

## **EXAMINE THE ROLE OF EDUCATION IN REDUCING ENVIRONMENTAL POLLUTION**

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### **ABSTRACT**

Today, considering that non-renewable energy resources are running out and devastating consequences from the utilization of this resource, governments focused on deployment of renewable source and sustainable development besides education of conservation of environment. As, Iran is one of the high consumption countries in energy issues, moreover according The fifth principle of the constitution of the Islamic Republic of Iran, environmental protection has been considered a general duty. Education of conservation of natural environment should be fundamental and make citizens aware and conscious of it. This article endeavors to probe Education of conservation of natural environment and represent solutions for training community.

**Keywords:** *Nature, Sustainable Architecture, Natural Environment, Energy*

### **INTRODUCTION**

Recent views to nature, concentrate on sustainable development issues, conservation of natural environment and earth Eco system; indeed, it aims to decrease energy consumption and less environmental pollution, population growth, industrial development, achievement of novel technologies, notification and education is one of the essential actions for cease or decrease of natural disasters. Life on planet earth is an integrated unit and natural disasters are not local or regional problems, they are in a row effects. So, effective actions should occur united, with participation of national and international communities. Recently Environmental education finds its place in public media, higher education of developed societies in various levels. Not very long ago when industrial sector was not developed, population was less, environmental effects was negligible. Iranian's life style was more sustainable; utilization of nature was as the same as nature' value and production of waste material was a bit. However, many countries due to their industrial progress and technological growth; was destroying environment and disrupt natural order. Over time, the challenges face these communities have realized the importance of environment and they initiated partly successful measures to control and improve and protect the environment. Unfortunately, various industries and new technologies cause environmental degradation in Iran, which had the least damages before. The raise of environmental crisis, have evoked concerns over the safety of human life. Much of the environmental problems are conducted from lack of necessary knowledge and culture of relation between man and nature. In fact, it is a cultural issue that needs national and international determination for strengthening environmental culture in different levels of the society. In his regard, environmental education for public is a clue to confront this problem and proactive approach for promoting environmental awareness.

### **NATURAL ENVIRONMENT**

Natural environment is the surrounding which contains life and has interaction with it that consist of human society and spaces which is built with his mind and hand. Whole of life space of earth which means all biosphere (BahrameSoltani, 1992).In initiation levels, natural rules are recognized and represented far apart, Constantly 'human find out natural energies perform as a unit which is so-called nature (Fathi et al, 2003). Environmental view is quite sustainable complex of emotions, beliefs,

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individual treatments, thoughts and groups (Seif, 2001). Thus, environmental function is a readiness and inclination of practical task due to promotion of environmental issues (Ajzen, 1995)

### **POLLUTION OF ENVIRONMENT**

The word “pollution” in dictionaries define as contamination; desecration; dirtying, soiling; spoiling, destruction. Contamination material can be explained as a component located where is naturally it should not been there or its concentration is higher than normal concentrations. Moreover, it would have adverse and harmful effects on living organisms (Erfanmanesh, 2000). Generally, pollution includes air pollution, water pollution, noise pollution and soil contamination. Among the types of pollution, air pollution, which lately has become one of the main problems in large cities, is an intricate problem demands national and even international determination to solve. Causes such as chronic respiratory disease, lung retardation in children, decrease in work efficiency and intellectual productivity of community, physical and mental fatigue, nervous tension are the effects of pollution on the economical and mental health of residents and in turn remedial costs in society. Whenever human interfere with nature and its vital elements, namely air, water, soil, noise, and temperature, the existing balance of them will harm. Human interventions and degradations in nature were not fundamental until the late eighteenth century. But then, human’s desire of concern and reconciliation of nature change to the attack and getting the blessings of it (Fathi, 2003). Each land has its own natural talents, human life and livelihoods and way of life in natural conditions, within the same organic ability is formed. Gradually these facilities occurred with the use of some technical methods to increase natural territory, thus its efficiency should be added, but extremely attribute must be considered for ideal returns. Otherwise, used sources and whole natural systems, would collapse (Soltani, 1992). With the growth of urbanization the relationship between man and nature have been altered.

