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Environmental education: Awareness, planning and management

SEEME MAHMOOD

Department of Education, Institute for Excellence in Higher Education,
Kaliasot Dam, Kolar Road, Bhopal- 462016 (India).

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ABSTRACT

Nature is capable of providing man with everything that he needs not only for self-sustenance, but also for making his life fully comfortable. However mans desire for joy and comforts has led him to exploit natures free goods to the extent of reducing its natural capacities for self stabilization. Today we are facing severe environmental crisis which is not limited to any particular country or region; it is global. Survival of all living species including humans has increasingly become very difficult as land water and air has become polluted as never before. The current marker of contemporary world scenario i.e. globalization, industrialization, liberalization and consumerization has eroded the delicate balance between human activity and nature. Time has come to ensure that the concepts of education for sustainability in the broadest sense are discussed and woven into a framework upon which current and future education policies should based. The time is right to engage in a dynamic process to educate children and all citizens about the environmental realities of today's world. We must re-educate ourselves to treat the environment with greater caution and control and it is this realization that gives environmental education a place of prime importance.

Key words: Environmental Education, awareness and planning.

INTRODUCTION

Environment is a vital component of society. But with the global acceleration of industrialization and deforestation environmental problems and resource shortage is reaching a critical point. The need of the many and the greed of the few have ruptured our natural habitat and have made life on planet earth very fragile. The prehistoric man having a nomadic existence and was puzzled by the environment and may be out of fear started worshipping it. The man of the present day, the most civilized being started utilizing the environment to augment his comforts. The more and more man started learning about natural resources the less and less he became capable of preserving it. The fascinating awe-inspiring magnitude of nature and beauty has been slowly, steadily and listlessly marred by the so called 'civilized society'. Man has learnt to exploit not only man but everything including the environment Man is not only a biological animal living on the planet but also a spiritual being living for others. Presently the love of environment as a value has to be imbibed from childhood onwards because there is no choice for us. To have a secure future free from earthquakes, tsunamis and natural disaster created by man through interference, it is necessary to inculcate this value as a compulsory one. Under such alarming state of affairs urgent measures are needed so that such threats of modern world may be minimized. The age old agency called education is being seen as a remedy for inculcating such desirable change in the behaviour of future citizens so that an effective citizenry may be nurtured who will demonstrate energy saving behaviour for minimizing the effect of climate change.

Though it is hard to develop values through formal education, it is possible through conscious efforts over a period of time. Below are listed some strategies which can promote a love for preserving the environment.

- Family , School, Religions Institutions and mass media should inculcate a love for environment.
- Parents & teachers should act as role models.
- Children should be encouraged to spent time with nature.
- Co-curricular, Curricular and extra curricular activities should be promoted.
- Tourism should be encouraged.
- Mass media should strive to inculcate values
- Roots of violence towards environment are to be identified and removed.
- Skill for participation in aforestation programmes.
- Development of knowledge and skill in relation to he causes of pollution.
- Developing responsible behaviour skills in dealing with environmental hazards.
- Knowledge about taxonomy of local floral and fauna relief features, climate and soil conditions etc.
- Leadership skills for arranging mass movement vis-avis environmental protection should receive paramount priorty.
- Knowledge regarding environment phenomenon such as ozone layer depletion, acid rain and greenhouse effect.

Higher education has a critical role to play, college and universities can and must help students understand the complex connections and interdependencies between the environment, energy sources, and the economy connections that underpin the concept of a clean energy, green economy. Only then will a broad segment of the population begin to pull in the same direction as those who are leading this hesitation. The education required to accomplish this is a new way of thinking and learning about integrated systematic solutions not just to the economic and environmental challenges but also to the interdependent health, social and political changes.

Above all, this new way of thinking uses the green economy as the focal point for understanding the deep connections between economics, energy, the environment and social well-being referred to as sustainability. Education can support sustainable and responsible development by training, educating and encouraging human behaviour toward a reduction of energy consumption and by supporting the science and technology that will provide an answer to the increased loss of non-renewable energy sources. The 98 Summits, the United Nations and other international organizations have already launched a number of initiatives addressing various aspects of sustainability, such as low carbon society, a resource circulating society and a nature harmonious society. Sustainability perspective how ever must be part of the teaching-learning processes in all global educational projects, we need to share how to integrate the fragmented areas of knowledge and to find proper methodologies to connect thinking and action. The main challenge at this moment is how to embody action in Higher Education and against this background higher education institutions should adopt certain processes which are discussed in the following paragraphs.

Innovative interdisciplinary curricular on climate change, environment & health

Universities should develop model curricula with flexibility of adoption by the universities. Higher Education should incorporate new, cross interdisciplinary curriculum that can equip people with new tools which are more sited to the context in which they will carry out their professions. One key learning need is the ability to make connections between many types of knowledge, giving equal value on the quality of air relationships with the world at large.

- Dialogical process to design curricula.
- Lifelong learning.
- Integration of knowledge from different sources.
- Field based programmes.
- Linking higher education with precious levels of education.
- A focal.system
- Use of information technology.
- Teaching in complexity and uncertainty.
- Educating citizens with civic awareness.

- Educating for global democracy, citizenship and interculturality.
- Social learning and service learning programmes.

