

Emin ATASOY* - Sedat YÜKSEL**

The Role and Effects of Elementary Environmental Education and Environmental Consciousness During Globalization in Turkey***

Abstract

While seeking solutions for environmental problems and trying to find a way out of environmental crisis, there is an increasing need for world citizens having environmental and ecological consciousness. In this respect, environmental education is becoming more important in order to deal with environmental problems. After determining conceptual frame of globalization, the relationship between globalization—education and globalization—environmental education are examined in this study. In the next step, the current situation of environmental education and its effects on helping students having an environmental consciousness are explained. The role and effects of environmental education on eco-individuals having moral values about environment, sensitive to ecological issues, and aware of ecological problems are examined in the perspective of globalization. In addition, the current curricula were analyzed according to globalization and environmental education in Turkey.

Key Terms

Elementary Education, Environmental Education, Globalization, Science Curriculum, Social Studies Curriculum, Turkey.

Küreselleşme Sürecinde Türkiye’de İlköğretim Düzeyinde Çevre Eğitimi ve Çevre Bilincinin Rol ve Etkileri

Özet

Çevre Çevresel krizden çıkış ve çevre sorunlarına çözüm aranırken, ekolojik ve çevre bilinci yüksek dünya vatandaşlarına her zamandan çok ihtiyaç duyulmaktadır. Bu bağlamda çevre sorunlarının çözümünde, çevre eğitiminin üstlendiği görev giderek artmaktadır. Bu çalışmada küreselleşmenin kavramsal çerçevesi belirlendikten sonra, küreselleşme – eğitim ve küreselleşme – ile çevre eğitimi i-

* Dr.: Uludağ University, Education Faculty.

** Ass. Prof. Dr.: Uludağ University, Education Faculty.

*** This paper presented at the International Scientific Conference “Global Changes and Regional Challenges” St. Kliment Ohridski University of Sofia, 28-29 April 2006, Sofia, Bulgaria.

İlişkileri incelenmiştir. Çalışmanın sonraki aşamasında, Türkiye'deki ilköğretim programlarında çevre eğitimine ilişkin olarak öğrencilere kazandırılacak içerik ve bu içeriğin öğrencilerde çevre bilinci oluşturmadaki etkisi açıklanmıştır. Çevre bilinci, çevre ahlâkı ve çevre duyarlılığı yüksek ekobireyler yetiştirmede çevre eğitiminin rol ve etkileri, küreselleşme penceresinden irdelenmiştir. Ayrıca, Türkiye'deki mevcut ilköğretim programları küreselleşme ve çevre eğitimi açısından analiz edilmiştir.

Anahtar Terimler

İlköğretim, çevre eğitimi, küreselleşme, fen bilgisi programı, sosyal bilgiler programı, Türkiye.

1. The Concept of Globalization

Although globalization is a complex and much debated concept that carries various meanings (Kellner 1998), it is a concept containing the fields of economics, politics, culture, and education and it defines transformation. Giddens (1990: 64) defines "globalization as having the effect of events occurring in one country on the other parts of the world or the crystallization of social relations on worldwide by getting affected by the events occurring outside of the national borders". Generally, globalization is defined as the development, growth, and becoming widespread of the relations that are economical, social, cultural, and political among countries.

Starting from the first years of 21. century people have needed to agree on important objectives and common values by developing the principles of universal behaviors (Naisbitt 1994). People are realizing the necessity of becoming a world citizen beyond the cultural and ethnical differences. To be a world citizen is to understand that there is no other world (Düren 2001).

While the separatist movements and fragmentation is on the rise, societies are getting united, cultures are getting closer to each other, the world is becoming smaller because of technological advancements, and countries are becoming depended on each other more and more in this century in which also religious exploitation, ethnical clash, and the competition of civilizations have been increasing. In other words, not only is the concept of globalization making societies and countries get closer and unite but also it is increasing the conflict and divisions. As the world is getting smaller and united, it is getting divided and broken into pieces (Morin 2003).

Although the ideas about the effects of globalization centre on economics, there are ideas covering the areas of culture and ideology. The common point in these ideas is that globalization is decreasing the domination local circumstances (Giddens 1990; Robertson 1992; Albrow 1996).

