The effect of Education in Creating the Culture of Environment Conservation

1Fateme sadat Nabipour and 2Mitra Farbin

1MA in Cellular and Molecular Biology, Teacher in the field, Tehran, Iran
2MA in Plant Systematic, Teacher in the field, Tehran, Iran

ABSTRACT

Problems relating to the environment and the importance of environmental conservation are a global issue. Culture is the main factor, which acts as the engine for sustainable development and environmental protection. Environmental education aims to develop a deep culture that means training individuals feeling responsibility for the environment and possessing knowledge, attitudes, motivation, commitment and required skills for various activities in order to create a clean and healthy environment and commitment to preserve the environment for future generations. Protection of nature and respect for the environment has a long history in Iran with an ancient culture. Nature, and especially trees and forests have been considerably important in Iranian mythology. In Hakhamaneshian times, preventing the contamination of the four elements of fire, earth, air and water has been considered significant. Conservation and protection of nature and the environment is also recommended in Islam. Iranian Muslims still consider water as Fatima dowry in rural areas, and consider its contamination as a sin. The Holy Prophet has said: Breaking the tree branches is as breaking the wings of angels to me. Allah says in the Quran: "God loves those who repent and loves those who purify themselves", which means cleanliness and purity should be in everything. Primarily, three approaches are discussed for cultural development, including "Law-based approach", "Ethical-based approach" and "Knowledge-based approach". The third, in comparison with other two approaches is more capable and has much more profound impact on society. "Education entity", as one of the most important administrators of education and creation of culture can use such an approach to develop "Environment Conservation Culture". It is noteworthy that to achieve the desired results in order to create the right culture in any aspect and area, the need for communication and interaction between agencies responsible and Education entity appears to be essential, and only in "close reciprocal relation", the suitable grounds for teaching appropriate and desired behaviors in the new culture can be provided among children and adolescents, and therefore, among the society population.

INTRODUCTION

Today's world is the world of development and changing. Given the importance and role of the environment in health and sustainable development of society, using any tool at any time in human history to develop the "culture of environment conservation" may guarantee the human present and future. It is evident that to create such an atmosphere, more than ever, knowledge is "power" and culture is "ability". Thus, the "Sustainable Development and Environment Conservation" would be achieved when natural environment and human culture are linked and move in one direction, and the presence of environmental ethic in every individual in the society can bring vitality and dynamism to the community. The most effective way to do this includes "Culture-making and Localization" of behaviors of all members of society in this regard and institutionalizing the "Environment Conservation Ethics", and this is why ongoing, continuous and research-based training is the only key to create and improve the right culture in every person, organization and community. Education entity is the most effective organization in line with such culture-making in today's world.

Describing the problem:

Problems relating to the environment and the importance of environmental conservation are a global issue, and the environment is exposed to serious threats at national and international levels. People around the
world have come to understand over time that environmental pollution and lack of attention to such issues is a tragedy and wherever in the world occurring will cause damage to the whole earth globe. However, with all this information, inattention to environmental and the resulting degradation and destruction by humans is still a threatening agent (even for the man generation), since the environment is a cultural space in which everything is connected to one another, and some events are happening permanently that imply on the "being" and "dynamics", and thus, the issue is far beyond than a tree, one location, one person and even the society.

The right culture in relation to nature should be able to form the spirit of nature friendship and harmony with nature in human, and change the human attitude to the environment and natural resources and all things around him, create a sense of responsibility in him regarding them. In fact, culture-making is the realizing the importance of some laws in human life.

Environmental education aims to develop a deep culture that means training individuals feeling responsibility for the environment and possessing knowledge, attitudes, motivation, commitment and required skills for various activities in order to create a clean and healthy environment and commitment to preserve the environment for future generations. As a result, the sustainable development requires changes in the foundations. Social justice, preservation of cultural heritage, environment conservation, having a healthy community, meeting the needs and attention to the future generation are among concepts that underpin the sustainable development. Also, given the fact that sustainable development is attention to the man and his needs, the participation of man in all stages of each process is a matter of principle.

Hence, all the "cultural development foundations" should be identified. Also, other factors that can assist a society in creating a developed culture in line with "sustainable development and environmental protection" need to be identified and used.

**The culture influence on the development and protection of environment:**

Culture is considered as the main factor and engine of sustainable development and protection of the environment. According to Taylor, culture includes all customs, arts, sciences, religions and political behaviors which form a set to differentiate a community from other communities. The concept of cultural development was raised for the first time by UNESCO (United Nations Educational, Scientific and Cultural Organization) in the seventeenth century. It is important to know that the cultural development has a greater extent than social, political and economic development so that sociologists believe dynamics in the culture of a society will lead to its development in all aspects and fields.