### **THE NECESSITY OF ENVIRONMENTAL EDUCATION**

The planet earth has experienced several disasters with natural or manmade sources. From Ice Age to destructive volcanoes and small and large meteorite impact, the only species of plant and animals have been able to maintain their survival in harsh environmental conditions which have greater adaptive ability. Of these factors, growth of degradation and environmental pollution with human origin can threaten life of humans and other species severely. Part of this destruction caused by lack of public awareness towards environmental issues; so education plays a vital role in preventing environmental crisis. Land always seem to be full of endless resources for mankind and human considered permissible for further exploit of his nature, but soon environmental effects of improper use became evident (Havvey, 1995). With increasing environmental issues such as energy crisis, loss and degradation of natural resources and increasing waste due to development of urbanization and industrialization, human impact on environment has been regarded by scholars. As noted above, many of these problems caused directly and indirectly from human’s behavior. From past centuries, education for humans considered as the first priority. Moreover, training can be one of the areas of preparation, skills, knowledge and understanding; in this way they are able to experience life in the world successfully. For achieving this success must turn to environmental education. Thus, environmental education is a remarkable experience which is able to change lifestyle of members of community, because people can use these principles to have a positive contribution to the environment. This instruction can form new behavioral pattern among individuals, groups and communities dependent upon the environment. Thus, it is necessary for individuals to be aware of their surroundings to appreciate and protect of their setting, rather than praising of other areas. Environmental training is believed that humans can live in consistency with nature. Consequently, man can make a conscious decision regarding future generations which is the goal of environmental education. Environmental abnormality such as many kind of illnesses like cancers are expanding, every day; as global research centers report of transformation and changes that have occurred or are pointing to the nascent (Forsat, 2005). Optimal use of environment in the country can be guaranteed durability; in

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addition lack of attention could cause issues that involve economic, social, cultural, and political development programs. Hence, a proper understanding of role of preventing factors and reducing the amount of them, enhancement of incentive elements can lead to success in environmental protection (Havvey, 1995). It should be noted that in each country education is the basic founding principles of sustainable development there (Lee, 1998). Many experts quoted that rectification of environmental crisis is involved with teachings of reform and change in attitude, insight and knowledge of human to the fate of his beings and their environment. (Huckle, 1993) Awareness of environmental issues and topics commonly evaluated as a prerequisite consideration for protective behaviors (Hungerford & Volk, 1990). Since, education is required for raising awareness, along with increased human activity and its impact, need for comprehensive and widespread training of responsible and sentient people in the environmental matters, is also more intuitive (Palmer, 2003). Target of this tuition, providing environmental perception for individuals, in order to grasps environmental values and tries to protect and support biological processes. By considering importance of the environment in modern societies, education of it becomes an integral and inseparable part of young people`s life in each country (Schlesinger, 2004). Knowledge and acquaintance in the field of environmental crises, effects of the progressive elimination of nature, consequences of human impact on incidence and spread of these problems, there seems to be necessary. Therefore, obligation of environmental education in international conferences as one of the environmental intentions emphasized (Heydari, 1999).

### **GLOBALDEEDS FOR EDUCATION AND ENVIRONMENT**

It is obvious that the world community turned to teaching and learning, to prepare citizens to cope with the continuous degradation of environment. Background of environmental education in the world goes to date 1972 and United Nations Conference on the Human Environment Development in Sweden Holding first conference and approval of manifest of 26 discipline of environment which is focused on education of citizens in all age groups in the field of environmental protection, ecological balance, and promoting scientific research focuses on environmental protection, ecological balance, and promoting scientific research in environmental issues (Fathi, 2003). Training message of 70 decade was insist on an urge. Quality of life and perhaps even the principle of continuity of "human being" on this planet depend on changing man behavior through environmental education. Across the world, especially in recent decades, attention has increased. Twentieth anniversary of the UN Conference on Human Environment coincides Nations Conference on Environment and Development held in Rio de Janeiro in early June 1992. The conference discussions on important issues such as the need to stabilize the climate, biodiversity, terrestrial planet and keep focused. The conference was entitled to all parts of the world are interdependent environmental fate of any country is not able to separate from the fate of the entire world (Brown et.al, 1993).