Considering the widespread effects of globalization, while some people defend globalization, others oppose it. Those who defend globalization claim that globalization is out of control of individuals and societies and the success of the economy of a country and the existence of a country depends on supporting globalization. Those people opposing globalization argue that globalization is a process that is going to abolish national independence on economics, social, and cultural areas. For this reason, they state

that globalization should be stopped (Brown 1999). However, globalization cannot be stopped. Today, the organizations like European Union (EU) is a result of the effects of globalization such as political, social, and economical (Yurdabakan 2002). Globalization affects the system at the level of both local and national. For this reason, instead of supporting or opposing globalization, the ways should be found to use the advantages of globalization and to decrease negative affects of globalizations.

2. Ecological Dimension of Globalization

While globalization is creating opportunities for the countries to work collaboratively in the areas of culture, politics, technology, and ecology, on the other hand, globalization is increasing the fragmentations, divisions, and conflicts (Karabağ 2006). The main reason for globalization is that the problems that our world has to face such as economical, political, military, and ecological problems can be solved only by collaboration of many countries namely at the global level. In other words, globalization made mutual dependence and closeness among countries main trend of the world politics. Thus, the ability to protect their economical, military, and ideological borders of national governments has been weakened or disappeared. For this reason, none of the governments can preserve their political and economical existence more over they cannot protect their independence, which is only based on their unconditional sovereignty by cutting their relations with other countries and ignoring global economics and politics (Kaplan 1999).

The last century took its place on history books as the century in which great discoveries were made in science and technology and the century of urbanization, industrialization, knowledge, and progress. This century, in which the moon was visited, animals were cloned, genetic, nuclear, and space studies had a very fast pace, can also be named as the century of contradictions of crazy consumption with hunger and poverty, high agricultural yield with erosion, unstoppable population explosion with mass death, and human rights with violations of human rights. One of the most noticeable facts of this century is that the struggle between humans and nature turned into the struggle between ecology and economics and as a result of this, humans have come to a level that they can annihilate themselves and environmental problems have become very important.

Globalization has ecological dimension as well as political, economical, cultural, and technological dimensions. The ecological dimension of globalization can be summarized as follows:

- In order to solve ecological problems, the collaboration among nations and governments are required since ecological problems are not limited with political boundaries and they are very difficult to solve. Local and national environmental problems has turned into global problems in a short time and become the problems of the whole planet.
- New types of pollution like radiation, noise, space appeared along with existing problems such as air, water, and soil pollution in the last half century. While the types, source, and methods of pollution have increased, the destructive power of pollution and

its global effects has increased. Our world and ecosystems have started to have deep and inexpiable wounds.

- Today it has been understood that the cost of economical improvement might be ecological problems. It is impossible for people to be happy and continue their life without the harmony and collaboration between economy and ecology. The reasons for getting environmental problems to be widespread and become deep are industrialization, urbanization, tourism, transportation, mining, and agricultural activities as well as human's instinct for exploitation and consumption and insufficient sensitivity and consciousness toward ecology.

- While entering the new century, on the one hand, the new branches of science like environmental philosophy, environmental education, environmental psychology, and environmental sociology are developing, on the other hand, the topics of ecological culture, ecological agriculture, ecological tourism, and ecological society are discussed by media and scientists. As the effects and scope of global environmental problems are increasing, the interests in the fields of politics, economy, culture, science, and art are increasing.

The reasons that are the growth of environmental problems and the danger that these problems have started to threaten the life on our planet caused people to question their attitudes and actions towards nature and their relations with nature, to reconsider their responsibilities to take care of nature, and to redefine more about environment, ecological culture, and consciousness of environment. While the necessity, importance, function, and effects of education about environment are being questioned, it has been discussed that schools cannot give students enough moral values and consciousness about environment in the world. As a result, since the future of our world is on the hands of our children, the investment of educating children about environment should be considered as an investment for our world and nature.

