

## Environmental Education as a Tool for Increasing Environmental Awareness of Vocational School Students

Abdullah Karatas<sup>1</sup> and Orhan Atakan Gürbüz<sup>2</sup>

<sup>1</sup>*Nigde University, Vocational School of Social Sciences, 51100 Nigde, Turkey  
E-mail: abduhkaratas3@gmail.com*

<sup>2</sup>*Nigde University, Vocational School of Social Sciences, 51100 Nigde, Turkey  
E-mail: atakan867@hotmail.com*

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**ABSTRACT** Vocational schools have very important function in the society such as the training of qualified manpower that is needed for the various professional fields, and they also make major contributions to their environment in terms of, socio-cultural and economic development. If vocational school students are trained to be environmentally friendly, they will be able to support the development of a healthier and safer environment because they will be employed at different stages of the business world in the future. The environmental awareness of vocational school students can be increased by environmental education and thus, after their graduation, they can be more environmentally friendly in their profession. Environmental problems can be permanently solved by such measures. In this theoretical study, the importance of environmental education in increasing the environmental awareness of vocational school students will be emphasized.

### INTRODUCTION

The education of vocational school students as intermediate members that have higher capacities to meet the needs of both industrial as well as services is able to contribute to the socio-economic development of any society. However, socio-economic development must be achieved without neglecting the protection and development of nature. Protection of the natural environment is a critical part of economic development and society (Ingram 2015). Environmental destruction threatens the continued existence of human beings (Watras 2015: 8). It can be stated that the main reason behind the environmental issues and environmental pollution is the destruction of nature for more savings and profits. However, the carrying capacity of nature has eventually come to the point of exhaustion, while the negative impact has threatened the future of all living things, so the best way to help the environment is to start with the individuals (Parker 2015). Young people become more aware

by learning about the environmental dangers facing the planet, such as environmental degradation and by becoming more conscious of their roles in the face of such threats (Yalmanci 2015: 385). According to Gündüz et al. (2015), no doubt, the most efficient and appropriate method for raising environmental awareness is through environmental education. While educating students for regional development and workforce, vocational schools have to perform their duties in best ways. Environmental education will guide vocational schools in this particular subject. Vocational school students with proper environmental education and environmental consciousness which shows how human factors have caused environmental problems and explains the reasons of realistic global environmental problems, would advocate environmental values in their professions in harmony with the social structure.

### Objectives

This paper aims to demonstrate the importance of environmental education in increasing environmental awareness of vocational school students.

### METHODOLOGY

The paper was carried out based on literature review. It makes a modest contribution to the literature by analyzing environmental education

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*Address for correspondence:*

Dr. Abdullah Karatas

Assistant Professor

NigdeUniversity

Vocational School of Social Sciences (51100)

Nigde,Turkey

Telephone: +90 (388) 2112876

E-mail: abduhkaratas3@gmail.com

for vocational school students. Vocational schools provide a qualified workforce to society, so they have major duties and responsibilities in this context. If vocational school students are taught on environmental awareness, these students will make an important contribution to the prevention of future environmental problems, so the paper suggests the environmental education as a tool for increasing environmental awareness of vocational school students. In accomplishing this paper, library data, many documented sources and different articles written by different scholars have been used.

### CONCEPT OF ENVIRONMENT

For living things, the environment which they are bound to live, represents a huge sense. Humans as one of the living things obtain their nutrients and vital needs from their environment and also, appear to be a significant threat. Whereas, humans are part of the environment and in order for them to survive they need the environment like other organisms.

Environment, with respect to living organisms, can be defined as an ambience that organisms live in, connected with vital bonds, and affect or can be affected in various ways (Yildiz et al. 2008:14). Environment is the totality of all factors that affects the live of society and organisms (Çepel 1996: 41). The environment can be classified according to qualitative attributes as physical environment and social environment. Physical environment can be defined as an ambience that humans live in and are aware of its physical attributes and presence. Physical environment can be divided as natural environment and artificial environment. Natural environment is an environment that humans find pre-made which means they are not contributing to its formation. Its components are divided into two groups, namely, biotic and abiotic assets. Artificial environment can be identified as the environment that is created by humans from the natural environment with the utilization of surface and underground resources with the harmony of the accumulation of knowledge and culture. The distinctive feature of artificial environment is modified by human hand. The relationships originated from system flowcharts of economic, social, and politic interactions of humans live in a physical environment (Keles et al. 2009: 53-55). Humans live in the social environment, and have been chang-

ing it for their own benefits with impulses of ambition to dominate and pride for a long time (Çepel 1992: 32) At the expense of increasing the circulation of products and services, the destruction of the environment value is indefensible. Briefly, the right to use does not authorize destruction (Keles et al. 2009: 229). First, there is the need to change people's point of view towards the environment and to direct people towards more environmentally friendly behaviours. Environmental education will guide further studies.

