

The Effect of Educating Environmental Ethics on Behavior and Attitude to Environment Protection

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Abstract

Since environmental crises threaten the whole system of nature, changes in moral principles, attitudes and environmental education are very important. What this study highlights, is the impact of environmental attitudes and values on human behavior with nature and it has been endeavored to emphasize on the change in environmental ethics, values and attitudes. Using an analytical approach this study deals with the change in behavior to protect environment by teaching ethics and environmental attitudes and values. The results of the study shows that the value judgments that form the foundation of environmental ethics have direct influence on human relation with environment and giving information on science without paying attention to environmental ethics and attitude has limited influence on environmental behavior. Therefore, in order to change values, attitudes and environmental behavior, it is necessary to pay attention to emotions. Environmental education methods should be seriously reconsidered and the theory of social learning can be a solution for environmental education.

Keywords: environmental education, environmental ethics, environmental behavior, environment, attitude

Introduction

Current environmental crisis can not be compared with any other problem in the world from the beginning of history to the present time. Undoubtedly, the contemporary environmental crisis is the result of incorrect education and practical ignorance of human and it is one of the most serious challenges ahead. (Shah Vali, 2007, 31). However, human behavior practically shows that we're beyond nature and we tend to focus on consumption (Schlesinger, 2004, 76). Achieving environmental goals only through international commitments is impossible because commitment is of innate nature. For proper utilization of environment, human has to enact laws that look at the nature not only to be consumed but to sustain life in the 21st century (Jacobs, 2004, 41). Human must adjust its behavior to stability of nature to maintain environmental values and change its performance by making changes in its intellectual and belief principals. For this, environmental training requires factors that influence voluntary behavior change .Therefore, learning about the determinants of behavior consistent with the nature of the treatment becomes necessary (Jacobs, 2004, 32). The educational institutions, in order to improve the environmental education, need to identify the factors that are influencing the voluntary behavior, thus, research on the determinants of behavior consistent with the natural environment becomes essential.

Environmental Training

What exacerbates environmental crises is the lack of environmental education and training and more serious than it is the lack of attention to correct environmental education and attitudes (Hungerford, et al, 1980, 45). Much of this turmoil refers to the type of the training that forms people's understanding and belief about his surrounding environment so, nowadays, everyone agrees that education is most effective tool and method to deal with future challenges, particularly

environmental challenges and achieving the objectives of this type of training leads to the proper use of resources and guarantees sustainable development (Mirdamadi et al, 2008, 21).

In the last two decades, environmental education has been the largest area that has struggled to be accepted as one of the key elements of the educational process (Simmons, 2010, 17-15). Environmental education includes air and water quality, population growth, natural resources, educated citizens who are aware of the environment and its problems and know how to solve them and are motivated to realize the strategies (Cridle, 2010, 339).

Environmental education is a fundamental part of its conservation and it appeared in response to the crisis caused by human and its purpose is to create a responsible and active citizen equipped with knowledge and willingness to make changes in the educational, social and environmental situations (Daskolia and Agelidou, 2006, the. 126). The goal of environmental education is creating awareness, knowledge, attitudes, skills and citizen participation as well as creating susceptibility in people about disasters and environmental changes and its impact on the environment so that they have the power to identify and analyze environmental problems and can invent methods to solve the problems (MirDamadi, Ismail, Bagheri, 2008, 22).

In this regard, Chen believes the goal of environmental education is to promote environmental literacy among the future citizens (Chen, 1997, 236-234). Hunkeh and his colleague (2001) argue that the best way to reduce environmental problems is educating people. The existence of citizens who are aware of the links between environment quality and life is among the essential factors for environment sustainability and increasing public awareness and interest in understanding the problems is the first step of this process is to encourage participation (Mir Damadi, Ismail, Bagheri, 2008). Formal system of education, in this area, can play a decisive role (Monroe et al, 2007). Schools are the first organized training contexts within society. Moharamnejad and Haideri (2006) investigate the potential of various institutions in the field of environmental education and they have introduced Education Department as an organization that can play a decisive role in the field of environmental education. Educational institutions change attitudes and create a favorable environment for the implementation of environmental legislation by creating awareness in students towards environmental issues.