3. Globalization and Education

As a result of the effects of the process of globalization on the economy, politics, and culture of countries, globalization affects the philosophy of education and the practice of education. New ways of communication and the development of information technologies make it easy for the countries affected by this process. However, according to Green (1999) while the process of globalization is easily affecting the politics and economy of countries, this effect is very small in education because countries are trying to keep away their educational system which aims to sustain existence and integrity of their country from global effects. This resistance to protect their educational system from the process of globalization cannot protect these countries from the effects of globalization. For example, European Union (EU) stresses on official documents that the members and the candidate countries of EU need to redesign their education system such a way that there should be a common structure, content, and practice in some areas in education without disturbing the national characteristics of education in these countries (Karip 2005; Topsakal & Hesapçioğlu 2001). The agreements in 1957, 1986, and 1992 in EU require some harmony in the areas of education and social politics of the countries. In the direction of these decisions, some programs which are Socrates, Eras-

mus, Lingua, and Leonardo Da Vinci have been started in order to enable the member and the candidate countries of EU to exchange information, students, and teachers.

In EU Lisbon summit in 2000, one of the most important decisions was that the economy of EU would be a competitive economy based on dynamic knowledge, there would be work and social integrity and it could realize a sustainable economic development until the year of 2010. In this direction, member and candidate countries were asked to invest more on human resources, enable more people to benefit from educational services, help people have knowledge and skills about information technology and foreign languages, create opportunities for students, teachers, and administrators to use the programs (like Socrates, Leonardo, Youth), make it easy for people to travel, and increase collaboration among schools by establishing internet connection on schools. It was stressed on the last paragraph of the concluding that the national differences among countries will be respected as it is stated in all official documents of EU (Karip 2005). While Lisbon summit of EU was trying to establish integrity among the members in order to create a strong structure, the member countries were given freedom to choose their ways and methods to comply with the decisions of EU. It can be thought that EU respects the rights of the member countries to decide on their politics on education. However, it should not be forgotten that EU has an important influence on the members on this topic.

Turkey was accepted as a candidate country having equal conditions with other candidate countries in Helsinki summit on 10-11 December 1999 and Participation Partnership Document was prepared in order to determine the strategies showing basic practices for Turkey before joining to EU (Topsakal & Hesapçioğlu 2001). After receiving the Participation Partnership Document, Turkey has prepared a "National Program" to comply with conditions stated in the Participation Partnership Document. When the titles of environment and education are examined, it can be seen that there was no explanation about environmental education although there were precautions and changes to reach to EU standards about environment (Resmi Gazete 2003). However, it is not enough to enact law and supply resources to reach the standards of EU about environment. It needs to be educate individuals who can understand the arrangements and who have consciousness about environmental. For this reason, students should be given environmental education in an effective way in schools.

4. The Interaction between Environmental Education and Environmental Consciousness

Environmental education is a process that creates a world society which is sensitive and interested in environment and its problems and have enough knowledge, skills, instinct, behaviors, and attitudes to solve today's and tomorrow's environmental problems (Ayvaz 1998). Environmental education aims to raise individuals who are aware of local, regional, national, and global problems, can approach to these problems with sensitivity and interest, try to solve these problems voluntarily, and whose ecological culture and environmental consciousness are at the highest level.

Environmental education is also the education of living healthy and having responsibility and the dominant concepts in this education are tolerating, sharing, helping,

love, and understanding. Environmental education is an uninterrupted and life long process of education which aims to defend the idea that environmental culture is a feeling of responsibility towards the region in which lived, world, or even the universe along with accepting, defending, and practicing ecological knowledge during ones life time. The purpose of this process, which is a process of creating sensitive and positive behavioral change, is to educate world citizens having the consciousness of environmental responsibility and adopting being environmentalist as their philosophy of life (Atasoy 2006).

Environmental education should be given in everywhere (schools, factories, fields, work places etc.) and environment should be used as the topic of education (Geray 1997). Environmental education, which is an interdisciplinary field, has cognitive, affective, and psychomotor objectives. The aims of cognitive area help people to develop their ecologic culture and knowledge of environment and those of affective area are to create values, behaviors, and attitudes toward environment and its problems. Psychomotor aims are to raise individuals who actively work to solve environmental problems (Doğan 1997).

