

Classroom teachers' views on environmental education

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Received for publication: 30 January 2014.

Accepted for publication: 12 March 2014.

Abstract

The present study aims to examine classroom teachers' views on environmental education. The study was conducted using a case study method which is one of the qualitative research methods. The study group was determined via criterion sampling which is one of the purposeful sampling methods. The study group included 20 classroom teachers who work in primary schools. The data were obtained via a semi-structured interview form. The data were analyzed employing the descriptive analysis method. According to the findings of the study, teachers perceived environmental education as environmental consciousness, an attitude towards the future and the environment. The family, the school, the social environment, the media and religion were determined as the effective factors in environmental education. The issues about which the students should be informed are the practice of economy, prevention of pollution, keeping the environment clean, an active engagement with the environment and taking a holistic view of the environment. It was concluded from the study that environmental education was an engagement with the environment and global thinking for the sake of our future.

Keywords: Classroom teacher, Environment, Environmental education

Introduction

Since the very beginning of the history, mankind has benefitted from natural resources, in its effort to develop living conditions (İncekara &

Tuna, 2010) and mankind has used nature as if it could never be exhausted. Man has wasted the natural resources, assuming they would endure, and this has led to today's environmental issues. These issues have put nature and mankind at odds with each other (Karpuz-Seyis, 2010). People have tried to find solutions for the situation because the issues have reached a life-threatening level (Erol & Gezer, 2006).

These multi-dimensional environmental issues arose as a consequence of many factors (Erol, 2011) and the issue became a global one. This situation created some solidarity among different nations to determine strategies and offer solutions for the issues and to carry out works accordingly (Şentürk, 2010). All over the world, people face dangers from the irrevocable damage suffered by nature (Sarıkaya, 2006).

Environmental issues overwhelmed people and environmental consciousness decreased day by day. So the importance of environmental education increased (Sever & Samancı, 2002; Alim, 2006); because, the protection of nature is only possible through raising the awareness of people who are most affected by nature (Arslan, 1997). The internalization of this situation, making it a philosophy of life, by people who are environmentally conscious is quite effective in dealing with environmental issues (Nalçacı & Beldağ, 2012).

How important is the human role in solving environmental problems to be taken into account, the necessity of individuals to be conscious about the environment and its problems rise to the occasion (Aydin & Çepni, 2010). An unconscious and uneducated society is not able to think that future

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generations will also have to inhabit the same world (Akbaş, 2007). It is the responsibility of everyone to protect nature from destruction and to leave a livable environment for future generations (Erol, 2011).

One of the most important factors to affect the manner and behaviors of students toward the environment is the teacher factor (Aydın, 2010; Karpuz-Seyis, 2010). For students to form a consciousness concerning nature and to put this into action depends on how much emphasis the teachers place on the issue. Teachers, who are good models for students, put the information into action, and they seize every opportunity to give their students a quality education concerning ecology. Such actions will certainly increase success on environmental issues (Çelikkıran, 1997).

Teachers who will deliver environmental education should properly have an environmental consciousness (Aydın, 2008). Educating teachers to a high level of environmental consciousness and sufficient ecological knowledge, and be able to conduct theoretical and practical environmental experiments is crucial for progress in environmental education and in reaching desirable environmental targets (Kahyaoğlu, Daban & Yangın, 2008). It is in the teacher's power to enable students to question and actively participate in the lesson rather than teaching clichéd information based on memorization skills only. This can only be possible with teachers, who do not regard the topic of environmental education as insignificant, who have high environmental consciousness, are aware of the world and the environment in which they live, and who want to develop the consciousness of students and guide the students in some way (Şentürk, 2010). In this context, the present study attempts to investigate and reveal teachers' opinions on environmental education.

Methodology

Pattern

In this study, the case study, which is one of the qualitative research methods, was used. The most basic feature of the case study is that one or more than one cases can be examined in depth. In other words, the factors of any situation are examined with an integrated approach and such issues as how the factors affect the situation and how the factors are affected by the situation are researched (Yıldırım & Şimşek, 2011).

