

Elements of Environmental Education, Curriculum and Teacher's Perspective: A Review

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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. Environmental Education does not advocate a particular view point or course of action. Rather, it teaches individuals how to weigh various sides of an issue through critical thinking; and it enhances their own problem-solving and decision-making skills. Environmental Education helps to recognize values and clarify concepts relating to environment. It develops skills and attitudes necessary to understand and appreciate the inter relatedness of man, his culture and his biophysical surroundings. It helps to provide practice in decision making and self formulation of a code of behavior about issues concerning quality environment. Environmental Education helps to develop in the people awareness, concern and knowledge of the environment and learn to use this understanding to preserve, conserve and utilize the environment in a sustainable manner for the benefit of present and future generations. The *Tbilisi Declaration* set up recommendations for the broader application of Environmental Education in formal and non-formal education. It is the responsibility of Teacher Education Institutions to evolve the kind of methodology suitable for teaching Environmental Education in school programme and to work out strategies for involving students in conservation and regeneration of environment. Teachers play a crucial role in forming and establishing right attitudes and values that are important to develop environmentally responsible behavior among their students. Developing a positive attitude and awareness among the students on environmental issues has been thought of an effective strategy for taking care of environment for the long term. Further, these young people will be the citizens, leaders and policy makers in future societies. The current review illuminates a broad perspective on environmental education in the context of elements of environmental education, curriculum and the role of teacher's to promote environmental education effectively.

Keywords- Environmental Education, Tbilisi Declaration, Teacher Education Institutions and Perspective on Environmental Education.

I. INTRODUCTION

Education is the process of supporting learning or the development of knowledge, skills, attitudes, habits, and values. It is a potent weapon for social

reconstruction. It is relevant to people's needs and goals in a continuously changing society. It encourages people to develop positive attributes and aims to bring out the best in them. Aristotle defined education as the cultivation of a sound mind in a sound body. It develops

man's abilities, particularly his mind, so that he can contemplate supreme truth, kindness, and beauty, which is essential to full happiness. Education is one of the most potent tools for achieving national goals in terms of social, economic, and cultural transformation (The Indian Education Commission, 1964-66). It contributes to increased productivity, national and emotional integration, and the acceleration of the modernization process. It cultivates social, moral and spiritual values among people. It becomes essential for the economic and cultural development of a country. Secondary Education is more valuable and of immense importance in a country with a large number of villages and rural population, because of its terminal and transitional nature. It is a platform to foster and develop the concepts of environmental preservation and protection among the students. The Government of India introduced recently 5+3+3+4 pattern in School Education in our country under National Education Policy, 2020. In the contemporary education system, secondary stage of education should not be considered as a mere extension of basic or elementary education. Rather, it should be viewed as preparing children and adolescents to be better human resources capable of contributing to economic, social, and national growth. As the final level in the educational cycle, it must attempt full development of human personality by teaching knowledge, skills, and attitudes relevant to the comprehension of diverse environmental protection challenges. This is the stage of schooling where pupils should develop a positive attitude towards the environment and its sustainability.

II. CONCEPT OF ENVIRONMENT

The environment is a set of circumstances in which an organism must live or continue its life process. It influences the growth and development of living organisms. In other words, the environment refers to all of the situations that surround living beings and have a substantial impact on their lives. The atmosphere, hydrosphere, lithosphere, and biosphere comprise it. Its primary constituents include soil, water, air, organisms, and solar energy. It has provided us with all we require to live a happy and comfortable life. The term, 'Environment' has been derived from a French word "Environia" means 'to surround'. It refers to both abiotic (physical or non-living) and biotic (living) environment. The word, 'environment' means the surroundings in which organisms live. Environment and the organisms are two dynamic and complex components of nature. Environment regulates the life of the organisms including human beings. Human beings interact with the environment more vigorously than other living beings. Ordinarily, environment refers to the materials and forces that surround the living organism.

