

International Multidisciplinary Research Journal

Golden Research Thoughts

Chief Editor
Dr.Tukaram Narayan Shinde

Publisher
Mrs.Laxmi Ashok Yakkaldevi

Associate Editor
Dr.Rajani Dalvi

Honorary
Mr.Ashok Yakkaldevi

Golden Research Thoughts Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial board. Readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

Regional Editor

Manichander Thammishetty
Ph.d Research Scholar, Faculty of Education IASE, Osmania University, Hyderabad

International Advisory Board

Kamani Perera Regional Center For Strategic Studies, Sri Lanka	Mohammad Hailat Dept. of Mathematical Sciences, University of South Carolina Aiken	Hasan Bakfir English Language and Literature Department, Kayseri
Janaki Sinnasamy Librarian, University of Malaya	Abdullah Sabbagh Engineering Studies, Sydney	Ghayoor Abbas Chotana Dept of Chemistry, Lahore University of Management Sciences[PK]
Romona Mihaila Spiru Haret University, Romania	Ecaterina Patrascu Spiru Haret University, Bucharest	Anna Maria Constantinovici AL. I. Cuza University, Romania
Delia Serbescu Spiru Haret University, Bucharest, Romania	Loredana Bosca Spiru Haret University, Romania	Ilie Pinteau, Spiru Haret University, Romania
Anurag Misra DBS College, Kanpur	Fabricio Moraes de Almeida Federal University of Rondonia, Brazil	Xiaohua Yang PhD, USA
Titus PopPhD, Partium Christian University, Oradea,Romania	George - Calin SERITAN Faculty of Philosophy and Socio-Political Sciences Al. I. Cuza University, IasiMore

Editorial Board

Pratap Vyamktrao Naikwade ASP College Devrukh,Ratnagiri,MS India Ex - VC. Solapur University, Solapur	Iresh Swami S. D. M. Degree College, Honavar, Karnataka	Rajendra Shendge Director, B.C.U.D. Solapur University, Solapur
R. R. Patil Head Geology Department Solapur University,Solapur	N.S. Dhaygude Ex. Prin. Dayanand College, Solapur	R. R. Yalikal Director Managment Institute, Solapur
Rama Bhosale Prin. and Jt. Director Higher Education, Panvel	Narendra Kadu Jt. Director Higher Education, Pune	Umesh Rajderkar Head Humanities & Social Science YCMOU,Nashik
Salve R. N. Department of Sociology, Shivaji University,Kolhapur	K. M. Bhandarkar Praful Patel College of Education, Gondia	S. R. Pandya Head Education Dept. Mumbai University, Mumbai
Govind P. Shinde Bharati Vidyapeeth School of Distance Education Center, Navi Mumbai	Sonal Singh Vikram University, Ujjain	Alka Darshan Shrivastava Shaskiya Snatkottar Mahavidyalaya, Dhar
Chakane Sanjay Dnyaneshwar Arts, Science & Commerce College, Indapur, Pune	G. P. Patankar S. D. M. Degree College, Honavar, Karnataka	Rahul Shriram Sudke Devi Ahilya Vishwavidyalaya, Indore
Awadhesh Kumar Shirotriya Secretary,Play India Play,Meerut(U.P.)	Maj. S. Bakhtiar Choudhary Director,Hyderabad AP India.	S.KANNAN Annamalai University,TN
	S.Parvathi Devi Ph.D.-University of Allahabad	Satish Kumar Kalhotra Maulana Azad National Urdu University
	Sonal Singh, Vikram University, Ujjain	



ENVIRONMENTAL EDUCATION (EE)

Dr. Pallavi Nilesh Vartak

Principal, SMST College of Education, Talegaon Dabhade.

ABSTRACT:

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 geography. The term often implies education within the school system, from primary to post-secondary. But it should be done in such a way so that the teaching practices make long lasting impact on children. This will help in generations to come.

Key Words: Environmental Education (EE), natural environments function, earth science, atmospheric science.

INTRODUCTION

The word EE means education about the environment i.e. Surroundings. It is about everything that surrounds us all, i.e. air, water, trees, mountains, animals, atmosphere, human



beings and many more. Thus it is holistic. It not only enlightens us about these things but it tells to us what we can do to preserve the environment.

EE is a process of learning about the existing situation through which sufficient knowledge can be gained to understand environmental problems and contribute towards solving them. Thus EE teaches us about how to solve problems.