Study Group

This study included 20 classroom (12 male and 8 female) teachers who were determined via criterion sampling which is one of the purposeful research methods. The criterion used to determine the study group was that the teachers should be in the same branch; this minimizes the diversity of perception.

Data Collection Tool

The semi-structured interview method formed the basis of this study and an interview form including four questions was used.

Analysis of the Data

A descriptive analysis method was used for analyzing the data. According to the descriptive analysis method, the obtained data is summarized and interpreted depending on the previously determined themes (Yıldırım & Şimşek, 2011). The interviews that were carried out with the teachers were coded as [1F]. 1 refers to the sequence of the interview and F/M refers to the genders (M=male, F=female).

Results

This section includes the findings that were obtained from the answers to the questions teachers were asked during the interview.

Classroom teachers' perception of the concept of environmental education

It was determined that the participants perceived environmental education as environmental consciousness (f=14), the future (f=4) and behaviors toward the environment (f=2).

Environmental education as environmental consciousness:

This is raising and developing environmental awareness in all the individuals of which society is comprised, and with this method, making them conscious of the environment and able to reflect this in their manners and behaviors [1F]. This is the process of educating individuals to have environmental consciousness, the transferring of this consciousness to future generations, and educating individuals to be sensitive to environmental issues and willing to behave in a desirable manner [14M]. Environmental education is given to raise awareness in people of the need to protect all living creatures and non-living things [19F].

Environmental education as the future:

This means a lot to me; because for me, human=nature, the environment. For me, there exists the nature that is with me at this moment, the nature that evokes the past and the nature which I leave to the future [17F].

It is educating people to leave a livable world for future generations and not to mess up the existing order [18M].

Class teachers' views on the factors effective in the environmental education

The participants stated that the effective factors in environmental education are the family (f=16), school (f=14), the social environment (f=8), the media (f=4) and religion (f=1).

Family factor in environmental education

A child is like wet concrete, the child takes the shape of what is put on him/her. Children need good models rather than simply instruction. Society can only undergo a change and transformation by means of the children in whom parents have raised a consciousness [3M].

The most onerous responsibility for raising children falls on the family. So, families should be good models for the children [11M].

If parents want to raise children who take responsibility for the environment they should think twice before taking any actions [8F].

The school factor in environmental education:

The basic human behaviors are first acquired within the family environment and then they take shape in the school. In this context, conscious individuals can be educated with the cooperation of the family and the school [16F].

Social environment factor in environmental education:

An individual wants to make material all the things he/she learns (in school, at home, outside) and reflect them in his/her behaviors. The environmental education given in school will be more permanent when reinforced outside of the school [4M].

Primary school students learn via observing the behaviors of the people around them. So, the structure of the child's environment is certainly an important factor in his/her manners and behaviors toward the environment [7F].

Media factor in environmental education:

Today, the media has the opportunity and means to present visually any event across the world to us all. This power should necessarily be of benefit to us on the issue of environmental education [6M].

Informative practical projects can be conducted on keeping the environment clean through use of the media. For example, the presentation of the melting icebergs helps create an environmental consciousness in people's minds [15F].

The Religious factor in environmental education:

The factor that urges us to show respect should be the great order, harmony and aesthetics of nature. It is also evidence of the existence of God and religion's sensitivity in regard to nature. When I explain the harmony and the great complexity of nature in this way, the children are impressed [17F].

Teachers' views on the necessity for raising environmental awareness in the students

The participants stated that the practice of economy (f=9), the prevention of pollution (f=4), keeping the environment clean (f=3), putting these consciousness and preventions into action and taking a holistic view of it (f=2) were the issues on which the children should be informed.

Initially "the practice of economy" in environmental education;

The natural resources should be used economically. Students should be guided on the use of easily recyclable materials [2F].

