CHILDREN and THE ENVIRONMENT: CREATING ENVIRONMENTAL AWARENESS AMONG PRESCHOOL CHILDREN

ÇOCUK VE ÇEVRE: OKUL ÖNÇESİ ÇOCUKLAR ARASINDA ÇEVRE BİLİNCİ OLUŞTURMA

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ABSTRACT: Environmental conditions on earth are rapidly deteriorating due to human impact. Young generations need to be educated who will be capable of dealing with the problems of the future. Creating environmental awareness has become a necessity so that people will live in a healthier and safer environment. Environmental education in early years is important since children are our future. Providing children with the attitudes, values, information and skills that are required for the creation of a healthy and sustainable future is among the most important duties of society (Davis, 1998). Preschool education plays a very important role in the development of children’s attitudes and behaviors towards the environment. Studies show that information about and attitudes towards the environment begin to take shape in the preschool period, and that environmental awareness acquired in preschool years is an important determinant of positive attitudes towards the environment in the future (Smith, 2001). Even though studies to provide preschool children with environmental training have shown increased in Turkey, in recent years, but there are still some spaces in this research area.

Key Word: Preschool period, environmental education, importance of environmental education


Anahtar Sözcükler: Okul öncesi dönem, çevre eğitimi, çevre eğitiminin önemi.

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INTRODUCTION

Preschool education, which is the first step in the education of children, spans the period from the birth of the child to the start of elementary education and plays a very important role in their future lives; it is in this period that most of the psycho-motor, psycho-social, mental and linguistic development takes place. The personality is developed due to children’s experiences constantly changing during these years (Aral, Kandır and Yaşar, 2002). John Dewey believes that children learn best by doing and by experiencing (Mooney, 2000). Montessori claims that a well-designed environment that offers concrete experiences to children makes high level learning possible (Sueck, 1991, cited by Kıldan and Pektaş, 2009). Montessori proposed that schools with gardens, fields, and animals be established, so that they could offer the following to children:

a. Observing the development of living beings: the child observes the development of plants and animals which he/she takes care of. In the process of observation the interest, attention and care elicited in children to plants and animals increases.

b. Learning how to be patient and to wait: this personality trait or philosophy of life is best nurtured by observing the slow germination of a seed planted in the soil.

c. Having empathy towards and confidence in nature and life: a child who takes care of plants and animals comes to feel love and trust in things that are alive.

d. Developing insight and self education: observing the growing of the plant he/she seeded depends on his/her care and that animals expect food from him/her, the child comes to understand that he/she has some duties in life. In addition, because the child will do all of these voluntarily, and not because the teacher asked of him/her, he/she will develop an ability to self efficacy in taking responsibility (Akyüz, 1979).

The rapid growth of population on earth, industrialization, urbanization and advancements in technology result in excessive use of natural and physical resources. This leads to the pollution and destruction of soil, forests, rivers, lakes, sea and air, which are vital for the survival of human beings.

The environment can be defined as the external context in which all living beings interact with one another throughout their lives (Başal, 2005). Environmental awareness consists of certain dimensions of environmental information which are defined as follows: Environmental Information: information about environmental problems, solutions to these problems, ecological developments and nature in general. Attitudes towards the Environment: all positive or negative attitudes and opinions concerning environmentally beneficial behavior, such as fear, anger, unrest and value judgments towards environmental problems, and readiness for the solution of environmental problems. Environmentally Beneficial Behaviors: actual behaviors displayed with the purpose of protecting the environment (Erten, 2002).

According to Basile (2000), environmental information and attitudes towards the environment are shaped very early in life. Environmental education activities participated in
through these years makes it possible for children to develop positive attitudes towards the environment in the future (Wilson, 1996). For these activities to be successful a number of criteria need to be met. One of these criteria is the curriculum of the educational program followed. The program in question should not be subject-focused; it needs to be flexible and the developmental characteristics of the target age group need to be taken into consideration. One factor that supports the idea of preschool environmental education is a change in the living conditions of a great number of people. Urban children have less of an opportunity to come into contact with nature, compared to children in rural areas. They spend most of their time indoors at their school, study centers, doing homework, commuting, in front of the TV/computer screens, or playing with technological toys. They learn about nature through plastic toys, cartoons, documentaries on wild life, encyclopedias, newspapers and other media. They spend their free time in children’s parks squeezed into tiny plots of land. This state of affairs puts today’s children at a great risk of failing to develop positive values and attitudes towards the environment (Oluk, 2008).