### ENVIRONMENTAL EDUCATION IN TERMS OF CONTENT AND SCOPE

Today, environmental problems are growing and threatens the future of organisms at global levels. Despite strict laws and deterrent penalties, only provisional measures are taken, while, a radical innovation cannot be implemented. Without changing the attitudes and perspectives of people towards environment, it is impossible to achieve desired results. At this point, education can be identified as the key concept. Because, human behaviours and perspectives can only be altered to desired acts, by proper education. With the advent of environmental education, future generations won't be part of the causes of new environmental conflicts but, they could find solutions of them. The options about environmental education and treaties for the solutions of environmental problems are emphasized in international conferences and for many years environmental education gains strength from various activities globally. In this regard, the UN's (United Nations) efforts cannot be ignored.

At international level, it can be said that the first foundation that have a comprehensive approach to environmental issues is the UN. In June 5, 1972, the UN organized its first meeting named "Human's Environment" in Stockholm and the date is celebrated as "World Environmental Day" every 5<sup>th</sup> of June annually. In 1975, based on Stockholm Conference, addition to United Nations Environmental Programme (UNEP), International Environmental Education Programme (IEEP) was started. In 1977, at an environmental education conference in Tbilisi, it was pointed out the importance of international cooperation and it was accepted to enlarge the initiatives that originated from UNESCO and UNEP for covering the whole international society. The manifesto and resolution of Tbilisi Conference was

the turning point for environmental education so it can be implemented into the processes of education systems. In these documents, the quality, purposes, pedagogic basics, and wide frame of environmental education were determined (Gönençil 2009). According to the declaration of Tbilisi Inter-governmental Conference on Environmental Education which was declared in 1978, the objectives of environmental education are; to help social groups and individuals acquire an awareness and sensitivity to the total environment and its allied problems; to help social groups and individuals gain a variety of experiences in, and acquire a basic understanding of, the environment and its associated problems; to help social groups and individuals acquire a set of values and feelings of concern for the environment and motivation for actively participating in environmental improvement and protection; to help social groups and individuals acquire skills for identifying and solving environmental problems; to provide social groups and individuals with an opportunity to be actively involved at all levels in working toward resolution of environmental problems (Hungerford and Volk 1990: 8-9).

Environmental education is a new approach that teaches people the relationship between them and their environment and how environment affects is the main subject of the education. Environmental education exhibits interdisciplinary approach for the world issues of social, economic, cultural, scientific, and so on. Environmental education intends to educate individuals that are motivated and conscious about environmental issues (Tunçer 2009). The foundation of environmental education is aimed at protecting nature and natural resources, besides giving information on environmental issues, environmental education also affects human behaviour. The main goals of environmental education can be defined as to bring positive and permanent behavioural changes and to bring active attendance of individuals to problem solving activities (Simsekli 2004: 84). Environmental education as an interdisciplinary life time approach aims to educate a new world generation that have knowledge, skills, attitudes, and motives with individual and social duties and responsibilities; in order to eliminate the present environmental issues and to prevent the formation of new ones (Denis and Genç 2010: 9). Environmental education can also be defined as developing an environmental consciousness for each

level of the society, in order to bring environmentally sensitive, permanent and positive behavioural changes and active involvement in environmental activities, and to protect natural, historical, socio-aesthetic and cultural values (Türkiye Çevre Atlası 2004: 452).

Environmental education as designed by many countries is for pre-school level children and for students that are below 6 years old, with the aim of introducing the consciousness of nature and the environment to them at an early age. This type of education can be programmed and identified by the contributions of individuals from different disciplines such as psychoanalysts, psychologists, biologists, and sociologist. On the other hand, within the concept of environment-human relationships, it is possible to do academic research at university levels. University students are potential leaders of the society and decision makers therefore, it is important to bring environmental education and environmental consciousness to those students. As a founder of an innovative society, an individual, must be trained as a production force and must be equipped with sufficient production information for improvement of a society that is parallel with the product. Also, an individual, as a person in a new society, must be educated and ready to join in decision making sequence as a potential leader and theorem, practice and scientific information and new ideas must be integrated during her/his education. However, this kind of education can be possible after certain reform in the university education. Parallel to such an objective, environmental lectures within the environmental education must be taught within the social science and science facilities. Nevertheless, a sustainable environmental education with proper education instruments is more likely possible to be taught as a part of a science lesson (Tunçer 2009).

