accept relevant articles from general public. So, if there is some decision regarding which students could have an opinion, those opinions could be sent to newspapers. This also means regular discussion of news in the classroom. Depending on the workload we could decide the frequency of such discussions.
- **Interest in the Problems of the Locality:** There are many problems in any locality. Students should be courage to discuss on local problems like water shortage and asked to give a solution of it.
- **Learning Productive use of Social Media:** When Chennai was flooded then Facebook was overflowing with people's status helping each other in Chennai. Things like these should be shared and learnt. Facebook and Twitter are not just for placing selfies. These are store houses of information, but students would need parental discretion to use such social media platforms. We could leave this out for the students, but use it to keep ourselves updated.
- **Commemorating Environmental Tragedies:** We should try to commemorate such tragedies e.g. Uttarakhand floods. When we commemorate such incidents, the students will not only learn about causes and consequences, but also show sympathy. They will feel that these things could happen anywhere and we should be cooperative and conservative.
- **Creating Love for Nature:** Gardening at the school/college/home level should be established and it is the simplest way of teaching to care for the environment. Rooftop gardens are the go for schools in cities. But, taking into consideration that schools usually have ample spaces, gardening can be a good habit to cultivate in students. Also gardening and fish aquarium at home should also be established. It evoke love for animals and plants in our mind.

Girls are more sympathetic. The girls' student contribution to aware of knowledge on environmental issues is higher as compared to boy's students. In general, the girls are more aware of ill health effects of plastics, air pollution, water pollution and public sanitation. Although environmental education has been a part school Curriculum but there is a great need of practical approaches of the students to develop sustainable practices like tree plantation program, vermicomposting of wastes at school grounds, no use of plastic or alternative should be used, need of safe and clean drinking water to everyone .Environmental awareness among the public should be induced by organizing rallies, walkathon, celebrating world environmental day, water day, wild life day etc. The efforts can be better achieved by taking cooperation of local Non Governmental Organizations, village peoples, college students etc.

#### **Interpretive programs formulated to transform visit to Zoos, National parks and Heritage sites into exciting experience**

Environmental Interpretation involves the translation of the technical language of science which may be natural science or related field into terms and ideas that people who are not scientists can easily understand and also the information has become interesting and educating also. CEE's interpretation programs seek to convert the visits of people to natural and cultural heritage sites into an educational opportunity. The visitors feel like natural i.e. they feel that they are present in the nature. People are

intimated about the site by signage and other exhibition which produce a strong impact on the society and their commitment to conserve the natural resources. Increasingly, interpretation is also emerging as a vital tool that helps to impress on visitors the critical link between environment and sustainable development.

### **Challenge of Plastic Use and Awareness Creation Regarding its Use**

We all are living in an age of plastics. Plastics certainly have advantages of being light weight but can hold weight nearly four times its weight, long-lasting and relatively inexpensive, but they more problematic to our world, as they not biodegradable and stay on the Earth as such for many years. Thus plastics are now present in every habitat and every nook and corner of the planet's environment - in the streets and landfills of cities and villages, remnants of plastic bags get eaten by animals, micro plastics entering into our food chain. Single use plastics are the plastic which we use for single time and then throw it. This thrown plastic accumulate in large amounts on the surface of earth and also a large amount of it then flow to oceans through our rivers In the sea the plastic is being consumed by aquatic animals like fishes, whales etc. This is poisoning our oceans and life dwelling in it. Nothing is untouched from the menace of plastic pollution. Single use plastic should be immediately banned or some alternative method should be adopted or discovered to make a good substitute for single use plastic. By churning movements of the ocean this plastic, changes into nanometers size which may also be present in marine salt we use in our households. Awareness regarding single use plastic is being created in primary and higher school's at large scale. According to a report in Hindustan Times little pupil deny of use of single use plastic like aluminum foils There is no suitable alternative to it but we should stick to our ancestral trends of folding the chapattis in a clothes. To encourage youth in tackling the problem and for taking a initiative , the UN Environment, in partnership with WWF-India and Centre for Environment Education (CEE) has launched 'Plastic Tide Turner Challenge' in India.