They train students who have environmental conscience and respect for the environment have become a culture and habit in them and it makes them capable of establishing a balance between meeting their needs from nature and taking care of it (Taghyeh, 2011). Human behavior is guided by his ideas, so what people do in their habitats depends on how they think about their environment and this originates from environmental education and training (Abedi Sarvestani, 2008, 56-57). Research shows that a sense of responsibility created in childhood is an important factor in guiding social and environmental behavior in adulthood. Thus, paying attention to environmental education through the content, materials and textbooks are among the basic and fundamental needs that appear in childhood as responsible behavior toward the environment (Ghazavi, Lyaghatdar, Ahmadi, 2008). Today, schools should give students a wide range of environmental knowledge and improve their understanding on the most effective ways to treat the environment (Schlesinger, 2004, 76). Environmental education in schools is limited and scattered. It does not have a principled and coherent approach and it is not helpful and useful. Research conducted in this field in the country has demonstrated it. Carryin out a research in this area, Salehi Omran and Agha Mohammadi (2008) showed that men's environmental knowledge is more than women's environmental knowlege but women's environmetal attitude is more than men's environmental attitude. However, there is no significant different between the two groups regarding environmental skills . Conducting a research titled "the study of elements of nature in Farsi, a textbook of grade 2 at elementary school" Amal Saleh and his colleagues (20100) showed that elements of nature in children's Farsi textbook are

weak regarding grammar and lexicon. Heaven is paid too much attention and ground elements particularly land and water and its critical role are not paid enough attention. In general, no purposeful effort has been made to make culture and spread newer attitudes to build an efficient relationship between nature and human (Amal Saleh et al, 2010). Carrying out a research titled "the study of the curriculum for secondary school with emphasis on environmental education", Taghyeh and his colleague (2011) showed that secondary school textbooks are not in a desirable condition in terms of insight and environmental skills and are not consistent with the objectives of education system. This education is taught by a wide variety of teaching methods.

It provides teachers and environmental planners with specific definitions, instructions and environmental goals and standards and contributes to their effective implementation (Moener et al 2007). This kind of education looks at educating active people who are aware of their environment and feel responsible for protecting it and for this end, it pays attention to different aspects of environment including biological, social, economic and cultural aspects and its relationship with human (Moharam Nezhad and Heidri, 2006,71). Environmental education that is concerned with values, behaviors, attitudes, activities and positive actions reflects ethical element and this element together with empirical, aesthetic, cognitive elements and understanding the complicated nature of environment form one of the main elements of any curriculum for environment and it is stressed that learners must get familiar with their commitment and responsibility for environment (Abedi Sarvestani. SHah Vali, 2009, 125). The goal is to increase every person's environmental knowledge so that the person understands the values of the environment and tries to protect it (Dibaee and Lahijanian, 2009, 178). In order to make the education more effective, environmental education must be formally included in schools curriculum. However, environmental educational plans do not involve knowledge, skill and attitude. The Tbilisi Declaration (1977) Environmental literacy levels are expressed in terms of these goals:

1. Awareness: helping students be aware of environment and its problems, developing ability to understand it and using this ability in different contexts.
2. Knowledge: Helping students gain essential awareness about how to interact with the environment. How environmental challenges are created and how we can solve them.
3. Attitude: Helping students gain a set of values and feelings associated with environment and be motivated to protect and improve them.
4. Skill: helping students achieve skills required for identifying, analyzing and participating in solving environmental problems.
- 5-participation: helping students gain experience in using the acquired knowledge and skills to do scholarly and positive act for solving environmental problems (Ramsi, 1992, 37).

The current approaches in environmental education are complicated and they are applied to varying resources of time, space, curriculum, student's qualifications and a wide variety of other factors that can affect any form of applied education (Winther et al, 2010). Increasing public information and interest in identifying the problems is the first step in the process of attracting participation for protecting environment (MirDamadi, Esmaili, Baghri, 2008). UNESCO has announced environmental education in its broadest meaning, awareness growth, acquiring new attitudes, values, outlooks, skills and behavior in terms of formal and informal processes to obtain a stable environment therefore, environmental education must be based on identifying concepts, skills and attitudes that reflect cognitive growth, useful skills for lifetime learning and correct decisions mixed with feelings, attitudes and values and cultural beliefs of people (UNESCO, 2000). To achieve environmental objectives, it is necessary to review education systems and use new environmental educational methods through education and mass media. In addition, this needs to build relationship between students, teachers, schools, educational systems and society (Abedi Sarvestani, Shah Vali, 2009, 128). Since learners, in addition to acquiring knowledge, need to acquire environmental knowledge and literacy in terms of environmental practical ethics, acquaintance with cultural

concepts and values of environment, change in value and attitude about it, participation in protecting the environment, becoming a committed and responsible citizen teaching how to correctly use the resources, following a lifestyle compatible with the environment, correct decision-making to solve environment problems and preventing new problems to happen, sensitivity to different events and decisions that affect the environment, acquiring the power to make judgment and analyze environment problems and inventing new methods to solve the problems (Soleiman Pour Omran, 2013).