According to Kostova, more effective and better quality environmental education can be established with a higher consciousness and moral level, higher ecological culture, and more responsible environmental behaviors (Kostova 2003). In other words, the priority aims of environmental education is to gain individuals environmental responsibility based on environmental moral and consciousness more over to transform knowledge, attitudes, and ideas into the environmental activities.

Environmental consciousness directs children and makes it easy for them to perceive their social and natural environment more correctly, to establish healthier relations with their social and natural environment. To raise the level of environmental consciousness affects children's value systems and the level of their environmental moral in positive way. It also increases children's ecological sensitivity and their awareness of ecology. Not only is environmental consciousness is important for children to know and understand nature, society, and the world but also it helps them to know and understand themselves. In this respect, environmental consciousness has a function to help children to understand their inner world and to recognize, feel, perceive, and comprehend the outer world. In addition, children's attitudes and behaviors that they show in their relationship with their social and natural environment reflects the level of environmental consciousness of children. For example, children's sensitivity and actions for pollution, their effort and self-sacrifice to solve environmental problems, and their tolerance and understanding for other living things reflect the level of their environmental consciousness. In this respect (Atasoy 2006),

- If we want to raise individuals who are at peace with their nation and country and who live in harmony with nature and the world;

- If want to raise individuals who can feel nature, who can approach to nature with love and respect, and who can understand the value and importance of nature;

- If want to raise individuals who take the world seriously and accept it and who protect the world and fight for the world;

- If want to raise individuals who can look at relationships, events, and developments not with the point of view of human center but with the point of view of nature and the world center;
- If want to raise individuals who do not avoid responsibility and who have desire to solve national and global environmental problems;
- If want to raise individuals who can sacrifice their own and their family and friends' benefits for the happiness of nature and the world;
- If want to raise individuals who have learned to be a member of the world and to take care of the world, to love, respect, tolerate, understand, and share, we need to raise children's level of environmental consciousness and ecological culture.

5. Environmental Education in Elementary Schools in Turkey

Turkish educational system has a centralist structure. All decisions related to education such as curriculum and text books are decided by the Ministry of Education and these decisions are exercised without any modification all over Turkey. Turkish educational system includes the levels of preschool, elementary, middle, and higher education. While preschool is optional, elementary education that lasts 8 year is obligatory. Those students completing the elementary education can continue their education in either vocational or general high schools that last 4 years. Those students who successfully complete high schools take a central exam in order to be able to continue their education in a 4 year university or 2 year higher institution.

Educational activities in Turkey are conducted according to law that was made in 1973 and called 1739 Numbered National Education Base Law. The general aims of Turkish National Education were stated in this law. These aims are both at the national and universal level. The general aim of Turkish national education at the universal level is to raise individuals who have a personality and character that developed in a well-balanced and healthy way in respect to body, mind, spirit, and emotion, who have the power of thinking freely and scientifically, who have a wide world view, who respect to human rights, and who value personality and initiative. Especially, the aims that are "who have the power of thinking freely and scientifically, who have a wide world view" prepare students for a universal culture. However, being conscious and having responsibility about protecting environment were not mentioned in these general aims (Resmi Gazete 1973).

At this point of this study, here are some explanations about environmental education at the elementary education level and globalization in environmental education. The curriculums of the first level (1-5 grades) in elementary education were totally renewed according to a new understanding in academic year of 2005-2006. While curriculum had been previously prepared according to behaviorist approach, curriculums have been prepared according to constructivist theory. Constructivist theory defends the idea that individuals can make sense of new information by actively engaging in learning and constructing their own knowledge. According to this idea, individuals are required to increase their knowledge and thinking by developing them, to work on information by

questioning the result of it, to interpret and analyze information, and to bring together the new and old experiences (Marlowe & Page 1998; Brooks & Brooks 1993).

The curriculum of the first level of elementary education that was prepared according to this approach focused on helping students to construct their own knowledge and stressed the activities in this direction. According to the explanations of the Ministry of Education in Turkey, sports culture, health, environment, guidance, career, entrepreneurship, and consciousness of natural disasters have been the central point by using an interdisciplinary approach. Turkish Ministry of Education states that while preparing these curricula the educational norms of European Union and international ones were taken into consideration (MEBa 2005). The curriculum of the second level of elementary education (6-8 grades) has not been renewed yet and this curriculum, which is still in use, had been prepared according to behaviorist approach. Ministry of Education has completed the studies of preparing new curriculum according to constructivism as it was done in the first level of elementary education. These curricula will be official and be used in schools in the academic year of 2005-2006.