### **ENVIRONMENTAL EDUCATION IN IRAN**

Although traces of environmental education in the curricula of Iran are evident, it does not exist more than three decades. In the meantime, efforts to bring environmental topics in educational programs were conducted. And courses such as environmental science, geography, chemistry and biology were included. Due to the inconsistency of this issue and the lack of systematic approaches to application of them, yet obtaining an acceptable formal education environment is a long way (Torani et al, 2003) . Today, the environmental education of citizens in different levels is one of the requirements and basic steps to protect the environment and prevent environmental pollution; because the fifth principle of the constitution of the Islamic Republic of Iran is seen environmental protection as a general duty. Implementation of public participation in environmental protection in countries requires notification of the citizens towards the environment and its role in human life, well-being and the need to prevent the destruction and pollution of the environment;

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Educating and informing the community about this important issue and the rights of citizens in the gratification of the natural, safe water and clean air requirement and bases for an active and informed public participation ;also citizens' awareness of their rights and the environment, The rights of others, and even environmental resources, environmental protection. Therefore necessary to fulfill the fifth constitution of the Islamic Republic of Iran as a progressive principle, is educating citizens about the importance of environmental issues in the country. Obviously, education is one of the most appropriate ways to achieve development in various aspects.

The inclusion of basic concepts and in-depth educational materials and advanced education environment makes students from beginning in their social development and formation as future citizens, conscious about environmental protection as a moral responsibility and presence. Unfortunately, only a few course books have been devoted to environmental topics. Another point is the role of women in education; that play a vital role in environmental management and valuing it. International instruments frequently affect women as one group focused on the environment (Ramezani Ghavamabadi, 2009).So their full participation is essential for sustainable development. Women play key role in a family atmosphere; because they can construct basic training in institutionalized children. Unfortunately, in Iran aspects of women's education has been neglected. Women in developing countries are key elements of development in general and particularly in the field of environmental protection (Gururani, 2002) Motivate people to study further about environmental issues by familiarizing them with the principles of environmental impact and role of it in life. Creating the right culture is the most significant subject in a society where people's priorities defined in the field of environmental protection by preparation and publication of scientific papers, posters and informative leaflet for knowledge dissemination and communication of environmental impacts. Public education should be coordinated with the work of individuals. In this context, teachers have an important role in educating the next generation.

### **CONCLUSION AND SOLUTION**

For achieving sustainability in development and preserving natural environment we demand environmental ethics. Moral that identified and responded complex and changing relationships between humans and nature. To emerge of this moral, a review of the educational system and methods is vital. Training and increasing awareness of public can be effective in improvement of environmental impacts. Indiscriminate domestic use of energy, use of variety of disposable products, pesticide, unsanitary methods of waste disposal, improper collection and separation of waste in order to avoid damaging environmental recycling and many others, all need to be turned to the positive environmental behavior (Barrow, 2001) .This change requires various levels of education. In this context, we propose the following guidelines.

Public training: arranging non-formal instruction by organizing session of debates, seminars, exhibition, workshops, nature tours which play significant role in raising general awareness of environmental matters (Hassan,et al, 2009) Knowledge about the rights of present and future generations evokes their sensitivity that leads to increased solidarity and responsibility to create a superior environment. Community participation to protect the environment will be further strengthened. It is considered as one of the necessity of the wise management of the environment in country(Bahraini et al, 2000).

Role of education for children and women: As we know mothers are the first teachers of children; so mothers and women of education and awareness among the first to raise awareness in the community guidelines. Seminars, environmental organizations and women's NGOs and the mass media such as radio and television can assume an important role in raising awareness of women's in the field of Pollution of water, soil and air are (Tor, 2009).