The term 'environment' refers to all of the external factors, influences, and situations that affect the life, nature, behaviour, growth, development, and

maturity of living creatures (Douglass & Holland, 2001). Man is surrounded and influenced by environmental elements that can be natural, manmade, social, biological, or psychological. Our environment is constantly changing. It has both physical and biochemical manifestations. The Earth is where humans live. Man cannot exist in alone. He is completely reliant on other living beings for food and other necessities. Thus, environment encompasses not only physical or material components, but also psychological, social, and cultural aspects. It has become the concern of every individual to study the environment of all forms of life on the earth as a whole.

Environment mainly consists of four components, viz., atmosphere, hydrosphere, lithosphere and biosphere. Environment is basically divided into two types such as Micro and Macro environment. It has also been divided into two other types such as physical and biotic environment. Micro environment refers to the immediate local surrounding of the organism whereas Macro environment refers to all the physical and biotic conditions that surround the organism externally. Physical environment refers to all abiotic factors or conditions like temperature, light, rainfall, soil, minerals etc. It comprises of atmosphere, lithosphere and hydrosphere; whereas biotic environment consists of biosphere that includes all biotic factors or living forms like plants, animals and other micro-organisms.

III. ENVIRONMENTAL EDUCATION

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. Environmental Education does not advocate a particular view point or course of action. Rather, it teaches individuals how to weigh various sides of an issue through critical thinking; and it enhances their own problem-solving and decision-making skills. Environmental Education (EE) is understood as education *about* the environment, *in* the environment and *for* the environment as per the classification given by Lucas (1979). The purpose of education about the environment is to develop awareness, knowledge and understanding about human-environment interactions (Tilbury, 1995). It develops in them a sense of responsibility in order to make them involve actively in the resolution of the environmental issues. It adopts a holistic approach to the study of environment and its varied problems. Education *for* the environment, therefore, acknowledges the socio-political dimensions of environmental issues (Jickling & Spork, 1998; Tilbury, 1995) and includes critical education objectives and an issue-based pedagogy. Environmental education is considered an effective strategy for achieving the

goals of Environmental Education.

Environmental Education helps to recognize values and clarify concepts relating to environment. It develops skills and attitudes necessary to understand and appreciate the inter relatedness of man, his culture and his biophysical surroundings. It helps to provide practice in decision making and self formulation of a code of behavior about issues concerning quality environment. Environmental Education helps to develop in the people awareness, concern and knowledge of the environment and learn to use this understanding to preserve, conserve and utilize the environment in a sustainable manner for the benefit of present and future generations. It entails the will to take personal initiatives and social participation to achieve sustainability. It is intended for all types of learners, students, out-of-school youth, community leaders, policy makers and the general public to develop appropriate environmental related skills. It is the process that covers the objectives to develop knowledge, awareness, attitude, values and skills among the individuals and social groups about the total environment, environmental problems and the necessary solutions to overcome these problems. It provides guidelines on proper use and conservation of resources and also control of environmental pollution.

Environmental Education is a process of promoting awareness among individuals, make them understand the environment in its real perspective and recognize its relationship with man and his activities. Environmental Education is the study of the environment and its dynamics, its various forms, environmental degradation, factors influencing the degradation of environment and its impact on human life. It is the need of the hour to prepare suitable strategies of environmental education to protect our environment. The goal of Environmental Education is to improve all ecological relationship including the relationship of humanity with nature and people with their surroundings. Thus, it may include conservation of energy and soil, protection of air, water and atmosphere from pollution, effective utilization of locally available resources, creation of conducive atmosphere for living through social and civic consciousness and harnessing natural resources without any ecological imbalances.

IV. HISTORICAL BACKGROUND OF ENVIRONMENTAL EDUCATION

Environmental Education is a learning process that seeks to increase people's knowledge and awareness about the environment and associated challenges; develop the necessary skills and expertise to address these challenges; and promote attitudes, motivation and commitment to make informal decisions and take responsible actions (UNESCO, 1978). Environmental Education gained importance at the global level with the first global declaration, the *Stockholm Declaration on Environmental Education*, made by UNESCO in 1972.