Saxena (1986) talks about EE as a process that promotes awareness and understanding of the environment, its relationship with man and his activities. According to him, there are three concepts of EE, as follows:

EDUCATION –

- I.About the environment,
- II.Through the environment,
- III.For the environment.

DEFINITIONS OF EE:-

IV.As observed in Encyclopedia of Educational Research edited by Harold E. Mitzel (1982), “Defining ‘EE’ is not an easy task.” But it is accepted universally that EE should be interdisciplinary. Some of the definitions of EE are given below to have a wide perspective of this concept.

V.William Stapp in 1969 declared that- “EE is aimed at producing a citizenry that is knowledgeable concerning the biophysical environment and its associated problems, aware of how to solve these problems, and motivated to work towards their solution.”

HISTORICAL BACKGROUND IN INDIAN CONTEXT:

EE is an age-old tradition and is a part of Indian culture and ancient civilization. Following events took place at

national level.

1) In 1937, Mahatma Gandhi launched the movement of Basic Education. This was the first serious attempt which tried to relate school education to the local environment.

2) In 1975, NCERT developed a framework which consisted of development of syllabi, Textbooks, other instructional materials through involvement of teachers, representatives, etc. This created the climate of imparting EE in India.

3) In 1977, The Directive Principles of State Policy on Environment has been articulated in article 48A of the constitution which was introduced by 42nd amendment. According to this, the state shall endeavor to protect and improve the environment and to safeguard the wild life and forests of the country.

4) Article 51(A) laid emphasis on protection of environment as one of the fundamental duties of every citizen.

5) In a national seminar organized by Indian Environmental Society in collaboration with the International programme on Environmental management at the Indian National Science Academy, New Delhi (1979), emphasis was given to incorporation of Gandhian thoughts and values as a part of Environmental Education.

6) Further in 1986, in the National policy on Education (NPE), a national concern for Environment is reflected as:

“There is a paramount need to create consciousness in the environment. It must permeate all ages and all sections of the society beginning with the child. Environmental consciousness should be there in the form of teaching in schools and colleges. This aspect will be integrated in the entire educational process.”

7) In 2000, NCERT developed National Curriculum Framework for School Education which emphasized on preservation of Natural environment including forests, lakes, rivers and wild life and compassion for the living creatures. It also included issues of energy, environment, population explosion water management etc.

8) On 18 December, 2003, the Supreme court of India gave judgment that from the academic year 2004-05, “Environment” as a compulsory subject should be taught at all levels of education (school, college and university) in our country. (Polanki, 2004)

9) In 2004, NCERT published a document named “EE in schools” carrying guidelines and syllabus for Environment Education for different stages.

Apart from these events, different agencies such as Centre for EE, Ahmadabad, Centre for Science and Environment, New Delhi, Ministry of Environment and Forest and many other are working for the cause of environment.

NEED OF EE

Ever since man appeared on earth, he has been harnessing the natural resources to meet his basic requirements. The phenomenal increase in the human population followed by rapid industrialization and urbanization in the last century has put tremendous pressure on the shrinking natural resources. This process is so faster than before that it has raised threats to the survival of human beings. Man’s attitude is responsible for all this disruption of nature. In the words of Rachel Carson

“Man’s attitude towards nature today is critically important simply because we have now acquired a fateful power to alter and destroy nature, but man is a part of nature and his war against nature is inevitably a war against himself”.

Realizing the intensity of the situation, large numbers of scientists, Environmentalists, politicians, Social workers have started taking actions. But if we want to cope up with the problems of environment, all the people themselves have to adjust their own priorities and needs. They have to follow some personal and global ethics. Each one of us has to be committed to the protection of environment and this should be reflected through the behavior. This will bring in change of attitude towards the environment.

Education plays a vital role in achieving the above goal as it is at the core of all the development process. EE is essential for generating awareness of environmental problems. Awareness precedes action.

Hence, proper educational efforts are necessary to trigger Awareness-Action chain. It helps to understand and appreciate how environment is helpful in making a living happy. It teaches us to understand our environment and know how to use it for our individual well being and for the welfare of the society and the future generations. So the person learns to use resources sustainably.

Environment education will teach people not only ways of taking something from the environment but also the ways of giving back. This attitude of man will be in favour of immediate as well as long term welfare of mankind.

CHARACTERISTICS OF EE

The characteristics of EE help the person to organize educational strategies i.e. it is related to structure and design of the environmental content.