In philology, ethics is the plural form of ethic meaning moods (Farhood, 2007). Environmental ethics, in its broadest meaning, is studying the relationship between human and its environment; this is a relation of a creature that obeys ethical roles and goodness and badness are important to him (Mohammad Ashnaee et al, 2008). Environmental ethics is a branch of applied philosophy that is concerned with values, beliefs and attitudes. It seeks to offer ethical and principal solutions by interconnecting different kinds of science. It deals with global preoccupations such as human relation with environment, human responsibility for protecting the resources. Rapid changes in societies concerning technology and economy have raised new issues related to human interaction with environment that question philosophy and ethics (Abedi Sarvestani and Shah Mansour, 2008). Environmental ethics questions human-centered paradigm prevailing the modern ethics and it, practically, criticizes materialism and consumerism and in return, it proposes a green lifestyle compatible with nature. Since human is the only creature that is able to behave against nature laws and regulations due to its freedom of action. Hence,

Having ethical skills and paying attention to environmental ethics is considered as a part of certainty strategy and improving human standard of living (Abedi Sarvestani and Shah Mansour, 2008). Like Piaget, Kohlberg believe that the stages of ethical growth are determined based on mental and cognitive abilities. He thinks ethical growth develops naturally in people and their ethic's judgment power covers different stages and environment and other educational factors play an important role in making its potential become apparent. These stages include ethical levels of preagreement, agreement and postagreement. At the third level, ethical growth and ethical criteria and standards become internal and they are not controlled by society. Ethics, at this level, is based on global and universal principals and it is beyond social agreements and if violated, the person feels guilty (Karami Nouri and Moradi, 1993) since environmental problems are essentially normative, therefore, raising normative issues like environmental ethics can play a critical role in environmental thoughts and people's behavior and action when interacting with environment. Environmental ethics changes human role as the conquerer of earth to the protector of earth. This role requires us to respect and love the earth and not just consume it and then throw it away. Ethics considers the dwellers of the earth as the servers of nature and assigns responsibility to them in protecting it. When people have proper environmental ethics, this is an internal guarantee for appropriate behavior with other creatures and preventing them from damaging it. Therefore, environmental ethics greatly emphasizes on teaching environmental ethics and educating good-tempered people (Abedi Sarvestani and Shah Mansour, 2008). Although these problems originate from epistemology and world view, they are less discussed in order to be able to obviate these crises by religious and ethical education (Jacobs, 2004). In this context, social reconstruction perspective encourages schools to be at the forefront of social change. The first step is formulating policies based on ethical and thoughtful action that is a mixture of value foundations and logic. Values are competing with each other. Only, logic and commitment to value foundations can direct thoughtful and ethical processes toward achieving legal ethical goals. (Moharam Nezhad and Heidari, 2006). Like environmental ethics, practical ethics has close relationship with cultural concepts and values (Abedi Sarvestani, and Shah Vali, 2008). Furthermore, when science is conveyed to learners, simultaneously, ethic and

value don not convey to them, it can face them with ethical and faithful challenges, particularly, in today's cultural context that lacks ethical and cultural engineering and this situation, without cognitive foundations, turns ethics into a formal and legal issue that creates disasters when it feels a kind of supervising vacancy. As a result, laying foundation for ethics and cognitive beliefs must be considered as interdependent and they should be taken into consideration from the beginning of science and technology (Pour abasi and Tavakoli, 2010). Environmental ethics can be divided into two parts: 1-Natural ethics: based on this ethical philosophy, all live creatures have the right to live, and human, with regard to essence, is not superior to other creatures. Nature is intrinsically original and generalizes all the human commitments to all other creatures. 2- Human ethics: human ethics involve future generations benefit from natural and environmental resources and commitment and responsibility for future generation (Tohidi Nia, 2008, 169).