This was the first time that the recorded documents formally suggested that education relating to environment should be included in school curriculum. Soon after the conference, UNESCO launched the International Environmental Education Programme (IEEP).

In 1975, UNESCO, with representatives from 60 countries, released the *Belgrade Charter* in former Yugoslavia. Following Belgrade charter, the first world's first Intergovernmental conference on Environmental Education was held in Tbilisi, Georgia. This conference adopted the *Tbilisi Declaration* in 1977, which challenged Environmental Education to create awareness and values among individuals in order to improve the quality of life and environment. The *Tbilisi Declaration* set up recommendations for the broader application of Environmental Education in formal and non-formal education; and this major occurrence and the subsequent publications continue to provide a fundamental framework for the development of Environmental Education around the world (Neal & Palmer, 1990).

A major outcome of this declaration had resulted in the formulation of objectives of Environmental Education. These objectives include:

1. **Awareness:** To help social groups and individuals acquire an awareness and sensitivity towards the total environment and its allied problems
2. **Knowledge:** To help social groups and individuals gain a variety of experiences and acquire a basic understanding of the environment and its associated problems
3. **Attitudes:** To help social groups and individuals acquire a set of values and feelings of concern for the environment and the motivation for their active participation in environmental improvement and protection
4. **Skills:** To help social groups and individuals acquire the skills for identifying and solving environmental problems

The next development focusing on the objectives of Environmental Education came with the publication of the Brundtland Report, *Our Common Future* (World Commission on Environment and Development – WCED, 1987). This report shifted the focus of Environmental Education towards sustainable development, economic growth, environmental protection and social equality. The Brundtland Report paved path for the publication of *Agenda 21* at the Earth Summit in 1992 (Tilbury, 1995). The summit, which was otherwise known as the UN Conference on Environment and Development (UNCED) held in Rio-de-Janeiro, called for the re-orientation of Environmental Education towards sustainability. It underlined the need for a holistic perspective to be reflected in the curricular approach to Environmental

Education for Sustainability (EEFS). It highlighted the essential need to integrate the concept of 'sustainability' into all learning areas. Environmental education is concerned with subjects in the way in which natural environment works, how human beings should behave to manage the ecosystem to sustain the environment. It provides the necessary skills and expertise to handle the associated challenges. The main focus of environmental education is to impart knowledge, create awareness, inculcate an attitude of concern and provide necessary skills to handle the environment and environmental challenges.

In recent years, the Indian government has undertaken a number of environmentally friendly initiatives. The Ministry of Environment and Forests was founded in 1986, and environmental legislation was put in place. During 2000-2001, the National Environmental consciousness Campaign (NEAC) was held to raise environmental consciousness at all levels of society, with the core subject "*Keep our environment clean and green.*" The Ministry actively collaborated with several Apex Bodies at the national level, including the University Grants Commission (UGC), the National Council of Educational Research and Training (NCERT), and the Ministry of Human Resource Development (MHRD), to introduce and expand environmental concepts, themes, and issues in school and college curricula. Only through the right form of education can a systematized, organized, and awakened social mind be developed, and it is only through this style of education that it is possible to establish suitable awareness among individuals to make their lives and the environment creative, constructive, and progressive. To instill such a mindset in people, it is critical to promote a scientific approach towards the environment beginning with their school education.