Students should be informed of the necessity to practice economy in the use of material products that are dependent on natural resources. Much practical work can be carried out concerning this issue. Unused books, journals etc. can be collected at school and sent for recycling. Then, the teachers could explain to the students how many trees could be kept alive through this practice [5F].

Putting environmental education into action:

Many people worry about the environment or have environmental consciousness; however, they unfortunately cannot bring this into action. Students should be especially informed about active engagement with the environment [13F].

It should be emphasized that the behavioral aspect of the issue is as important as the cognitive aspect. The effects of the practices of each individual and of the practices which are not conducted, and how these affect the environment, should be taught [14M].

"The prevention of pollution" in environmental education:

Pollution causes the narrowing of the living spaces available to people and animals, it increases health problems and also causes global warming

etc. People should be informed on these issues so that awareness can be raised [2F].

The permanent damage that chemical substances do to nature should be explained to the students [15F].

“The holistic view” in environmental education:

I believe that there is no single priority or recency in environmental education. The environment has an integrity and should be seen as a whole and gives life to all beings within this integrity. People who think of themselves and their future should know that they have to protect the whole of nature’s integrity. Otherwise, the polluted environment will have a domino effect [9M].

“Keeping the environment clean” in environmental education:

Keeping the environment clean must be the priority, because it is quite easy to pollute a once clean environment. However, cleansing a polluted environment and trying to change it back is quite difficult and sometimes even impossible [12M].

The teachers’ views on the importance of environmental education in terms of the future of the world

The participants stated that the environment in relation to our future (f=11) and global thinking (f=8) are the most important issues for environmental education in terms of the future of the world.

“The environment for our future” in terms of its effect on the future of the world;

Environmental education is an investment in the future. We should remember that not only we will live in this world, so will future generations [18M].

If we continue neglecting and polluting the world, there will be no habitat suitable both for us and the next generation [20F].

“Global thinking” in terms of its effect on the future of the world;

We should know that the damage brought on the environment anywhere in the world will affect the whole world. If we think of the world as a ship; when the ship begins to sink, everybody will drown regardless of where we are in the ship [4M].

More effective results can be obtained with global environmental education rather than regional environmental education. For example, air pollution causes global warming and affects the whole world [10F].

Environmental issues should be regarded as global issues. The problem in any area of the world affects the whole world. Take for instance, the Chernobyl nuclear accident; it has had its effect on the Black Sea Region in Turkey for many years. Common cancer occurrences in the Black Sea Region are an example of the negative reflection of an environmental problem that has occurred elsewhere [13F].

Discussion

The most effective way to find solutions to these problems is to educate individuals, to raise an environmental consciousness. It is necessary to inform individuals about the environment, enable him/her to acquire positive manners, and produce behavioral changes (Arslanyolu, 2010). It was determined in the present study that teachers perceived environmental education as “environmental consciousness”, “the future” and “manner and behaviors towards the environment”. The insensitive behaviors of people create the environmental issues. The most effective way to solve these issues and problems is for individuals to be conscious of the environment and environmental issues, and to take responsibility for a healthy environment (Aydın, 2008). Environmental pollution is a common issue across all countries. We need to prevent pollution and protect the green areas and animals in order leave a healthy environment for future generations (Özey, 2009).

Teaching and learning processes are complex phenomena which cannot be explained by one or more reasons/factors (Uşak, Erdogan, Inan, Kubiatko & Şahin, 2011). In this context, teachers stated that the family, the school, the social environment, the media and religion play important roles in environmental education. Environmental education begins within the family and the environment of the child (Öner-Armağan, 2006). So, environmental works should be carried out in cooperation with the families and the family participation in such activities should be provided for (Güçke, Kaya, Aktay & Özden, 2007). The protection of the environment, the prevention of pollution and the achievement of sufficient environmental consciousness are possible with appropriate education in schools (Aslan, Uluçınar-Sağır & Cansaran, 2008). In parallel with the environmental education given in schools, parents and other adults also have responsibilities on this issue; their work can thus complement formal education. There is a possibility that a child who