Learning new things about the environment makes a positive impact on children’s values and attitudes towards the environment. In addition, the information a child acquires from sensory experiences and from individual activities contributes to the formation of appropriate behavior concerning the environment. Internalization of environmentally appropriate behavior, on the other hand, should help change the values and attitudes of a child towards the environment; as he/she comes to know more, the child’s opinions on the environment also change, and as he/she develops an environmental awareness, his/her environment related values and attitudes are also changed. To raise environmental awareness, teachers need to provide information on the environment, help children observe the environment, provide sufficient and appropriate material on the environment, display encouraging behavior, reflect on the results of various activities engaged in and provide feedback on their values and attitudes towards the environment (Rudolph, 2001, cited by Şimşekli, 2001).

Environmental education is necessary for a sustainable future (Brynjegard, 2001). Environmental education aims to develop a world population that is aware of and concerned about the environment and its associated problems. Appropriate education helps children to acquire knowledge, skills, motivations and show commitment to work individually and collectively towards a solution to current problems and the prevention of new ones (Adkins and Simmons, 2002). Environmental education starts in the family and continues within the peer group and at school (Fegebank, 1990, cited by Başal, 2005). Parents are expected to be role models for their children by displaying environmentally friendly behavior. Planting seeds, sorting garbage and being kind to animals are some of the behaviors that would help develop a love of the environment in children (Wilson, 1993).

To inform the society about the environment and environmental education and to create environmental awareness, it is necessary to modify behavior change among individuals (Gayford, 1996; Kuhlemeyer, Bergh and Lagerweij, 1999). Considering the scale of the environmental problems we currently face and are likely to face in the future, every little step
to create environmental awareness and environmental sensitivity counts. Thus, environmental education needs to be given due attention and environmental education programs need to be prepared with due care and diligence. In particular, environmental education needs to be started in the preschool period (Altn and Oruç, 2008).

The idea of preschool environmental education was first voiced in 1982 by Jaus (Russo, 2001). There are two important reasons for starting environmental education in preschool years. First; in the first few years of life, there is a greater chance of showing respect and develop awareness about the environment; if education starts late, there is a greater risk that such attitudes will not develop at all. Second; environmental education and a positive interaction with the natural environment are important components of a healthy character development of a child. Such interaction with the environment contributes to the positive behavior and quality of life of an individual. Children who are close to nature tend to develop an interest in things, to be surprised, delighted, and at times to be afraid. Another idea that supports environmental education in early childhood is that children need nature for a healthy interaction with the natural world. People need to interact with nature not only to meet their physical needs, but for psychological and emotional reasons as well (Wilson, 1996).

There are three approaches to preschool environmental education (National Curriculum Council, 1990). The first approach is a) education in the environment is necessary for a high quality preschool education program. It consists of direct experience with nature and aims to help children develop positive emotions and attitudes towards nature and its components. Children get an opportunity to do basic things like walking outdoors, exploring nature, playing with water, mud and sand, collecting dry and fallen leaves, making nests for birds, and growing vegetables, and thus develop an awareness about nature. The second approach; b) education about the environment aims both to help children understand how natural systems work and how complex they are, to show how intricately they are interconnected with human life. Children learn about simple ecological principles and basic concepts like the water cycle, oxygen cycle, recycling, how vegetables grow, and why fresh water resources are vital for life on earth. In addition, children looking after pets have been found to contribute to their awareness about the environment and about various habitats (Myers, Saunders and Garrett, 2004). The third and final approach; c) education for the environment includes measures to be taken against environmental problems. Being in natural environments contributes to the cognitive development of children and improves their awareness, reasoning and observation skills, and children who play in nature develop positive emotions about each other (White, 2006).

Countries that take a responsibility for creating awareness and sensitivity towards the environment in their citizens started to take action in 1970s. The concept of environmental education gained momentum following the 1972 United Nations conference in Stockholm. The comprehensive view called “Agenda 21” was accepted by 175 countries in the first United Nations Earth Summit in 1992 (Talero, 2004). Similarly, the UNESCO 1977 declaration stated that “environmental education should be integrated into the whole system
of formal education at all levels starting with the preschool period” (Kahriman and Karaarslan, 2010).