With the rapid acceleration of environmental problems, environmental education is becoming more significant. It is aimed to educate individuals that are aware of environmental problems, have responsibilities and are ready to make efforts towards solving environmental issues (Gökçe 2009: 251). The aims of environmental education are; to improve the consequence of the connection among economic, social, ecological and politic events; to provide opportunities for education of individuals that are able to gain knowledge; value judgments, responsibilities for

protection and development of environment; to create a new behaviour for an individual and the whole society. The purpose of environmental education is; to acquire awareness on the sensitivity of environmental issues for an individual and whole society; to acquire basic knowledge and experience of environmental issues for an individual and the whole society; to acquire value judgments and responsibilities that bring about the request for active involvement in protecting environment for an individual and the whole society; to acquire skills for identifying and solving environmental issues for an individual and the whole society; to acquire opportunity for involving in the solution sequences of environmental problems from different community levels (Gönençgil 2009).

According to these aims and purposes, among other environmental education activities, there are three different approaches. These are education about the environment, education from the environment and education for the environment. Education about the environment covers and teaches students information, concept and events of environment. In education from the environment, environment is used as an educational instrument. Education for the environment handles a conservator education that protects nature and natural resources. In this context, education for the environment can be interpreted as a reaction which is originated from environmental crisis (Hassard 2009). This type of education advocates an understanding that focuses especially on the socio-political and economic reasons of environmental education (Grey 2002: 294).

Environmental education is not limited with environmental concepts with the education for environment framework. Environmental education must show how the environment is affected by human-environment interactions and must show the main reasons of environmental issues for raising the awareness and consciousness of students. With the framework of education from the environment, opportunities must be created for the integration of students with nature.

#### **EFFECTS OF ENVIRONMENTAL EDUCATION ON ENVIRONMENTAL AWARENESS**

Extinction of species, increase in population, decrease in natural resources, decrease in drinking

water reserves and energy issues bring about a significant ecological and environmental crisis to humanity (Türkmen 2010: 155-156). Today, environmental problems have a large place in global agenda and with their popularity, it can be said that people are arguing more about the environmental awareness and origins of the environmental issues. With the understanding of the importance of environmental awareness and consciousness for the elimination environmental issues, there is an obvious increase in the role of environmental education in the concept of sustainability. The focus of the program of environmental education can be defined as increasing the knowledge of environmental concepts and changing behaviours for a more positive attitude towards the environment (Oguz et al. 2011: 34). Environmental education is given to individuals to perceive their natural environment, and to develop their environmental values and behaviours in a positive way. The main objective is to increase sensitivity and environmental awareness for protecting natural environment (Kahyaoglu 2009: 29). When children are first educated with the help of communication tools, everything will be better after few generations. With the education of adults, nature consciousness can be increased and appropriate policies can be produced. Our future security and the continuation of the human species can be provided only by such precautions, by giving environmental awareness (Alpagut 1997: 118-119). Environmental awareness requires a sensitivity about social, historical, natural environment, non-governmental organizations for the solution of environmental problems, participation, individual's understanding for the importance of wildlife and natural resources for human life, dealing with the events about historical, social and natural environment, keeping the costs down in all consuming activities (Öztek 2006).

Environmental awareness requires the consciousness to prevent damage to the environment and to understand the importance of sustainable use of nature (Yücel et al. 2006: 218). Environmental awareness consists of thoughts including decisions, principles, reviews about the environment; environmental behaviours and various emotions about all of them (Türküm 1998: 172). Environmental awareness can be shortly defined as 'knowing of the impact of human behaviour on the environment' (Kollmuss and Agyeman 2002: 253). As many scientists highlight,

environmental knowledge, attitudes towards the environment and eco-friendly behaviours are intended with environmental awareness. These can be briefly explained in the following way. Environmental knowledge includes environmental problems, their solutions, developments in ecological areas and nature. Attitudes towards the environment cover fear, anger, restlessness, and values arising from environmental problems and all the positive or negative thoughts and manners towards the environment. Eco-friendly behaviours are the behaviours which are shown to protect the environment. Such behaviours are located in the literature as eco-friendly or environmentally beneficial behaviours (Erten 2004).

To know and understand that people encounter great difficulties in case of the deterioration of the natural and built environment, all kinds of educational opportunities should be given to them for increasing their level of knowledge and environmental awareness. Effective and comprehensive environmental education which can fundamentally change people's social behaviours is the most important requirement for achieving environmental awareness (Yildiz et al. 2008: 225). As in all educational levels, giving environmental awareness to vocational school students is of great importance for the prevention of environmental problems.

#### **IMPORTANCE OF ENVIRONMENTAL EDUCATION FOR VOCATIONAL SCHOOL STUDENTS**

Vocational schools are of great importance and are saddled with great responsibilities in the development of a country. Vocational schools, having an important role in the development of a country provide benefits such as; the promotion of quality of life in the area where they are installed, the increase in cultural activities, and an increase in the rate of participation in education (Yücebas et al. 2013: 45). Vocational school is an institution of higher education carrying out four semester education aimed at training manpower in specific areas (The Council of Higher Education 2000). As a result of understanding the importance of training of professional staff vocational schools were first opened by the Ministry of Education in 1973 (Davras and Bulgan 2012: 2229). Giving priority to these schools in order to meet the manpower needs of the Turkish economy

is one of the main objectives of the 1981 higher education regulations. This was a new era for vocational schools (Kavak 1992: 99).