Although it is stated that the topic of environment constitutes the centre of the elementary school curriculum and it takes place in all classes, the topics related to environment mostly take place mostly in the classes about social studies and very little in the science and technology course when the elementary school curricula are examined.

a) Environmental Education in the Social Studies Course

Social science course is taught at the grades of 4-7 in elementary education. When the social studies curriculum (MEBb 2005; MEBc 2005) is studied, it can be seen that the content of this curriculum was divided into 8 learning area. Here are these 8 learning area: (1) individual and society, (2) culture and heritage, (3) humans, places, and environments, (4) production, distribution, and consumption, (5) science, technology, and society, (6) groups, institutions, and social organizations, (7) power, administration, and society, and (8) global connections.

The areas that are directly related to this study are “humans, places, and environments” which includes geography and environment topics at the local and national level and “global connections” which includes environmental topics that connected to national and global problems. When social studies course is examined in respect to “global connections”, it can be seen that the principle of learning from near to far is taken into consideration. For example, the issues that are local and related to Turkey take place in the first units and global issues take place at the last units of the social science course. Except 7th grade, social science course includes environmental topics at all grades of elementary education. At this stage of this study, here is some information about the units that includes the environmental topics in the social studies course.

Table 1 shows the learning areas and the units related to these learning domains in social studies

Table 1. The learning areas and the units related to these learning domains in social studies course that is taught in the elementary education.

| Grades | Fourth Grade | | | Fifth Grade | | | Sixth Grade | | |
|--|--------------------------------|------------------|------------|--------------------------------|------------------|------------|------------------------------|------------------|------------|
| | Units Name | Objective Number | Class Time | Units Name | Objective Number | Class Time | Units Name | Objective Number | Class Time |
| Individual and Society | I know myself. | 6 | 12 | I am learning my rights. | 4 | 12 | I am learning social studies | 7 | 15 |
| Culture and Heredity | I am learning my history | 6 | 15 | Step by Step Turkey | 6 | 15 | Turks on the Silk Road | 8 | 21 |
| Humans, Places, and Environments | The place we live. | 8 | 15 | Let's learn our region. | 8 | 15 | Life on earth | 5 | 15 |
| Production, Distribution, and Consumption | From Production to Consumption | 7 | 15 | The thing we produce. | 7 | 15 | The resources of our country | 7 | 18 |
| Science, Technology, and Society | Good for us. | 6 | 12 | The dreams coming true. | 6 | 12 | Electronic millennium. | 5 | 12 |
| Groups, Institutions, and social organizations | All together | 5 | 12 | Those working for the society. | 5 | 12 | -- | -- | -- |
| Power, Administration, and Society | Humans and Administration | 4 | 15 | One country, One Flag | 5 | 15 | The adventures of democracy | 5 | 15 |
| Global Connections | My distant friends | 4 | 12 | Our World | 6 | 12 | Our country and the world | 5 | 12 |
| | Total | 46 | 108 | Total | 47 | 108 | Total | 42 | 108 |

4th Grade Social Studies Course: While humans related to the topics of environment and natural disasters and the environmental factors for natural disasters in the unit of "the place we live in" that is related to the learning domain of places and environment take place in the social studies course at the fourth grade in elementary education.

5th Grade Social Studies Course: In the unit of “let’s learn our region”, which belongs to the domain of places and environments, the extinction of natural fields, forest fires, and pollution in Turkey take place in the social studies course of the 5th grade in the elementary education as well as the topic of global warming? In the unit of “our world”, which is related to the area of global connections, only common historical heritage is introduced but the topics of environment do not take place in this unit.

6th Grade Social Studies Course: In the sixth grade, the unit of “our country and the world”, which belongs to the domain of global connections, have the topics of the extinction of some life forms on earth and the effects of this extinction on natural balance, the disappearing forests with the increasing population, excessive hunting, and pollution. Moreover, the environmental problems caused by the nuclear reactors, which are considered to be built in Turkey too, are mentioned at this level of elementary education.