Research Programmes

Research on climate change, environment and health needs to be interdisciplinary; it needs to look at broad ecological, demographic and socio economic issues to assess both the impact and the opportunities for intervention. Climate change and Environment present complex problems in multiple settings, sometimes under severe pressures. Existing ecological framework need to be evaluated and interventions developed that integrate climate change into existing public health models. Research on ways to mitigate the effect of greenhouse gasses from fossils fuel use is absolutely essential. Research of health impact on Environment is of utmost importance since climate change and environment are inter connected for which mitigation and intervention strategies could be evolved leading to national policies and programmes.

Research, agencies should develop 'model curricula' with flexibility of adoption by the universities in the country. These curricula have to be interdisciplinary in nature. The following approaches can be considered by universities and colleges for evolving research programmes on environment.

- Research on cost effective, equitable and sustainable interventions must take priority over research on surveillances, estimation and modeling of health effects and impacts, all of which should also continue.
- Research should be linked to knowledge translation and sustainable intervention.
- There is need to develop scale able models that are accessible for use by resource poor communities, regions and states.
- Credible public health system that encompass disease prevention, provision of water supplies and sanitation, health educating, early diagnosis and treatment.
- New technologies should focus upon renewal sources of energy. Existing technologies solar and wind energy should be increasingly used and made cost effective.
- Training programmes need to be organized on a regular bases.

Seminars/Symposia and Workshops

Seminars, Symposia and Workshops should be organized for students and common people to desirous environment related topics. Besides educational institutions, different non-government organizations can also play a positive role in this issue. The main aim should be to convey environment related information and messages amongst people not only through lectures but also by demonstration of photographs, slides and relevant exhibitions. Knowledge and skills in relation to the causes of pollution as well as measures for prevention to all forms of pollution such as accordance of using pesticides, noise making devices such as horns, minimizing the level of an pollution could be encouraged amongst the masses.

Man made factors like population & life style of people should be controlled

As of 20th May 2010, the world population was put an 6.822 billion by the US Census Bureau. A large global population means a large demand for everything. Relentless population growth eventually leads to environmental collapse. The fresh water supply on Earth is very limited 97.5% of all water on Earth is slat water learning only 2.5% as fresh water. Lifestyle of people also need to changed as it involves abundant consumption of energy to heart, cool and light homes, fuel cars and power offices. Modern Literature and Ancient Indian Texts repeated state that happiness does not come from things we possess and consume. On the other hand to enrich ones life one has to streamline one's material would. 'Consuming too much' and possessing too much are issues that affect our social environment and jeopardize our social existence, just as environmental degradation affects our physical survival.

Industry - university co-operation in sustainable agriculture and environment conservation

To meet the food, feed and fibre requirements, the scientists, industries and government agencies should join hands together in development and promotion of environment friendly conservations technology. The new areas of biotechnology, geo-informatics, crop modeling, green house management will be more advantageous in increasing agricultural production and value addition. Energy conservation technology

needs to be promoted. UNESCO 2009 world Conference on Education for Sustainable Development recommended the restructuring of universities to allows for more interdisciplinary teaching and research. There is a strong desire for climate change and sustainability related issues to be taught as cross cutting themes across university disciplinary. Universities can be instrumental by making such changes thereby providing teaching material necessary for different disciplinary faculties to teach students about the water, climate change and sustainability issues relevant to their standard courses. However universities can have integrated framework of climate activities in their curricular framework based on:

- Data mining on water resources, health energy tourism and agriculture.
- Climate modeling assessment and socio economics pacts.
- Predicting climate based on seasonal to inter annual prediction, climate change projections. Impact assessment and mitigation of greenhouse gases.

CONCLUSIONS

Thus for preventing global warming and protecting our environment from further degradation there is need to bring together all stake holders and to mobilize each one of them to work in a mission made in individual and collective to capacities for instilling in all people belonging to different age group consciousness, concern, commitment and building capacities for preservation and conservation of natural resources.

Environmental education is a life long process and it has to be an academic response to social change i.e. transformation from frontier society to sustainable society. Therefore the context of curriculum of Environment Education need to synthesize knowledge with skill. Universities have a role for developing the assessment methods and developing the human resource, through education which will teach others to adopt the assessment methods created. These new metrics should be able to capture social and political issues as well as picture economic situations and act an media to communicate the progress towards sustainable and responsible development to the local communities and other stakeholders involved.

REFERENCES

1. Jayant Sathaye, Shukla P.R. and Ravindranath N.H. Climate Change, Sustainable Development and India, *Global and National Concerns, Current Science*. **90**(3): 314-325 (2006).
2. Bhart, S., International Environment Law, ABH Publishing Corporation, New Delhi, 26-27 (2007).
3. Goyal, M.K. , Our Environment, Vinod, Merrut U.P (2002).
4. Mrunalini, Dr. T., Curriculum Development, Neelkamal Publications Pvt. Ltd. New Delhi/ Hyderabad (2007).
5. Vernal Lovis, Pedagogy in Environment Education, University News (Special issue on Environmental Concerns), **44**(12): 20-26 (2006).
6. Parikh Jyoti, K. and Parikh Kirit, Climate Change India's Perceptions, Positions, Policies and Responsibilities - OECD, 1-40 (2002).
7. Khole, Medhe and De. V.S., Socio-Economics Impacts of Natural Disasters, WMO Bulletin **50**(1): 35-40 (2001).