Environmental awareness through formal training: In Iran youth population are a large percentage, education can have a significant impact on promoting culture of environmental and sustainable development goals. Introducing youth with different levels of environmental sciences and the inclusion of environmental issues in the curriculum, can support their morale boost in protection of natural resources

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and increase their sense of responsibility reasonably (Heydari, 2003). Education is one of the comfort factor has played a decisive role in achieving sustainable development. For the sustainable development at all levels of the primary and secondary educational financial terms should be strengthened and streamlined. Training of primary school students has had a significant impact on differences environmental beliefs. In addition to, the teaching methods and course content, environment and society also have a significant influence on the amount and type of environmental beliefs (Kusawan and O'toole, 2006). Investigation for further educational requirements of various academic disciplines in higher education and enriching functional training can be effective in raising and improving awareness of environmental literacy. Various courses` students should become conscious of their characteristic role in protection of environment and reduction of pollution. For instance an architect should be trained environmental approach in sustainable and environmental design; in order to, diminish nature damages and execute of renewable resources. Finally, environmental education commence from the appropriate local situations and forward to the breadth of the issues and opportunities with national, regional and global plots.

### **REFERENCES**

- Ajzen I., 1995**, Attitudes, personality and behavior, Tehran , Translated by NajafiZand, Publication of Dana
- Bahraini S.H., 2000**, The role of environmental NGOs in order to achieve public participation in environmental protection In Iran, Tehran, Journal of Ecology, Number 26
- Bahrame Soltani C., 1992**, Complex Urban Issues and Practices Volume (Environment),Tehran, Center for Urban Studies and Architecture of Iran, First Printing
- Brown L., 1993**, World situation, Tehran, Translated by H Taravati, Publication of Arvin, First Printing
- Barrow C., 2001**, Principles and methods of environmental management, translated by M. Andrody Publication of Congress
- Erfanmanesh Metal., 2000**, Pollution of water, soil, air ,Esfahan, Publication of ardakan
- Fathi M. 2003**, Women's knowledge of the environment for sustainable development, Tehran, Shahid Beheshti University Press, First Printing
- ForsatM., 2005**, Evaluation of environmental education in higher education, Ph.D. dissertation, University of Science & Research, Environmental Management degree, Supervisor's doctor Majid Abbaspour.
- Gururani S., 2002**, Construction of Third World Women's Knowledge In The Development Discourse, Unesco 2002, Published by Blackwell Publishers.
- Havey T, 1995**, An education 21 program: Orienting Environmental Education towards sustainable development and capacity building for Rio – the environmentalist VOL.15.
- Hassan A. 2009**. the adult non-formal Environmental Education (EE):A sennario in sabah, Malaysia, procedia social and Behavioral Sciences
- Heydari O., 1999**, Take the role of education in preserving the environment, Thran, Daily News
- Heydari O., 2003**, Develop practical solutions in environmental education for youth, Tehran, National Conference on Environmental Education Specialist, EPA
- Huckle J., 1983**, Environmental education, in Geographical Education: Reflection and Action, Oxford: Oxford University Press.
- Hungerford H., 1990**, Changing learner's behavior through environmental education, Journal of Environmental Education, 21(3), 8-21.
- Kusawan, Udan, Ruth Rayholds, Mitch O'toole, (2006)**, Paper Presented at the AARE, Annual International Education Research Conference, Adelaide , 27th – 30th November.
- Lee S R., 1998**, A Case Study of New Course development in higher education, University of Georgia.
- Palmer J., 2003**, Environmental Education in the Twenty-first Century, Tehran, Translated by Khorshiddoost, A.M. First Printing,: Samt Publication.

**Review Article**

**Ramezani Ghavamabadi M., 2011.** Participation and role of women in international environmental law, Journal of Social Studies – Psychological women, Year VII Number 3

**Schlesinger W H., 2004,** Environmental education for a sustainable future, Applied Environmental Education & Communication,3(2):1-3.

**Seif, A., 2001,** Educational Psychology, Tehran, Publication of agah

**Tor H., 2009,** Increasing Women’s Environmental Awareness Through Education procedia, social and Behavioral science.

**Torani H. 2003,** Status of environmental education in the formal system of education, Tehran, National Conference on Environmental Education Specialist, EPA