Since there is no topics related to environment at the seventh grade in elementary education, those units and the topics in these units are not examined here.

b) Science and Technology Course

Science and technology course is taught in the grades of 4-8 in elementary education. When this class is examined (MEBd 2005; MEBc 2005), it can be seen that the content were divided into four learning domains which are: (1) living things and life, (2) matter and the change, (3) physical events, and (4) the world and the universe.

Science and technology course has some topics related to environment although these topics are not as dense as those are in social science course. Although there is no domain about the topic of globalization in this course, some of the environmental problems in the world take place in this course. There is no subject-matter related to environment in science and technology course in the 6 and 8th grades of elementary education.

Table 2 shows the learning areas and the units related to these learning domains in science and technology course that is taught in the elementary education.

Table 2. the learning areas and the units related to these learning domains in science and technology course that is taught in the elementary education.

| Learning Domain | Fourth Grade | | | Fifth Grade | | | Seventh Grade | | |
|------------------------|--|------------------|----------------|--|------------------|----------------|---------------------------------------|------------------|----------------|
| | Units Name | Objective Number | Class Time (%) | Units Name | Objective Number | Class Time (%) | Units Name | Objective Number | Class Time (%) |
| Living Things and Life | Let's solve the puzzle of our body | 23 | 16.6 | Let's solve the puzzle of our body | 22 | 13.83 | Systems in our body | 27 | 19.4 |
| | Let's travel in the world of living things and know about them | 16 | 13.8 | Let's travel in the world of living things and know about them | 33 | 20.83 | Human and environment | 12 | 9.7 |
| | Total | 39 | 30.6 | Total | 55 | 34.72 | Total | 39 | 29.2 |
| Matter and Change | Let's learn about matter | 46 | 25 | The transformation of matter and learning about it | 46 | 25 | The features and structure of matter | 45 | 27.8 |
| | Total | 46 | 25 | Total | 46 | 36.25 | Total | 45 | 27.8 |
| Physical events | Power and movement | 13 | 8.3 | Power and movement | 21 | 9.72 | Power and movement | 31 | 11.1 |
| | Light and sound | 43 | 13.8 | Electric in our life | 16 | 8.33 | Electric in our life | 33 | 11.1 |
| | Electric in our life | 20 | 11 | Light and Sound | 39 | 13.83 | Light and Sound | 31 | 11.1 |
| | Total | 76 | 33.3 | Total | 76 | 31.94 | Total | 95 | 33.3 |
| World and Universe | The world our planet | 17 | 11 | Earth, Sun, and the moon | 19 | 8.33 | Solar system and beyond: space puzzle | 27 | 9.7 |
| | Total | 17 | 11.1 | Total | 19 | 8.33 | Total | 27 | 9.7 |
| | General Total | 178 | 100 | General Total | 196 | 100 | General Total | 206 | 100 |

4th Grade Science and Technology Course: In the fourth grade science and technology course, the unit of "let's travel in the world of living things and know about them", which is in the domain of Living Things and Life, has the topics of pollution in Turkey and the precautions to protect environment. In the same course, the unit of "Let's learn about matter", which is in the domain of Matter and Change, is about using natural resources with care and economy.

5th Grade Science and Technology Course: In the fifth grade science and technology course, the unit of "let's travel in the world of living things and learn about them", which belongs to the learning domain of Living Things and Life, has the topics of envi-

ronmental problems in Turkey and human rights about environmental issues. This unit also mentions about global environmental problems, the animals and plant that face extinction, and the issue of diminishing rain forest as a result of environmental problems.

7th Grade Science and Technology Course: At the seventh grade, the unit of "Humans and environment" is about corrupting ecosystem and the possible problems caused by this disturbed ecosystem. Those animals and plants that come near to extinction are stressed in this unit too. The effects of the environmental problems in the world and how they affect Turkey are discussed in this unit. The precautions to prevent environmental problems (taking environmental precautions for industry, helping living thing to continue their life, doing agriculture with consciousness, planting trees, keeping clean the water sources, and using recycled products) take place in this unit too.