Environmental Attitudes and Values

Human behavior is influenced by the person's beliefs, values and attitudes (Abedi Sarvestani and Shahvali, 2009, 125). Attitude can be defined as brief evaluation of everything based on cognitive, emotional and behavioral information (32)." Attitude is combination of cognitions, feelings and readiness to do something (Karimi, 2010). Freedman and his colleague describe attitude as a durable system that includes three elements of cognition, feeling and willingness and readiness to do something (Huskinson & Haddock, 2004, 63). If an individual is going to change some of his behavior, he needs to change his attitude (Kajbaf, Sheikh Darani and Abedi; 2009, 102). According to the the above-said definitions, most social psychologists divide attitude into three main dimensions or elements:

1. Cognitive Element: it includes a person's beliefs about an object, thought or situation. 2- Feeling and Emotion 3-willingness to do something (Bayat, 2010, 13). Attitudes are the results of factors such as personal experience, education, information and personality type. If education and information cannot fully change beliefs and attitudes, the most important reason is suitable environment that prevents attitude changes, therefore, attitude change needs a lot of effort (Parsa, 2004, 264-265). The aim of creating environmental attitude is to help people gain a set of values and feelings related to environment and to create motivation to improve and support it. Meanwhile, people must be asked to pay attention to environmental issues and respect the environment (Huskinson & Haddock, 1980, 44, 45). The outcome of change in attitude is change in adjustment type, symbols, and values of a person. Therefore, it is the source of all of our individual and social behaviors. Paying attention to environmental attitude and value reflects the importance of software aspect beside technical and hardware aspect that is environmental knowledge (Kupchella & Hyland, 1977, 16). When people accept some stimuli, they process it and convert it into attitude that affects our feeling and recognition and then is displayed as behavior:

Stimulus ← Perception ← Attitude ← Behavior

Tampson and Berton (1994) showed that have environmental attitude, environment protection behavior is seen in them but in the second group, more negligence to environmental issues can be seen. The question is: why do not people show environmental behavior in spite of increasing environmental awareness? One of the answers is that this is costly for them. In addition to knowledge, environmental variables and religious qualifications influence it. Therefore, there is a positive relationship between human-oriented attitude and negligence. Those who give priority to human well-being in comparison with people who have environment-oriented attitude, show more negligence to environmental issues. Hence, people's environmental attitude and knowledge on

protecting environment is decisive (Ferdousi, 2007, 261-263). Carrying out a research, Dibae and Lahijanian (2009) showed that regarding that creating insight is the goal of every text and content and acquiring knowledge must lead to creating insight, but, in practice, it does not happen. Man's valuation type for nature and value criteria is influential in determining correctness or incorrectness of behavior to nature and these issues are associated with attitudes and norms. Therefore, special attitudes are associated with special behaviors (Abedi Sarvestani, Shah Vali, 125, 2009). On the other hand, environmental attitudes depend on different sources of information and one of sources of environmental attitude is information and awareness as the necessary prerequisite for attitude. In this regard, Ayzen (2000) says if people are not convinced that certain factors play a role in destroying environment, they do not have a negative attitude to it. Hence, human knowledge about environment, affects his attitude (Shirkavand, 2010, 38). The development of attitudes and values can not be based on low level plans. In this regard, an educational and one-dimensional view of environmental issues is not enough. We must benefit from a systematic attitude. We must also benefit from objective indexes of motivations of internal ethics that stem from our unconscious (Mohammadi Asl, 2009). Alongside education and knowledge transfer, we must strive to change environmental attitudes and values.

Emotion Level in Environmental Education

According to Benjamin Bloom classification, cognitive learning includes six levels of knowledge, understanding, applying, analyzing, combining, evaluating and judgment (Shabani, 2007, 146). Although environmental educations deal with low levels of cognition, creating cognition and recognition in comparison with fostering emotions and forming desired attitudes is easier and it is possible by patterns of public education but this is not easily possible for emotions. Emotions include behaviors that are associated with interests, feelings, values and ethics. Emotional nurturing refers to a kind of learning that lead to individual-social development and feelings, excitements and ethic's growth that are often neglected in the curriculum (Hossein Zadeh, 2009, 5). It is composed of five categories that include receiving, reacting, evaluating, organizing and manifesting (Shyrkavand, 2010, 60-61) so that at the highest level, the person gains a system of values that control his behavior for a long time and finally create a kind of personality for him (Sureda and Kalvo, 2001, 289). Although, ordinary educations at schools are not able to create this level of emotions, parents, society, mass media and other institution's cooperation can facilitate this trend (Ferdousi, 2007, 256). It is also confirmed that for the internalization of environmental values and attitudes, different levels should be covered.