Looking deeply and accurately into the practices latent in the mission of the prophets, we will see that in fact, the prophets were establishing some sort of "culture" among the people at their time with a great effort and follow-up, which outcomes were beneficial to the people themselves. As such, according to Charles Winick definition, culture includes all artistic, social, ideological and religious patterns that humans use to "control over their environment".

**Iranian population culture during the last century in relation to the environment:**

Protection of nature and respect for the environment has a long history in Iran with having an ancient culture. Nature, and especially trees and forests have been very important in Iranian mythology. Iranians saw the trees as good people that have become trees after the death and believed that one should never cut down an old tree.

In the Avesta, Ahura Mazda says: The nation who cultivate fruit trees and convert the barren lands to farmlands would have happier people. Some trees, such as Platanus, Cypress, Ziziphus and pomegranate have been very popular among Iranians. The Cypress Tree has been known as a Minoo and paradise tree in Persian legends. Even review of literature and literary works of past generations shows the attention of predecessors to non-destruction of nature and preservation and protection of the environment so that Daghighi and Ferdowsi have named a Cypress tree in many poems that the Zoroaster has brought it from Heaven and planted in Kashmir, Khorasan. At Hakhamaneshian times, preventing the contamination four elements of fire, earth, air and water has been considered. A few hundred years before Christ, the first protected area in the world was created when the Xerxes (King Khashayar) after his expedition to Asia Minor committed the regional preservation of cedar forests to his own royal guard.

We all have heard the story of Anoshirvan and the old man who was planting a Walnut tree in the Tree Planting Day. The golden words of Von Hagen from Germany, the Father of Forestry Science, who said "we must harvest as much as it grows annually, and we must give the forest to our posterities at least as what we've got from our predecessors”, was said by the old man to Anoshirvan in 14 centuries ago.

**Others planted and we ate:**

*We should plant so the others can eat:*

The definition of sustainable development is based on this brainstorm Iranian idea. Conservation of nature and environment is also recommended in Islam. The Iranian Muslims still know the water as Fatima dowry in
villages and consider its contaminations as a sin. The Holy Prophet has said: Breaking the tree branches is as breaking the wings of angels to me. For slaughtering animals in Islam, atonement must be paid. Our eighth Imam, the Shia, was guarantor of deer.

Allah says in the Quran: "God loves those who repent and loves those who purify themselves"; which means cleanliness and purity should be in everything; i.e. everywhere should be clean; the land, air, earth, water, etc., all need to be clean so that the community can live in complete comfort and benefit from the blessings of God. If a city is clean, God gives the city a good crop, and bestow on his blessings poured himself: "Good land yields its vegetation by the permission of its Lord, while the corrupted yields only the scanty". But a corrupted and evil city would not have the blessing. The Lord says: "It is he who made you from the earth and let you live upon it." And "who break the covenant of Allah after accepting it and sever what Allah has bidden to be joined and corrupt in the land, these are the losers". Also, "corruption has appeared on land and sea with what the hands of the people earned". And, "do not make mischief in the earth after it has been put right". There are many recommendations in Islam and by its greats regarding preserving the environment, planting trees and developing green spaces and avoiding of squander. "Cleanliness results from faith" is at top of these commands so that the first sign of a Muslim is cleanliness.

Review of the life of Prophet Mohammad clearly demonstrates that he has had the knowledge on all sciences about the nature process and has been aware of all relationship between the organisms in the ecosystem and the nature. He saw the nature with consciousness, as in the Surah Fussilat, verse 53, nature is considered having intelligence and as signs of the divine. According to the lifestyle and biography of our holy prophet, if and only if the life of our precious prophet would be the model for people and officials, destruction of nature and similar events appear to be unlikely.

Education: Fundamental pillar of culture-making:

According to the latest statistics provided by the Center for Statistics and Information Technology and Communications of Ministry of Education, the total "student" population of Iran excluding "the adult students" (students in distance education centers) accounts for 12368793 students, consisting of 5981474 female and 6387319 male students. Estimated by a simple calculation, even with the assumption that all students are in families with a single child, the audiences of education ministry can be known tripled of this number; thus, the students are considered as the direct audiences, while their parents would be the indirect audiences. Therefore, the Education Ministry with direct and indirect education and training can dramatically influence at least half of the nation's population, and any proper planning could be a big step toward creating the culture of environment conservation.