V. ENVIRONMENTAL EDUCATION IN SCHOOL CURRICULUM

In ancient India, there was Gurukula system of education. Students used to spend a number of years in Guru's Ashram. Guru was their father figure. He remained a guardian, an advisor, a counselor, a philosopher and a guide for all his disciples. Guru's wife remained a mother figure for them in the Ashram. She used to treat them as if they were her own children. Education was completely free for them. There was no discrimination among students by virtue of the wealth or status of their parents. The students used develop right attitudes and values under the complete supervision of their Gurus. They acquired education in all the domains of learning – cognitive, affective and psychomotor. Besides, they lived in a natural environment and cared for conserving it. They had a lot of respect for the environment in which they lived. Environmental Education was an integral part of their educational and cultural system; and students understood the need for

conserving wildlife, ecosystems and abiotic environment. There had been a lot of change in the system of education during the middle ages. The thrust on environment and all-round development of students was shifted to classroom instruction and learning of 3 R's (Reading, Writing and Arithmetic). The very spirit of learning, wherein observation, exploration, comprehension and application were inherent, had been sacrificed. Cramming of facts and rote memorization became the order of the day. The knowledge acquired by the students without using their senses (touching, smelling, tasting etc.) in the natural surroundings could not be assimilated and internalized. It went off their memory soon after the completion of the examination and award of the certificate. Obviously, environmental education – educational excursions, eco-treks and natural walks had no place in such a system.

Environmental Education in formal system of education has been reported as initially coming into school curriculum in the early 1970s through Science education (Gough, 2002). The origin of Environmental Education can also be traced further back to the promotion of nature studies and later to the conservation movement (Stevenson, 2007). Here, it aimed at developing knowledge, awareness and skills about environmental issues and natural resources; and was broadly incorporated into the curriculum of primary schools and Science and Geography curriculum in secondary schools. Stevenson (2007) also argues that although the aims of nature studies and conservation education can moderately be accommodated in the goals of school system, improving environmental behavior among students is a far more challenging mission for schools. In the 1980's, the role of Environmental Education in school organization was meaningfully developed by increasing public environmental concern, giving a stronger impetus to schools to implement Environmental Education (Tilbury, 1995). Chapter 26 of Agenda 21 emphasized that 'Environmental Education should be incorporated at primary and secondary schools and that it should be the responsibility of educational authorities to promote all kinds of programmes for continuing education in environment in the move towards sustainable development' (UNESCO, 1992).

VI. ROLE OF TEACHERS IN DEVELOPING ENVIRONMENTAL AWARENESS AMONGSTUDENTS

Environmental Education programmes in a formal school setting often consider students to be the most appropriate targets because they are in a period of life which can significantly shape the way they approach and interact with the environment that surrounds them and develop a desire for life-long learning (Mackey, 2012). Environmental Education, therefore, tries to sensitize the young minds of students to environmental problems and concerns; and to develop in them right

attitude and behaviour towards environment (Thapa, 1999). Further, secondary school students in the age group 11-15 years seem to be the most appropriate targets for fostering ethical and ecological appreciation of the natural world (Kellert, 1985).

There has been a lot of debate among researchers, policy makers and teachers with regard to the implementation of Environmental Education in school curriculum. In the 1980's, two models dominated for this purpose (Yueh, 2007). One was the multidisciplinary approach and the other was interdisciplinary approach. The multidisciplinary model infuses Environmental Education into existing school subjects according to its relevance to the teaching content of each school subject. In contrast, the interdisciplinary model views Environmental Education as an independent teaching unit containing materials from every school subject. The multidisciplinary approach appears to have been the most frequently used approach to classroom-based Environmental Education programmes with the concepts of Environmental Education integrated into separate subject areas such as Biology, Chemistry, Geology and Geography in secondary school curriculum (Hart & Nolan, 1999). No matter the approach, it is important for Environmental Education in schools to include particular pedagogical practices to achieve the goals of Environmental Education.

Environmental Education cannot be introduced in schools in an effective manner unless teachers, who teach various topics, are well-versed with the subject matter of Environmental Studies. They should know and understand what environmental education is, what its subject matter is, how it should be taught in schools and how students' attainments should be measured or evaluated. Such teachers can only be available, if Environment Education finds a place in the curriculum of Teacher Education or Teacher preparation programmes being offered by Colleges of Education, Colleges of Teacher Education, Institutes of Advanced Study in Education (IASEs), University Departments of Education and District Institutes of Education and Training (DIETs). In this context, it may be mentioned that Environmental Education has its unique characteristics; and because of these characteristics, its teaching methodology is different from that of other subjects. It is the responsibility of Teacher Education Institutions to evolve the kind of methodology suitable for teaching Environmental Education in school programme and to work out strategies for involving students in conservation and regeneration of environment.