Social Learning Theory and Environment Education

In nature, environment is an interdisciplinary perspective. Therefore, it must be studied in terms of philosophy, history, psychology, sociology, economy, technology, policy, ethics, aesthetics and spirituality (Soleiman Pour Omran, 2013). Environmental psychology is a branch of social psychology. It attributes environmental problems to human behavior and it considers individual knowledge about environmental problems as the most important variable for predicting human behavior (Ferdousi, 2007, 256). In this regard, Bandura, in theory of determinism, believes in reciprocal determinism. Both external environmental factors and internal cognitive factors control human behavior. From this perspective, psychological applications are explained based on a bilateral interaction between individual and decisive environmental environmental factors. Therefore, person, environment and person's behavior influence each other (Seif, 2000, 281). (Figure 1)

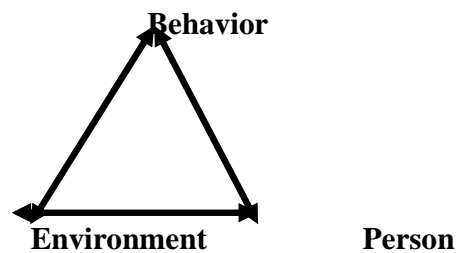


Figure 1. Reciprocal determinism person (p), (E) Environment and (B) behavior's reciprocal influence on each other (Seif, 2002, 281)

Bandura's theory emphasizes on the importance of observing and imitating from other's behaviors, attitudes, reactions and emotional reactions (Rafee, 2003, 53). Observing learning is composed of four stages: Noticing, memorizing, recreating, and motivating or reinforcing stages (Seif, 2000, 285). Advocates of social learning theory believe that ethical behaviors and values, like other human behaviors, are influenced by observing learning. Based on principles of learning, reward, punishment, example and model form. It, also, associates ethical behavior with situation and attributes it to a stable description or qualification or a special stage of growth (Rafee, 2003, 54). According to Bandura, environment reinforces modeling in several ways: the observer is reinforced by a third person or model or the results of the modeled behavior influence the behavior of the observer vicariously (Seif, 1995, 285). According to this theory, people learn from each other by concepts like observing behavior, imitation and modeling. Among these, observation, modeling, and imitation are considered as the main forces in developing behavior and environment, behavior and cognition reciprocally influence each other. Based on this model, learning and education are processes that children and teenagers develop actively in interacting with family, peers in school and society using cognitive processes and social skills (Bayat, 2010, 14-14). Hence, based on social cognitive learning, learning can be explained by observing and modeling by a person from environment that affect his environmental behavior (Seif; 2000, 281). Desired environmental behavior is a function of environmental responsibility that results from interaction among different factors. (Figure 4) Beerhuve (2001) believes that environmental problems are in fact the unfavorable environmental behavior of people that are created due to weak environmental responsibility in childhood. And, environmental ethics as a part of social ethics plays an important role in forming social capital (Ghazavi; Lyaghatdar and Ahmadi; 2008, 131).

Conclusion

Regarding the importance of human as the goal of development, on one hand, and environment as the bed for human activities, on the other hand, having healthy environment is of prime importance as a subject for discussion and the role of environmental education as the most important instrument for realizing human development received attention. In other words, 1-traditional curriculum and methods of teaching are not able to meet today's environmental needs 2-in addition to learning knowledge, students need to gain environmental literacy, practical environmental ethics, acquaintance with environmental cultural concepts and values, change in attitude and value to it, participation in protecting their own environment, becoming a committed and responsible citizen, training correct use of resources, following a lifestyle compatible with environment, correct decision-making for solving environment problems and preventing new problems to happen, sensitivity to different events and decisions that affect environment, acquiring the power to realize and analyze environmental issues and innovating new methods to solve its

problems 3-environmental education must revolve around knowledge, skill and attitude 4-using mass media facilitates environmental education.

From one dimension, dealing with environmental issues is not complete. Paying attention to theoretical and applied content of plans at the same time provides the setting for developing environmental knowledge and insight. Effective environmental learning depends on developing experiences in the three realms of cognition, attitude and skill. In this regard, those learnings that do not derive from our deepest ethical values and spirituality can not succeed in creating a certain future. Laws, by themselves, can not guarantee environment protection and human selfish attitude must change. Therefore, the most important condition for it is improving the culture in order to build balance among people, environment and education. In this regard, we suggest the following issues:

- Explaining correct environmental behavior and ethics
- Revising methods of educating environment,
- Considering the status of teaching environment at schools and materials of the textbooks about environmental knowledge,
- Paying attention to extra-curricular activities on environment,
- Environment Organization participation in educational programs
- Changing the content of textbooks on environment,
- Adjusting environmental issues to environmental needs and problems,
- Interacting with environment experts in writing textbooks
- Making environmental issues attractive for students with focusing on changing their insights,
- Paying attention to the effects of environmental education on student's behavior,
- Using other country's patterns and models in environmental education

In general, environment must be taught as a unified set without ethical, cultural and physical boundaries and this education must become a process in all stages of life.

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