Basically, three approaches have been proposed for the cultural development:

1. "Law-based approach" whereby by regulations and standards, the community is made to do a particular kind of behavior and avoid some other behaviors.
2. Ethics-based approach: In this approach, the man is not influenced by his instinct forces and has a sense of inherent responsibility about various issues.
3. Knowledge-based approach: This approach would support and develop the culture and leads to community empowerment in preserving values, transferring them to the next generations or other communities.

In comparison with the other two approaches, the third has more capability and much more profound impact on the society. "Education Ministry", as one of the most important performers of education and creating culture can use this approach to develop the "environment conservation culture". Education includes providing the requirements and factors of actualizing or flourishing of the individual for his voluntary growth and development toward desired goals and based on evaluated programs.

Describing the importance of education can be demonstrates as God is himself the first teacher; prophets and imams are human beings' teachers, as prophet Muhammad said: "Verily, I am sent to teach you".

Educational system due to covering millions of students (and indirectly their families), and due to the long period of communication with them (twelve years) is considered as the most appropriate educational environment on culture-making. Since, "education" is a process through which the members of a community learn the roles, rules, relationships and in general, the "Culture" of their own community.

It should be noted that to achieve the desired results in the creation of the right culture in every context, there is a need for communication and interaction between agencies responsible for and the Education entity, and only a "reciprocal relation" can provide the proper beds for training desired and appropriate behaviors in the new culture among children and adolescents, and as a result, among the community members.

Culture-making methods in different grades:

Although coordinated individual moral relationship with his/her environment regarding protection of environment and its improvement depends on the childhood and pre-primary habits and educations, however, having knowledge about the environment and development of understanding of processes and internal communications in natural and artificial environments is necessary so that a person actualize his/her values and
attitudes, motivations and commitments towards protection of the society environment, which may lead to doing measures to solve environmental problems and improve the quality of life. In other words, the development of individual knowledge and awareness means that the person shows sensitivity to events and physical, biological, socio-economic and political variables of his/her environment and concerns about the issues resulting from. It also implies that he/she would have an ability to recognize and describe human problems (such as poverty, illiteracy, social injustice and degradation of natural resources) and a sincere desire to resolve them, and acquires skills necessary to devise ways and provide the means needed to solve the environmental problems. Therefore, “Education on Protection of Environment” must be a process in accordance with such objectives, and school is a very center effective for achieving such purposes.

1. Education in primary schools:

Children as well as kids (pre-school) have a clean and ready nature such a white tablet that if accompanied by correct environment educations would be able to grow such trainings like their body parts, which will have a significant impact on their character and temperament. Dissemination of a rich culture among the children of this country's (Iran) would turn the future of our country fruitful and brilliant. We should note, however, the role of parents in early childhood is very important. Thus, the schools can effectively train the students and parents through continuous communication and parent education through School Communities. By game-like trainings in elementary schools, the children can learn methods to protect the environment very well. Holding competitions and research and library studies even in this grade could have significant impacts on learning. Inclusion of environmental problems and issues in the country, including water scarcity, environmental pollution and pollution factors and the importance of natural resources in the country within the textbooks is one of the biggest factors in developing sensitivity and responsibility in children towards the environment.

Prepared monthly journals by regional education offices and schools and using the participation of students in preparing the news and providing information in the field of environment can make them responsible regarding their surrounding environmental issues.

Holding research, scientific and artistic competitions in various fields of environment such as knowing the local nature and natural resources, environment polluting agents and even providing solutions by children to solve the problems can have a significant impact on this grade.

The primary students largely trust their teachers, which is a turning point for investment in training teachers caring for nature and sensitive of the environment. Holding in-service training courses and coaching and educating primary schools teachers can significantly improve the process of protecting the environment and sustainable development, since the teachers sensitive and caring for the environment will therefore provide the necessary knowledge to their students with a correct and efficient method. Using new methods in education, such as cooperative learning, screenplay approach (role-play), group discussion method, innovating or remaking processing, deductive thinking pattern and brain storm method in elementary schools is usually the best way to create good habits and sustainable awareness. Therefore, providing proposals such as "Environment Companion", meaning, selecting the primary students as Environment Guards will make them extremely sensitive to their environment (similar to the companion of the police).