The cooperation protocol signed on October 14, 1999, between the Ministry of Environment and the Ministry of National Education in Turkey was an important step for providing applied education in selected schools on: a) the protection of the environment, b) pollution prevention, c) positive consumption habits, d) segregation of recyclable waste at source, and e) recycling (Şimşekli, 2001).

The 4th Environmental Council, convened in 2000 by the Ministry of Education in Izmir, underlined the lack of sufficient environmental education in Turkey. The Commission on “Environmental Education, Public Awareness and Public Participation” recommended the development of activities (applied education), in cooperation with the Ministry of National Education, to create positive attitudes and behaviors towards the environment among preschool children and the preparation of appropriate educational materials (Çevre ve İnsan, 2001, cited by Şimşekli, 2001), and underlined the need for cooperation with the Ministry for the Environment and voluntary organizations on these issues (Tubitak, 2006). There is an effort to make preschool environmental education more attractive for children by securing the participation and support of voluntary organizations. In this context, The Turkish Foundation for Combating Soil Erosion, for Reforestation and the Protection of Natural Habitats, TEMA, ran a “Little Hands in Soil” project as part of a preschool environmental education program, and the applied environmental education project “This is My Earth” was run in cooperation with the Ministry for the Environment and Forests. In addition, a project titled “Tipitop and his friends are learning about the earth” named after a famous cartoon character, prepared in cooperation by Pamukkale University and TÜBİTAK (The Scientific and Technological Research Council of Turkey) aimed to introduce preschool children aged 5 to 6 to earth and earth related concepts.

Unfortunately, Turkey does not have a comprehensive preschool environmental education program. The environment is one topic, among many others, usually only covered on special occasions. The MNA’s (Ministry of National Education) Preschool Education Program provides few goals, gains, concepts, on special days concerning the environment (Gülay and Ekici, 2010).

In a comparative study of preschool environmental education practices, MNA’s (2002) “Preschool Education Program” was compared with preschool education programs in the US, Canada, Switzerland, Germany and Japan. If Germany, which had the greatest amount of teaching time devoted to environmental education activities, were to be assigned a score of 100.0 % for environmental education, Switzerland would receive 37.0 %, Japan would receive 22.0 %, Canada would receive 19.0 %, the US would receive 14.0 %, and Turkey would receive 23.0 % (Akçay, 2006).
CONCLUSION and SUGGESTIONS

The main purpose of environmental education is to give every individual the opportunity to express a personal attitude, responsibility towards the environment he/she lives in. For children in contact with nature involve a listen, feel, taste, and take a part while exploring everything in their environment (Louv, 2008; Seefeldt, 2005). Here are some ways to promote environmental education is presented below at preschool period:

In the preschool period, environmentally beneficial behaviors that can be taught to children are collecting toys, keeping rooms tidy and collecting personal belongings and other objects in the daycare facility and putting them where they belong (Günindi, 2010). In day care and preschool education facilities, children can be taught about the environment using dramatization, games, experiments, short stories and cartoons. Another educational tool that can be used to provide information and bring about effective behavior change among preschool children is the television. TV programs can be very successful in drawing the attention of children with the visual color, movements and audio they provide, and can be used very effectively in the preschool period for educational purposes (İleri, 1998).

Environmental issues like energy and water consumption, pollution, preservation of plants and animals and recycling need to be integrated in early childhood education programs (Schultz, 2002).

Talking about the environment is another way of teaching children about the environment. How do we make use of the environment at home and at school? What are the different forms of energy and how are they used in daily life? What are the sources of energy and how is it consumed? These questions and others on the environment can be discussed at school with the participation of the children. Books on animals, plants and the earth can be recommended. Children can be encouraged to assume responsibility for taking care of pets around them. Speakers can be invited from local organizations to talk about issues like natural pet care (Russo, 2001).

In the preschool period, interacting with the environment is very important for the development of positive attitudes and practices (Smith, 2001). Preschool environmental education programs can be held at many different venues, including day care facilities, nurseries, nature museums, zoos, schoolyards, home gardens and picnics. No special school, technology, museum or specially built environment is needed for environmental education. The only thing teachers and care takers need to do is to give children an opportunity to freely and directly interact with nature. The form and the level of interaction with nature may greatly vary as well: a plant in a pot, fruits and vegetables we eat, a bird’s nest in the schoolyard, a spider’s web… all of these can be perfect starting points from which to explore nature. Nature walks, zoo visits, visits to botanical gardens, observation of living organisms in natural water ponds and lakes can also be perfect starting points (Ayvaz et al., 1998).
Parachutes, paper airplanes, wind chimes, kites, bubbles and straw painting can help children grasp the notion that air is real (Smith, 2001).