has an environmental education at school could come face to face with the misbehavior of the public in the street and of their parents at home. So the child could encounter a contradiction (Niibe-Sancar, 2005). Visual, audio and print media should do its share in raising the environmental awareness of people. Today, the media is the most powerful way to guide people. More sensitivity to the issues and a conscious manner in the media will enable people to be more conscious on this issue (Öztürk, 2008). In the Holy Scriptures, there are also suggestions on adopting certain behavioral patterns for keeping the environment clean, and the efficient and effective use of the environment (Keleş & Hamamcı, 2002).

Teachers stated that students should especially be informed on practicing economy, preventing pollution, keeping the environment clean, putting these consciousness and preventions into action and taking a holistic view of it. It should be explained to the students that many problems do not simply occur because of an insufficiency of natural resources and that indeed the natural resources are in themselves sufficient, in fact we should simply use these resources more judiciously. So, the students' propensity to save will increase (Engin, 2010). The most effective factor in the pollution of the environment is the human factor (Öztürk, 2008). People are responsible for polluting nature, the ill-use of the self-renewing features of nature. They are responsible for environmental issues and the outcomes of their actions (Karpuz-Seyis, 2010). It is impossible to comprehend today's environmental issues without a holistic view (Kışlalıoğlu & Berkes, 1991). So, the main objective of environmental education is to enable individuals to develop a holistic view, to develop critical views on human interaction with the environment, to be sensitive, conscious, and challenging on environmental issues, and to protect the world (Atasoy & Ertürk, 2008).

The teachers stated their views on the importance of environmental education for the future of the world, to encourage global thinking and action on the environment. Protecting and developing nature in the name of today's and of future generations is the main duty of mankind (Erol, 2011). The environment is not our inheritance, it is our responsibility to protect and develop nature and ideally leave it fit for future generations (Özey, 2009). The research conducted and the decisions taken and actions made, make clear that environmental pollution is no longer a regional issue but rather a

global one (Ak, 2008). While environmental issues are passing from being regional to being global, the solution to these issues, that is, environmental policy, has also passed from being national to being international (Keleş & Hamamcı, 2002).

In order to conduct environmental education more effectively, teachers should be educated and qualified to teach on this issue both in the pre-service and service processes. The concept of the environment has attained a global dimension. So, all countries should be aware of their responsibility to raise the awareness of all of the people in the world, and the people, together with the countries, must struggle to resolve the environmental issues.

References

- Ak, S. (2008). *Search of primary school teacher candidates' towards environmental consciousness due some demographic variables*. (Unpublished master thesis). Abant İzzet Baysal University: Bolu.
- Akbas, T. (2007). *Research of environmental sensitivity among teacher candidates of science course*. (Unpublished master thesis). Ataturk University: Erzurum.
- Alim, M. (2006). Environment and environmental education in primary school in turkey within the process of the membership of European Union, *Kastamonu Education Journal*, 14 (2), 599-616.
- Arslan, M. (1997). Changes in environmental awareness and environmental education, *Education and Life*, 23-26.
- Arslanyolu, K. (2010). *Investigation of elementary education students' attitudes towards environment according to multiple intelligence theory*. (Unpublished master thesis). Erzincan University: Erzincan.
- Aslan, O., Ulucinar-Sagır Ş. & Cansaran A. (2008). The adaptation of environment attitude scale and determination of primary school students' environmental attitudes, *Selcuk University Ahmet Kelesoglu Education Faculty Journal*, 25, 283 -295.
- Atasoy, E. & Erturk, H. (2008). A field study about environmental knowledge and attitudes of elementary school students, *Erzincan Education Faculty Journal*, 10(1), 105-122.
- Aydin, N. (2008). *Influence of class level, seniority and value orientation on self-efficacy beliefs through environmental education of class*