When a general comment about environmental education is made by examining the curriculum of elementary education, it is aimed to teach students local, national and global environmental problems and to prevent these problems from occurring, and the ways to protect themselves from these problems. It should be noted that the effects of globalization are taught to students starting from the fourth grade. Starting from this grade, environment and its problems are mentioned and students are helped to develop a consciousness about environment mostly in social science course and some in technology and science course in the elementary education. Environmental problems are taught according to the learning principle that is from near to far. According to this approach, first, environmental problems in Turkey are studied and then global environmental problems are discussed. Thus, students learn that environmental problems need to be solved at the global level.

6. Conclusion

In this study, curriculum of elementary education is examined and following conclusions are made:

- When the elementary education curriculum is examined, it can be seen that the process of globalization is taken into consideration. While the previous curriculum at this level stressed the environmental problems in Turkey, environmental and geographical issues are examined at the global level in new curriculum. Thus, students are able to see the environmental problems from a wide perspective.

- Student will be able to develop environmental consciousness at the global level and be responsive to environmental problems by studying current environmental problems in the world and in Turkey and by understanding that global problems too affect Turkey. However, it should be remembered that students should be able to practice what they are learning in order to develop such consciousness and responsiveness.

- When the curriculum is examined, it can be seen that the units in which environmental education topics take place are not related to the other units and environmental topics are usually accumulated in just one unit.

- It should also be remembered that teachers' knowledge, qualification, sensitivity, and the level of consciousness about pedagogy and environment is an important factor affecting the quality of education.

- In elementary education curriculum, environmental problems are not discussed from philosophical and moral view and the conflict between human and nature are portrayed at the level of destruction and pollution. For this reason, it is difficult to develop environmental consciousness of students with this kind of content.

- When the elementary education curriculum is examined in Turkey, it is seen that it is a very positive condition for students to study environmental problems at the local and global level. However, as it was stated above, environmental issues are examined in respect to environmental problems and the philosophical and ethical dimensions of environmental problems are not examined. Another problem is to determine at what level students learn these issues. Moreover, information should be given such a way that student should be able to create and develop environmental consciousness. For this reason, these topics should be given by making connection with current events and by using audio-visual means. Also student should be given opportunities to practice in their own environment what they are learning in the classroom.

- There should be activities to increase environmental sensitivity and awareness of students in all courses in the curriculum. The activities that are done in schools and out side of schools such as like the poetry and picture contests, nature walking and picnics, planting trees and preventing erosion from spreading, sports, and knowledge contests should be done to increase environmental consciousness and sensitivity of children. Especially, there should be appropriate curriculum for environmental education and teachers having environmental training in order to increase the quality of activities in classrooms. If teachers have insufficient knowledge and attitudes about environment they cannot create a suitable learning environment for environmental education.

In conclusion, in order to live in a healthier, cleaner, and happier world, perception of education and teaching should be changed. Moreover, students' perception of nature and the world should be changed along with the relationships between individual and environment. The culture, esthetic, rights, and moral values about environment should be supported by curriculum, courses, and the examples given in classrooms. In short, environmental education should be supported by all teaching activities. The earth and country, humanity, and nature consciousness level of students and youth should be increased.

REFERENCES

- ALBROW, M (1996) *The Global Age*, Cambridge: Polity Press.
- ATASOY, E (2006) *Çevre İçin Eğitim Çocuk Doğa Etkileşimi*, Bursa: Ezgi Yayınevi.
- AYVAZ, Z. (1998) *Çevre Eğitiminde Temel Kavramlar El Kitabı*, İzmir: Çevre Koruma ve Araştırma Vakfı Çevre Eğitim Merkezi.
- BROOKS, J. G. & BROOKS, M. G. (1993) *The Case for Constructivist Classrooms*, Association for Supervision and Curriculum Development, Alexandria VA.
- BROWN, T. (1999) "Challenging Globalization as Discourse and Phenomenon". *International Journal of Lifelong Education*, vol. 18, iss. 1, pp. 3-17.