- 1.EE is a continuous process.
- 2.EE is for all age groups.
- 3.EE is directed to the solution of the practical problems of the human environment.
- 4.EE is interdisciplinary.
- 5.EE includes action in relation to the problem.
- 6.EE seeks to develop skills for solving environmental problems.
- 7.EE has evolved out of environmental as well as social and cultural needs of the society.
- 8.EE aims to clarify values and in some instances to change them in relation to environment.
- 9.EE seeks alternative solution for environmental situations.
- 10.EE helps in programming learning experiences from simple to complex.
- 11.EE helps children to proceed from concrete to abstract.

NATURE OF EE

The Tbilisi Conference held at Georgia, USSR in 1977 by UNESCO and UNEP resolved that EE should:

1. Consider the environment in totality, natural and built technological and social, economic, political, cultural, historical, moral, spiritual and aesthetic.
2. Be a continuous life long process beginning at the pre-school level and continuing through all formal and non-formal stages of Education.
3. Be inter-disciplinary in its approach drawing on the specific content of each discipline in making possible a holistic and balanced perspective.
4. Examine major environmental issues from local and national points of view so that learners can know about the environmental conditions in different geographical areas.
5. Focus on current and potential environmental situations while taking into account historical ones.
6. Promote the value and necessity of local or national and international co-operation in the prevention and solution of environmental problems.
7. Explicitly consider environmental aspects in plans for development and growth;
8. Enable learners to have a role in planning their learning experiences and provide a opportunity for making decisions and accepting their consequences.
8. Help learners discover the symptoms and real causes of environmental problems.

It is very obvious that in today's world, everyone must have knowledge of EE. The country has accepted the need of EE with the recommendations of Tiwari Committee (1980). It is an important tool to achieve the goal of sustainable development. It has 2 aspects – 'WHAT' aspect deals with the content and 'HOW' aspect deals with the teaching methodology. In order to meet the challenges ahead & accomplish the objectives, evaluation of objectives should be carried out with respect to these 2 aspects. Hence research should be done in these areas with respect to EE.

The content to be taught to students is very important because the subject is very dynamic. The

content changes with the situation. It is the demand of the subject that recent knowledge should be given to children. Hence, one has to carry out research as to what new development has taken place in the world of knowledge of EE.

At the same time, teaching methodology is very important when we think of teaching of EE. The main aim of teaching is to bring about learning i.e. to bring about desirable changes in student's behavior.

The fundamental premise is that Teaching – learning process takes place in an atmosphere which is participatory, exploratory, active, empowering and above all enjoyable.

Effective teachers use effective methods of teaching which makes the teaching and learning process enjoyable. Hence it is important to select an appropriate method of teaching because the effectiveness largely depends upon the method used for teaching. It becomes necessary in this respect to carry out research in the teaching methodology of EE.

Effective teachers use effective methods of teaching which makes the teaching and learning process enjoyable. Hence it is important to select an appropriate method of teaching because the effectiveness largely depends upon the method used for teaching. It becomes necessary in this respect to carry out research in the teaching methodology of EE.

Environment literacy depends on a personal commitment and motivation. This commitment and motivation often begins with an awareness of one's immediate surroundings. It also depends on the way the knowledge is imparted to students. But many a times problems are seen with the way of imparting knowledge to children. This affects the assimilation of the content and finally hinders the awareness process. This is especially true at all levels of formal education. At junior college level, students are adolescents. Formation of proper attitude really matters at this level of development. Lake, Flanagan and Osgood in 2008 observed that there is a decline in the trend of sense of personal responsibility towards environment and conservation behavior of adolescents after 1990. Also the youths are found to assign the responsibility of environment over the government. They are not ready to take personal responsibility.

This attitude of young people calls for better environment education. At formal level of education, a teacher can play a pivotal role. He/she can take up this task by selecting an innovative method of teaching. But as observed by the researcher, teachers use lecture method in the class which has following limitations at junior college level.

1. It is not taught through activities and real life problems. Kulkarni, (2005) had studied the Books of 1st to 4th std. in order to know how the whole program is implemented. She had also prepared the action oriented programme for primary level. The conclusion found less stress has been given for action oriented programme at this level of education. Mali, (2008) also surveyed about implementation of EE at Secondary level. The main aim was to evaluate different problems faced by teachers while teaching this subject. It was found that teacher normally do not use audio-visual aids while teaching EE. Also the use of different activities is not done.