Education at the secondary level must emphasize at least one of the following approaches to study nature and environment:

a) Involving children in out-of-school activities, developing in them problem solving and community activities related to environmental problems.

b) Providing the students the necessary inputs on basic environmental factors such as ecology, resource distribution, population dynamics, population balance and the problems of hunger and starvation.

The teacher plays a very significant role in shaping, moulding and cultivating right habits, manners and good character among children in schools. To gear up the environmental awareness programme, it is essential that the teacher should have scientific knowledge of Environmental Education. It is the responsibility of the Colleges of Teacher Education and University Departments of Education to prepare teachers for this task by introducing Environmental Education as a subject in Teacher preparation programme. The curriculum in the existing Teacher education programmes should be amended in such a manner that there should be due weightage for the study of Environmental Education as an independent subject or integrating it with other school subjects emphasizing suitable methodology. The effective implementation of Environmental Education requires a large number of teachers who are knowledgeable and skillful in organizing different activities in schools. The role of a teacher in Environmental Education is multi-dimensional in nature. He is a planner, a sustainer and a value instigator.

Teachers should have a basic understanding of integrating theory and practice in Environmental Education. They should understand and accept the responsibilities associated with the implementation of Environmental Education programmes at school level. They should enable students to engage in open inquiry and investigation, especially while considering environmental issues that are controversial in nature. In such cases, teachers should provide them an opportunity to reflect on their own as well as on others' perspectives. Teachers should ensure a climate for learning about and exploring the environment, an inclusive and collaborative learning environment and flexible and responsive instruction. The role of a teacher does not end with teaching a few concepts relating to Environmental Education in the classroom. It should go beyond the four walls of the classroom. The teacher should be a friend, philosopher and guide to his/her students; and should take an active role in motivating them to protect environment. Since Environmental Education is more an out-door activity, the teacher should plan his/her lessons using heuristic and exploratory methods with a view to enable his/her students explore the nature. The teacher should devise strategies for integrating the content of Environmental Education in his/her core teaching subjects. Environmental Education should be made a part and parcel of school education programme.

Teachers play a crucial role in forming and establishing right attitudes and values that are important to develop environmentally responsible behavior among

their students. Teacher is said to be the protector, savior and purifier of the environment. The teacher can help his students take up a number of activities such as ‘clean and green’, ‘tree plantation’, ‘watering plants’, ‘rainwater harvesting’ etc., in the school as well as the surrounding community. The teacher can also arrange field trips and excursions in order to develop in his/her students a love for the nature. He should create in them a feeling of togetherness and a positive attitude towards environment. The teacher should create awareness among the students towards environmental pollution and suggest remedial measures to overcome the problem. He/she should organize debates, competitions, discussions and dramas to enlighten the students on the importance of Environmental Education. Visits to dense forests are organized so that students should develop a taste for natural beauty and acquire knowledge of flora and fauna.

The following are some of the activities that the teachers can organize in the schools. They should:

- i. Encourage their students to create pollution-free atmosphere in the school premises.
- ii. Correlate the environmental activities with the traditions and customs in the society.
- iii. Inform his students with the safety measures to be taken to avoid the spread of viral diseases by keeping the surroundings clean.
- iv. Organize health camps in the school and involve the students participate actively in such programmes.
- v. Motivate the students to develop hygienic conditions around them.
- vi. Encourage the students to plant at least a tree on his/her birthday every year either in the school, or in the place of worship or elsewhere and nurture its growth.
- vii. Conduct visits to industrial places and other places of high pollution to make the students realize the need for protecting the environment.
- viii. Celebrate important days relating to environment such as world forest day, world conservation day, wildlife protection day, world population day in the school involving the students participate actively in such programmes.
- ix. Train the students as soldiers to protect environment.
- x. Sow the seeds of sustainability of environment in the young minds.
- xi. Organize campaigns of awareness to avoid the use of plastics and other non-degradable substances by the public.
- xii. Help the students acquire the sensibility towards environmental problems and the necessary strategies to resolve such problems.
- xiii. Encourage students to examine and interpret the environment from a variety of perspectives – physical, geographical, biological, sociological, economic, political, technological, historical, esthetical and ethical.
- xiv. Help them to lead their lives happily in a pollution-free environment.