Vocational schools are in very close relationship with the community (local environment) that they serve (Kavak 1992: 96) because they can meet the need for qualified employees for the community in the best way and with these features they make a valuable contribution to the socio-economic development of their region. However, to ensure the sustainability of such a contribution in the true sense, it is not enough to equip vocational school students just with professional knowledge. As well as the professional aspects they should also be informed and educated environmentally because development cannot be achieved with a view that sees the nature as only a tool for human purposes. Industrial and economic success can be achieved with healthy environmental conditions. The need for industrial raw materials are ultimately met by nature. Also, just like all other living things, people need nature to live. When considering students that will be employed in the service sector in a variety of professions in the future, environmental education given to them is emerging as an important tool in protecting the environment. The environmental education they have received will be able to guide them in protecting environmental values when they perform their professions. They will play a key role in solving environmental problems as highly environmentally conscious professionals who aim to protect the environment, instead of harming it. However, the quality of the environmental education that can increase environmental awareness is of great importance at this point.

An environmental education that can increase environmental awareness of vocational school students can be applied for within the framework of three different approaches. These approaches are education for environmental management and control, education for environmental awareness, education for sustainability. In education for environmental management and control, environmental education enables students to learn and perceive the physical-human systems and the interaction between these systems. In education for environmental awareness, environmental education enables students to acquire a variety of skills and allow them to experience nature through field trips and outdoor activities. In education for sustainability, environmental education is structured on the previous

two approaches which encourage the students to be responsible for their own behaviour and give them the understanding of environmental ethics (Demirkaya 2006: 210).

Environmental education activities carried out within the framework of the above-mentioned approaches for all departments in every academic year can provide environmentally friendly behaviours for the students and positively affect their environmental awareness. Thus, students will be environmentally conscious citizens in the future and they will give importance to environmental values while practicing their professions and provide a positive contribution to the country's development and growth. All this because environmental education has the potential to affect a wide range of individuals and provides an important opportunity to promote human-environment harmony (Clayton and Myers 2015: 241). According to Fatima et al. (2015), students with pro-environmental knowledge are more willing to protect the environment. Also, they insist that the environmental knowledge obtained from education has an engaging impact on students for participating in environmental behaviours.

### CONCLUSION

The quality of human resources of a country is one of the most important criteria used to determine the level of her development. Although, the developed countries raise their human resources at the desired level of quality and quantity, underdeveloped countries experience serious difficulties in raising their human resources. At this point, education emerges as a key concept, because education is one of the most important activities to increase the knowledge level of individuals. Education is a social phenomenon that covers the whole community in this respect. Education does not only improve the quality of the individuals, it also supports the development of countries because, development can be achieved only by human capital. However, achieving a real sense of development and sustainability can be carried out by natural resources that human capital needs. At this point, vocational schools meeting the needs of qualified and trained staff to the service sector are of great importance. Due to environmental awareness from their school, students will be the guarantee of a better future, shedding light on the solution to environmental problems. For this

purpose, it is necessary to increase the number and quality of environmental courses in vocational schools, include environmental issues in every curriculum and overcome the lack of teaching staff on this subject. Students should not be limited to talk only on environmental concepts but, they should experience nature, they should be taught the main causes of today's environmental challenges and the relationship between human-centric view and environmental disasters. They should acquire a perspective on these issues. Such an educational approach will be able to get more useful and efficient results for the environment. Thus, environmental education activities can serve its real purpose and students can be supported as individuals compatible with the environment. However, environmental courses that are carried out in the framework of unnecessary and boring theoretical knowledge without giving necessary importance and sensitivity may cause considerable loss of time and effort. Aside from improving their environmental awareness, these courses may cause students more insensitive towards environmental issues.

### RECOMMENDATIONS

Human factor is of great importance in reaching environmental problems to the size that threatens the future of all creatures. Vocational schools which provide a qualified workforce to society have major duties and responsibilities in this context. If vocational school students are given environmental awareness, these students will make an important contribution to the prevention of future environmental problems. They will not be the causes of environmental problems but parts of the solution because they will be able to show their best efforts in preventing environmental problems in their sectors. In this way, the opportunity to live in a healthier and cleaner environment could be offered to the society. In order to achieve this, students are not only limited to theoretical knowledge and concepts but they should be integrated with the nature by outdoor activities. These environmental and outdoor education experiences will be very useful for vocational students to experience and integrate with nature and educating students about today's environmental issues will, bring about tangible environmental benefits in the future.

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