2. Students do not get opportunity to express their views.

3. They get bored and take less interest in learning.

4. They do not get to learn at their own pace.

5. More emphasis is given on rote learning.

Moreover, Junior college students are so exam oriented and busy with the coaching classes and studies of other subjects that unless EE is taught in an interesting and life based manner in the classroom itself (during regular teaching) the subject will not make impact on their lives and behavior.

As written By Nanda- If youths are to develop proper attitudes concerning their environment, we should provide environmental learning experiences. However few teachers are trained in our colleges and universities.

Hence, learning experiences conducive to each and every student is must.

Another very important reason is that as the subject is graded, it is not taken seriously by students as well as by teachers. They don't pay attention to teaching and learning of the subject. Also, according to

research done by Chandanshive (2006), teachers do not use audio-visual techniques, handbooks etc. They are not trained in this aspect and that is why many problems are faced.

CONCLUSION :-

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.

EE is a process of learning about the existing situation through which sufficient knowledge can be gained to understand environmental problems and contribute towards solving them.

Saxena (1986) talks about EE as a process that promotes awareness and understanding of the environment, its relationship with man and his activities.

William Stapp in 1969 declared that- "EE is aimed at producing a citizenry that is knowledgeable concerning the biophysical environment and its associated problems, aware of how to solve these problems, and motivated to work towards their solution." In 2004, NCERT published a document named "EE in schools" carrying guidelines and syllabus for Environment Education for different stages i.e Primary Secondary and at Junior college level (youth level)

Apart from these events, different agencies such as Centre for EE, Ahmadabad, Centre for Science and Environment, New Delhi, Ministry of Environment and Forest and many other are working for the cause of environment.

Environment education will teach people not only ways of taking something from the environment but also the ways of giving back. EE will help to develop an individual's understanding, skills and feelings of empowerment that are necessary for both positive behaviour towards the biophysical and social environment in everyday living, and for active participation in group efforts to find the optimal solutions for environmental problems.

Use of diverse learning environments/methods and broad educational approaches in teaching and learning about and from the environment with due emphasis on practical activities and firsthand experience is very necessary in this regard.

REFERENCES :-

- 1.Chandanshive, A.A. (2006). माध्यमिक शाळांमधील पर्यावरण शिक्षणाच्या सद्यस्थितीचा अभ्यास. Unpublished Master's thesis, P. G. Dept. of Education, S. N. D.T. Womens' university, Pune
- 2.Mali, A.P. (2008). ग्रामीण भागातील माध्यमिक शाळांमधील पर्यावरण शिक्षणाच्या अंमलबजावणीचा विश्लेषणात्मक अभ्यास. Unpublished Master's thesis, P. G. Dept. of Education, S. N. D.T. Womens' University, Pune.
- 3.Polanki, P. (2004, January 25). UGC makes green studies compulsory. Times of India. Retrieved on April 29, 2011 from http://articles.timesofindia.indiatimes.com/2004-01-25/pune/28324847_1_environmental-studies-ugc-university-grant-commission.
- 4.Stapp, W. B.(1996).The journal of Environmental Education. 1, 30-31. Reprinted by Heldref publication
- 5.https://en.wikipedia.org/wiki/Environmental_education
- 6.<http://www.gdrc.org/uem/ee/1-1.html>
- 7.<http://www.yourarticlelibrary.com/environment/environmental-studies-meaning-objectives-scope-and-importance-of-environmental-studies/12295/>
- 8.<http://www.cpreec.org/environmentaleducation1.htm>



Dr. Pallavi Nilesh Vartak

Principal, SMST College of Education, Talegaon Dabhade.

Publish Research Article

International Level Multidisciplinary Research Journal For All Subjects

Dear Sir/Mam,

We invite unpublished Research Paper, Summary of Research Project, Theses, Books and Book Review for publication, you will be pleased to know that our journals are

Associated and Indexed, India

- ★ International Scientific Journal Consortium
- ★ OPEN J-GATE

Associated and Indexed, USA

- EBSCO
- Index Copernicus
- Publication Index
- Academic Journal Database
- Contemporary Research Index
- Academic Paper Database
- Digital Journals Database
- Current Index to Scholarly Journals
- Elite Scientific Journal Archive
- Directory Of Academic Resources
- Scholar Journal Index
- Recent Science Index
- Scientific Resources Database
- Directory Of Research Journal Indexing

Golden Research Thoughts
258/34 Raviwar Peth Solapur-413005, Maharashtra
Contact-9595359435
E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com
Website : www.aygrt.isrj.org