VII. ATTITUDE OF TEACHERS TOWARDS ENVIRONMENT

Environmental attitude is the term associated with the environmental concern of an individual for nature or the amount a person cares about the state of the natural environment. Today, man is living in the world of social, economic, political and value crises. In addition, during the recent years, environmental crisis has become another important factor, which has made everyone in the world to think of its gravity. This is due to the increasing population, urbanization, shrinking of agricultural land, desertification, deforestation and technological advancement. All these lead to heavy air and water pollution coupled with the hole in the Ozone layer. To combat environmental degradation, many initiatives have been taken up at global, national, state and institutional levels by the Governments and voluntary organizations. Among these, adoption of compulsory Environmental Education at all levels in the educational system as directed by the Hon'ble Supreme Court is the most appropriate measure to develop right attitude, awareness, understanding and action towards environmental protection among teachers as well as students. The effective implementation of Environmental Education mainly depends on the availability of environmentally trained teachers. Hence, there is a dire need of producing teachers with a positive attitude towards environment (Syed Hasan Qasim, 2019). This should be taken up on priority basis by the institutions offering Teacher Education programmes at different levels.

VIII. TEACHER PREPARATION PROGRAMME FOR ENVIRONMENTAL EDUCATION

Teacher Educators working in Colleges of Education, Colleges of Teacher Education, University Departments of Education, Institutes of Advanced Study in Education (IASEs), District Institutes of Education and Training (DIETs) and other professionals working in Teacher preparation programmes play a significant role in developing right attitude and awareness among the prospective teachers who are the torch-bearers to enlighten the students realize their responsibilities in protecting and safe-guarding the environment. It is the responsibility of these institutions to prepare teachers for this task of protecting environment. The curriculum in the Teacher Education programmes (D.Ed., B.Ed. and M.Ed.) should suitably be amended and redesigned to incorporate the content of Environmental Education in different school subjects. The teacher educators should combine the fundamentals of high quality education with the unique features of Environmental Education while designing and implementing the curriculum. There should be co-ordination in the components of the course

content – theory, practice and community participation. The very purpose of environmental education is to increase public awareness about environmental issues, explore possible solutions for various problems associated with the environment, and to lay the foundations for a fully informed and active participation of individual in the protection of environment and the prudent and rational use of natural resources.

The following are some of the objectives of Environmental Education which are to be realized through Teacher Education programmes at Under-graduate and Post- graduate levels:

- To develop a positive attitude towards understanding environment and its allied problems
- To help in acquiring skills associated with the identification of various environmental problems and finding out strategies to resolve these problems
- To develop right attitude, concern, feelings and values towards the environment and encourage active participation in the protection of environment
- To develop an ability to evaluate the outcomes of Environmental Education taught in the school programme
- To improve upon the existing environmental awareness among the trainees
- To provide necessary training to understand the local environmental problems
- To provide in-depth knowledge and skills to deal with various environmental issues in future.

Teacher Educators should develop a high level of specialized knowledge and pedagogical skills to impart education regarding new facts, relationships, threats and conflicts; and evolve the necessary strategies to overcome various problems associated with teaching Environmental Education in Secondary schools.