Ubiquitous learning can be explained as an everyday learning environment that is supported by mobile , computers and wireless networks in our everyday life (Ogata et al. 2009).The main aim of ubiquitous learning is to provide learners with content and interaction anytime and anywhere (Hwang et al. 2008). The learning process includes the real-life experience supplemented with virtual information. Environmental education provides important opportunities for students to become engaged in real world issues that went beyond classroom studies .They can resolve the complex environmental issues our earth faces by their studies in the class rooms and can also become problem solvers by acquiring skills.

### **Teachable Moments and Inquiry Quotes**

A teachable moment is an unplanned opportunity that arises in the classroom where a teacher has an ideal chance to offer insight to his or her students. Inquiry-based learning is a learning based process in which questions are formed from the interests, curiosities, and experiences of the learner. Inquiry Learning is beneficial as the learner ask questions, made discoveries and testing these discoveries. This type of learning is driven by the learners own curiosity, Interest and wonder. This type of learning is the result of some stimulus or surprise that the learner encountered during the studies.

They take action through continued observing, raising questions, making predictions, testing hypotheses. Five Es can be used to make students learn it as follows:

- **Engage:** You as the instructor set the stage for the lesson by using a “teachable moment, an object, or by posing an intriguing question or problem to the students.
- **Explore:** Students do hands-on activities, experiments or field investigations on their own.
- **Explain:** You take on more of a direct instructor role. The information gathered by the students is collected, shared and reviewed. The instructor introduces specific skills and concepts.
- **Elaborate:** Students use the skills, knowledge and concepts they have gained and apply them to new situations or “real-world” problems.
- **Evaluate:** You help the students to access what they have learned. This could be through traditional tests, student self-assessments, essays, or other methods.

### **What happens when we talk to little kids about big problems?**

Interpreters are passionate people. We care about preserving and protecting what we love-- and we hope to motivate others to care, too. A female teacher was in the Elephant House at a zoo. She was talking with a man and his five-year old son. The boy questioned that the elephants have big tusks and also big size animal. The interpreter replied that elephants are being killed for their tusks also. The poachers firstly targeted the oldest females. The females are in charge of the herd. So the herds are upset by this act and they do not know what to do. Killing elephants for their tusks is a huge problem for

elephant families.” The man and the boy extend thanks to the interpreter about the valuable information she has given to them. They learned a lot about elephants. And the teacher smiled. But today, messages about endangered and vulnerable animals are reaching even the youngest kids by TV, children’s magazines, computer games, and even well-meaning zoo educators and teachers sometimes tell tales of environmental calamities. This is problematic for two reasons:

- Many environmental problems are too complex for kids who are just in the learning process. An eight-year-old girl during a campaign slogan incited the slogan, Save the Elephants and don’t buy Ivory of Elephant. She had studied elephant poaching in school.
- Research suggests that when kids are to face bad news, they face it either by disassociating from it or tuning it out. Sometimes young kids after hearing about poaching, pollution, and habitat loss can be depressing one and turn young kids off to nature instead of enjoying it. David Sobel, in his article “Beyond Ecophobia: Reclaiming the Heart in Nature Education” (Orion, Autumn 1995), states that this kind of distancing is exactly what we force kids to do when we overpower them with bad news. Children feel better by keeping them away themselves from what they find overwhelming. Sobel coined a term, “ecophobia,” to describe the fear of nature which a child can develop when prematurely asked to solve problem of the nature which can be solved by an adult only. With our interpretive language and techniques, we must put our interpretive messages through the age appropriate filter. To solve big, complex issues like poaching, mass habitat destruction, and global warming middle schoolers are better equipped to handle them. Early and middle childhood is the time to lay the foundation for future caring by providing kids lots of positive, meaningful, joyful experiences.
- Louise Chawla of Kentucky State University found that the environmentalists who spent many hours in wild or semi-wild conditions in their childhood or adolescence are more conscious to nature and wild life. You may be surprised that educators from Brookfield Zoo suggested that teaching young kids about endangered animals is more effective. After all, much of Brookfield Zoo’s work is about protecting animals around the world. It is a conservation organization with a mission: “to help people live more sustainably with nature.” However, the zoo has differently interpreted this mission for younger kids than for teens and adults. Research shows that many environmentally active adults today have one thing in common: a childhood filled with fun, positive nature experiences. That’s why Brookfield Zoo’s new Hamill Family Play is providing these experiences for children which may be infant to ten years old one and their families.