- teachers and prospective teachers. (Unpublished master thesis). Adnan Menderes University: Aydin.
- Aydin, F. & Cepni, O. (2010). University students' attitudes towards environmental problems: A case study from Turkey, *International Journal of the Physical Sciences*, 5(17), 2715-2720.
- Aydin, F. (2010). Geography Teacher Candidates' Views about Environment Problems and Environment Education (Gazi University Case), *International Online Journal of Educational Sciences*, 2(3), 818-839.
- Celikkiran, A. (1997). *Environmental issues and education (a sample practice of formative teacher training course on environment)*. (Unpublished master thesis). Ankara University: Ankara.
- Engin, H. (2010). *Teaching sustainable development, education of sustainability and environmental education in geography education*. (Unpublished master thesis). Marmara University: İstanbul.
- Erol, D. (2011). *Preparation of computer assisted teaching material at primary level*. (Unpublished master thesis). Dokuz Eylül University: İzmir.
- Erol, G. & Gezer, K. (2006). Teachers' attitudes toward environment and environmental problems, *International Journal of Environmental and Science Education*, 1(1), 65-77.
- Gokce, N., Kaya, E., Aktay, S. & Ozden, M. (2007). Elementary students' attitudes towards environment, *Elementary Education Online*, 6(3), 452-468.
- Incekara, S. & Tuna, F. (2010). Measuring the knowledge level of high school students on environmental issues: the case of Cankırı province, *Marmara Geographical Review*, 22, 168-182.
- Kahyaoglu, M., Daban, Ş. & Yangin, S. (2008). Attitudes of Primary Candidate Teachers about Environmental, *Dicle University Ziya Gokalp Education Faculty Journal*, 11, 42-52.
- Karpuz-Seyis, N. (2010). *The place and importance of education in primary programmes for environment in Turkey*. (Unpublished master thesis). Karadeniz Technical University: Trabzon.
- Keles, R. & Hamamci, C. (2002). *Ecology*, Imge Bookstore, Ankara.
- Kislalioglu, M. & Berkes, F. (1991). *Environment and Ecology*, Remzi Bookstore, İstanbul.
- Nalcaci, A. & Beldag, A. (2012). Identifying the environmental attitudes of 7th and 8th grade elementary students (Erzurum sample), *Eastern Geographical Review*, 17(28), 141-154.
- Niibe-Sancar, K. (2005). *Environmental education for people in Japan and Turkey*. (Unpublished master thesis). Ankara University: Ankara.
- Oner-Armagan, F. (2006). Elementary school 7th and 8th grade students' knowledge levels about environmental education: Kırıkkale case. (Unpublished master thesis). Gazi University: Ankara.
- Ozey, R. (2009). *Environmental Issues*, Aktif Publishing House, İstanbul.
- Ozturk, O. (2008). *Evaluation of environmental news and articles in the Turkish press and environmental journalism education in Turkey*. (Unpublished master thesis). Marmara University: İstanbul.
- Sarikaya, S. (2006). *Interactive teaching methods in environmental education*. (Unpublished master thesis). Celal Bayar University: Manisa.
- Sever, R. & Samanci, S. (2002). Environmental education in primary education, *Eastern Geographical Review*, 7(7), 155-163.
- Senturk, S. (2010). *Evaluation of secondary environmental education in England in accordance with the UNESCO and UNEP principles*. (Unpublished master thesis). Marmara University: İstanbul.
- Usak, M., Erdogan, M., Inan, H.Z., Kubiak, M., & Sahin, M. (2011). Investigation of Prospective Teachers' Approaches to Learning in Biology and Ecology, *The New Educational Review*, 23(1), 283-294.
- Yildirim, A. & Simsek, H. (2011). *Qualitative research methods in social sciences*. Ankara: Seckin Publishing House.