IX. RATIONALE OF THE STUDY

The environment plays an immense role in maintaining and supporting the health of the people (United Nations Environment Programme – UNEP, 2014). However, the environment continues to suffer and our planet has been facing serious and complex environmental issues such as climate change, air and water pollution, loss of biodiversity, deforestation, over population, depletion of natural resources and many more. These issues have been increasingly recognized over the past several years (United Nations, 2002; UNEP-2014). Although the health and protection of the natural environment is important for human beings, there is general acceptance that humans are largely responsible for causing many current environmental problems (Brown, 2008; United Nations, 2012). These actions have been severely affecting the ecological balance of the environment, with potentially devastating consequences for the life of current and future generations of all species (UNEP-2013).

Therefore, people need to realize their responsibility to protect and preserve the environment for these generations. Nonetheless, there is consensus among the researchers of Environmental Education that, although the level of awareness about the environment and its associate problems has in general increased among the public, large groups of people have become less connected with the natural environment leading to weaker understanding and empathy for these problems (Sterling, 2001). According to the objectives of Environmental Education as outlined by *Tbilisi Declaration*, investigating peoples’ environmental attitude, awareness and behaviour towards the environmental issues could contribute something for educational approaches for a better sustainable future. But there exists still a gap in our understanding of why some people, who are environmentally aware and have a positive attitude towards the environment, do not show environmental actions (Kollmuss & Agyeman, 2002). While Environmental Education is a life-long process, environmental educators have widely agreed that secondary school students form an important group among whom the concepts of Environmental Education need to be implemented (Athman & Monroe, 2001; Bradley et al., 1999; Loughland et al., 2002). Developing a positive attitude and awareness among the students on environmental issues has been thought of an effective strategy for taking care of environment for the long term. Further, these young people will be the citizens, leaders and policy makers in future societies. Since teachers play an important role in developing these qualities among their students at secondary level and stand as role models for them, it is thought that the personal and professional attitude and awareness of teachers play a significant role in implementing Environmental Education programmes effectively. These ideas have formed the basis for the present investigation.

X. SIGNIFICANCE OF THE STUDY

Environmental education is not a separate subject. It is a multidisciplinary approach both to education and to the problems of the environment. All the subjects in a traditional curriculum pertaining to the environment dealt with the knowledge necessary for preserving the environment. Environmental Education provides the foundation for all future education and learning. It enables children to develop a store house of knowledge about the world in which they live; and to seek knowledge that they can use and develop throughout their lives. It helps the children empower with the necessary knowledge and skills relating to the environment wherein they live. This helps them lead a happy and peaceful life even in future. Integration of Environmental Education in school programme is very essential in developing countries. The curriculum in the school education should be designed in such a manner that the students get a thorough understanding of the

environment and realize their responsibility in protecting it. The students and teachers should have a positive attitude and complete awareness of the environmental problems they encounter in their day-to-day lives. Hence, a lot of research needs to be conducted in this area. The United Nations Decade of Education for Sustainable Development (UNDESD, 2005-14) emphasized that Environmental Education to be introduced not only as a part of school curriculum, but also in the teacher education curriculum in order to develop necessary awareness and desirable attitude among prospective teachers towards environment and its conversation.

The investigator, after going through the literature available in the area of Environmental Education, proposes to study different factors that contribute for the development of a positive and right attitude of teachers working in secondary schools. Ever since the academic attention was drawn to environmental problems and the adoption of Environmental Education as a strategy to combat it, considerable research has been conducted in the field. Majority of these research studies were confined to develop environmental awareness among students, parents and the public. These studies also revealed various problems arising out of environmental pollution to human life. But no literature has been published on studies directed at finding out the attitudes, awareness and perceptions of teachers working in Secondary schools towards environmental education. Hence, it is proposed to carry out a kind of content analysis of different dimensions of the environment that contribute for the positive attitude and awareness among secondary school teachers. These dimensions include Health and hygiene, Wild life, Forests, Polluters, Population explosion and Environmental concerns. Such an analysis would provide the basis for a more detailed concern of secondary school teachers towards understanding and preserving environment. The present investigation is an attempt in this direction.

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