- DOĞAN, M. (1997) *Türkiye Ulusal Çevre Stratejisi ve Eylem Planı, Eğitim ve Katılım Grubu Raporu*, Ankara: DPT Müstesarlığı ve Türkiye Çevre Vakfı.
- DÜREN, Z. (2001) *2000'li Yıllarda Yönetim*, İstanbul: Alfa Yayıncılık.
- GERAY, C. (1997) "Çevre İçin Eğitim", *İnsan, Çevre, Toplum*, ss. 332- 344, Ankara: İmge Yayınları.
- GIDDENS, A. (1990) *The Consequence of Modernity*, Cambridge: Polity Press.
- GREEN, A. (1999) "Education and Globalization in Europe and East Asia: Convergent and Divergent Trends". *Journal of Educational Policy*, vol. 14, iss 1, pp. 55-71.
- KAPLAN, A. (1999) *Küresel Çevre Sorunları ve Politikaları*, Ankara: Mülkiyeliler Birliği Vakfı.
- KARABAG, S. (2006) *Mekanın Siyasallaşması*, Ankara: Gazi Yayınevi.
- KARIP, E. (2005) "Küreselleşme ve Lizbon Eğitim 2010 Hedefleri". *Kuram ve Uygulamada Eğitim Yönetim*, . vol. 11, iss. 42, pp. 195-209.
- KELLNER, D. (1998) "Globalisation and Postmodern Turn", *Globalisation and Europe: Theoretical and Emprical Investigations* pp.23-42, London: Pinter.
- KOSTOVA, Z., (2003) *Kontseptualizatsiya na Ekologinoto Obrazovanie, (Conceptualization of Environmental education)*, Sofiya: İzdatelstvo Faber.
- Milli Eğitim Bakanlığı (MEB) (2005a) *İlköğretim 1-5. Sınıf Programları Tanıtım El Kitabı*, Ankara: Devlet Kitapları Müdürlüğü Basımevi.
- Milli Eğitim Bakanlığı (MEB) (2005b) *İlköğretim Sosyal Bilgiler Dersi Öğretim Programı ve Kılavuzu 1-5. Sınıflar*, Ankara: Devlet Kitapları Müdürlüğü Basımevi.
- Milli Eğitim Bakanlığı (MEB) (2005c) *İlköğretim Sosyal Bilgiler Dersi Öğretim Programı ve Kılavuzu 6-7-8. Sınıflar*, Ankara: Devlet Kitapları Müdürlüğü Basımevi.
- Milli Eğitim Bakanlığı (MEB) (2005d) *İlköğretim Fen ve Teknoloji Dersi Öğretim Programı ve Kılavuzu 1-5. Sınıflar*, Ankara: Devlet Kitapları Müdürlüğü Basımevi.
- Milli Eğitim Bakanlığı (MEB) (2005e) *İlköğretim Fen Ve Teknoloji Dersi Öğretim Programı ve Kılavuzu 6-7-8. Sınıflar*, Ankara: Devlet Kitapları Müdürlüğü Basımevi.
- MARLOWE, A. B. & PAGE, L. M. (1998) *Creating and Sustaining The Constructivist Classroom*. Thousand Oaks: Corwin Press
- MORİN, E., (2003) *Geleceğin Eğitimi İçin Gerekli Yedi Bilgi*, trans. by. H. Dilli, İstanbul: Bilgi Üniversitesi.
- NAISBITT, J. (1994) *Global Paradox: The Bigger the World Economy, the More Powerful Its Smallest Players*, New York: W. Morrow.
- Resmi Gazete (24. 06. 1973) Milli Eğitim Temel Kanunu, Law Number: 14574.
- Resmi Gazete (24. 07. 2003) Avrupa Birliği Müktesebatının Üstlenilmesine İlişkin Türkiye Ulusal Programı, Law Number: 25178.
- ROBERTSON, R (1992) *Globalisation: Social Theory and Global Culture*, London: Sage.
- TOPSAKAL, C. & Hesapçioğlu, M. (2001) "Avrupa Birliği ve Eğitim", *Kuram ve Uygulamada Eğitim Bilimleri*, vol. 1, iss. 2, pp.441-462.
- YURDABAKAN, İ. (2002) "Küreselleşme Konusundaki Yaklaşımlar ve Eğitim", *Eğitim Araştırmaları*,. vol. 1, iss. 6, pp.60-64.