**The National Project for Excellence in Environmental Education, which was initiated by The North American Association for Environmental Education (NAAEE)** has developed some guidelines that can be used to evaluate environmental education programs and materials. These guidelines also stress age-appropriate topics. These guidelines are adapted from NAAEE’s Guidelines Learning (K-12):

- **Questioning:** Analysis and Interpretation Skills Learners should be able to ask questions, speculate and hypothesize about the world around them, get information and develop answers to their questions. The learners should know about inquiry, master fundamental skills for gathering and organizing information.
- **Knowledge of Environmental Processes and Systems:** Learners should understand the processes and systems that constitute the environment, including human social systems and influences. That understanding is based on knowledge synthesized from across traditional disciplines and includes a base knowledge of the earth as a physical system, the living environment, humans and their societies, and the relationship between environment and society.
- **Personal and Civic Responsibility:** - Environmental literate citizens can understand what should be done to ensure environmental quality while balancing cultural, economic and other concerns. Learners also understand the differences which occur when environmental issues are solved individually and in groups.

## Conclusion

To conserve environment and its resources is the most urgent duties of all. For fulfilling this awareness regarding various environmental issues should be created. Awareness at school/college level is much needed as the students in these institutions are young and most sensitive to these types of problems. The various digital techniques are well acquainted to the students. M-learning, u-learning and

e-learning is the new technique of creating environmental awareness in the society. Environmental awareness program should be organized at regular basis, so that the students should be stimulated to conserve the nature.

### References

- Anabalagn G.- -' A Study On Environmental Awareness And Related
- Campbell, California's Superintendent of San Mateo County Schools, <https://www.plt.org/about-us/why-environmental-education-is-important/>
- Excellence in Environmental Education: Guidelines for Learning (Pre K-12). North American Association for Environmental Education 2004.
- Information from the website <http://eelinked.naaee.net/n/guidelines/topics/Excellence-in-EE-Guidelines-for->
- Information from the website of UN Environment, WWF and CCE-[www.cceindia.org](http://www.cceindia.org)
- Information from the website, [www.cceindia.org](http://www.cceindia.org)
- Information from the website-[http://web.eenorthcarolina.org/Files/ncee/2017/MOTEE-Participants Guide July 2014, Last Revision Compressed. Pdf](http://web.eenorthcarolina.org/Files/ncee/2017/MOTEE-Participants%20Guide%20July%202014%20Last%20Revision%20Compressed.pdf)
- Online information from the website –<http://www.gobertimes.org/>
- Online Information from the website- <http://www.kidsenvirohealth.nlm.nih.gov/>
- Online Information on website-<https://www.gvi.co.uk/blog/how-to-cultivate-environmental-awareness-in-schools/>
- Paula Sincero's study on the website- <http://www.inquirylearn.com/Inquirydef.htm>
- Practices Among The High School Students at Madurai District, Tamil Nadu, ISRJ Volume-5, Issue-9, Oct-2015
- Scholarly Research Journal For Interdisciplinary Studies
- Taken from Inquire Within :Implementing Inquiry-Based Science Standards in Grades 3-8, Second Edition (134-163) and online information from website – <http://faculty.mwsu.edu/west/maryann.coe/coe/inquiry.htm>
- The progressive teacher, Bi-monthly resource Magazine to empower education, 01 march, 2016