2. Elementary and high school times:

From the age of 12-13, the child gradually enters the adolescence times. Rousseau called this period as the “second birth” due to occurring profound changes. Such a name represents the importance and sensitivity of puberty and adolescence times in the intellectual and sexual growth of the individual. The educational milestone of such tumultuous times is finding and identifying the internal strengths, capabilities and capacities of the individual, which can open the way for finding his/her identity and social role. "Social life and the need to be a part of a larger group” become as introduction to social activities. Day-dreaming, diversity of opinions and interests, willingness to debate and disagree with others are all an introduction to intellectual sophistication and a good opportunity to create enthusiasm and motivation to study and get the teenager to study and learn more in various aspects of his/her environment. We know well that any deep study and research would be able to train as well. When one knows a thing well and truly like it, such an interest will result in the knowledge for him. Transfer of knowledge and culture along with character education has a considerable importance in this period. A large part of educating in adolescence times occurs through working and vocational training provided that according to "Morris Debs", the job and occupation is not reduced to a technical solution, rather it is considered as a principle of life principles, and the cultural activities specific to youth will be based on them. Imam Sadiq (AS) told Abu Jafar Ahavî, who was as companions and missionaries of religion: "Be with the youth and promote them, since they move toward any good faster than others."

The main characteristics of high school students (14 to 17 years) include:

- Development of a large part of special talents following general talents
- Rapid increase in physical stamina and unprecedented strength
- Achieving full development of intelligence and increased learning ability to the maximum level
• Increased acceptance of modeling
• Directed curiosity of the teen
• Achieving sustainable social rules and feel limited to some social and family rules
• Tendency to politics issues and ideology
• Increased morale in valuation of cultural, artistic and scientific issues
• Entering the stage of abstract thinking and extension of intellectual and mental abilities
• Doubts and suspicion in beliefs to remake them

According to the characteristics of students in these ages and according to the new learning theory, which states that learning is a two-way influencing process between the individual and the particular social environment in which he lives (This is called social learning theory), the followers of this theory define the learning factors as the following:

Seeing what happens to other people, with direct experience and finally, with receiving instructions for what he has to do, the learner will learn something. A large part of the education in secondary schools should be based on the "observation, study and research", which is a useful, lasting and effective teaching and can motivate and drive the student into "protecting the environment". Searching spirit and actualizing own assumptions can have quite deep and lasting impacts on the students towards sustainable development and protecting the environment, and the students will be able to implement their knowledge in the real situations.

Suggestions:
1. For operational goal of development of awareness, responsibility and habits in students, one of the most fundamental measures is training the teachers and instructors in kindergartens, elementary schools, junior high and high schools in the fields of basic sciences, geography, geology and literature through formal training courses and private training as two in-service or distance education. Thus, the teachers meanwhile acquiring completed and interdisciplinary knowledge of the environment related to their specialized topics in their field, become familiar with the methodology of the discipline using the guidelines. In this regard, the teachers should consider the environmental issues in the process of their learning and teaching. Addressing these issues, the regional environmental conditions should be considered, since their work can directly or indirectly have an impact on the regional environment.
2. The coordination and consistency of programs and curricula with environmental issues and protecting the environment should be specific to the living region of the students (e.g., urban, rural, commercial- industrial, economic, etc. environment). Such a curriculum can have deep and palpable educational impacts on the students.
3. Holding "festivals and cultural-artistic events" among "students" in order to promote a culture of environment and environmental protection, which can be effective at all levels.
4. Holding the "competitions, festivals and seminars" on environmental culture development for the "teachers" with presenting papers and suggestions for improvement of the conditions and to improve the methods of teaching and creating the environmental culture can provide a suitable ground to increase the awareness of teachers as well as their students.
5. Direct association between the Environmental Protection Agency and Education Organization in order to design continuous projects and planning to develop a culture of environmental protection, such as selecting the "environmental companions" in school from the students (similar to the police companion project) to protect and care for the environment in spring and summer holidays. Also, selection of some students as "guardians of the environment" with activity in schools and educational settings, the sensitivity of students to their environment can be increased.
6. "Environment Teacher" project, similar to the school health teachers, with the responsibility to educate and raise the awareness level of teachers, students and their parents regarding environmental problems and creating sensitivity for environmental protection requirements.
7. Holding short-term in-service training courses to raise the knowledge and awareness of teachers regarding environment crises and creating sensitivity towards the environmental protection.
8. Holding monthly, term or yearly meetings in the Environmental Protection Agency and the affiliated offices and getting knowledge of the activities levels of executives and representatives of the Environmental Protection Agency in the Education organization and evaluation of activities and analyzing the results obtained by the Environmental Protection Agency.

REFERENCES

[1] Study the effect of environmental education on improving the knowledge and attitudes of district 12 elementary school teachers.
[12] Green chemistry, 2004; Deputy of Forest Department of Forestry Organization.