Natural sounds are sounds that exist in nature (the sound of water flow, thunder, and animal sounds and so on). Social sounds, on the other hand, are sounds that are created by the reactions of people to events and situations around them (talking, crying and laughter). Creating music is a very effective instrument to bring about environmental awareness among children as well. Pupils should be allowed to copy natural sounds around them, and animal sounds, which are part of the natural environment. Another method is building rhythm instruments out of waste material. Using various waste materials, students can prepare rhythm instruments, for example a maracas by placing sand, rocks, rice, beans or pieces of glass in a bottle. Bongos can be made out of tin boxes, and small trumpets out of plastic yoghurt containers. Making these instruments, students not only develop an environmental awareness, they also improve their manual skills and creative powers (Sungurtekin, 2001).

Although environmental education is a very important aspect of preschool education programs, the actual theoretical and practical education conveyed is not sufficient in many cases. Yet, children have an idea about living creatures they encounter from an early age onwards. They can differentiate the living from the artificial or the inanimate and know about the distinctive characteristics of living things like feeding, natural growth, aging and healing (Myers, Saunders and Garrett, 2004).

To summarize; children should be allowed to explore the natural world by themselves and through their own experiences. Teachers should organize educational activities in various non-school natural environments (parks, gardens and so on), and make use of these as major components of environmental education. Teachers can also contribute to the development of environmental information and awareness among children by identifying and supporting their interest in natural things (Doğan, 2007; Phenice and Griffore, 2003). In countries where most of the population is young, like Turkey (average age 19), measures for the protection of the environment can be applied only if the young population have a strong awareness about the environment and environment related issues (İleri, 1998).

REFERENCES


GENİŞ ÖZET

Dünyadaki hızlı nüfus artışı, sanayileşme, kentleşme ve gelişen teknoloji ile birlikte doğal ve fiziksel kaynakların aşırı derecede kullanılması nedeniyle, toprak, orman, nehir, göl, deniz ve hava gibi insan yaşamı için hayatı öneme sahip unsurların kirlenmesi ve tahribatı her geçen gün artmaktadır.


Çevreye Bilgisi: Çevreye ait sorunlar, bu sorunlara aranan çözüm yolları, ekolojik alandaki gelişmeler ve doğa hakkındaki tüm bilgiler ve doğa hakkındaki tüm bilgiler demektir.

Çevreye Yönelik Tutumlar: Çevre sorunlarından kaynaklı korkular, kızgınlıklar, huzursuzluklar, değer yargıları ve çevre sorunlarının çözümüne hazırlıksız gibi kişilerin çevreye yararlı davranışlara olan olumlu veya olumsuz tavır ve düşüncelerinin hepsidir.

Çevreye Yararlı Davranışlar: Çevre duygusunun için gösterilen gerçek davranışlardır (Erten, 2002).


Okul öncesi yıllarda çevre eğitimi iki büyük gerekçeye dayanmaktadır. İlk olarak yaşamanın ilk birkaç yılında doğal çevre için saygı ve bakım duygusunu geliştirmek gerekir ya da asla böyle bir tutum geliştirilememe riski vardır (Stapp, 1978; Tilbury, 1994; Wilson, 1994). İkinci olarak en çocukluktağın çevresi eğitimi doğal çevrede olumlu etkileşimin sağlıklı çocuk gelişiminin önemli bir parçası olduğu temeline dayalıdır (Carson, 1956; Cobb, 1977; Crompton ve Sellar, 1981; Miles, 1986/87; Patridge, 1984; Sebba, 1991; Wilson, 1994) ve bu tür etkileşimler kişinin hayatı halindeki öğrenme ve yaşam kalitesini artırır (Wilson, 1994). Doğaya yakının olan çocuklar merak, sevinç ve korku kaynağı olarak ilgi gösterme eğilimindedir. Erken yaştağı çevre eğitimi destekleyen bir diğer görüş ise; çocukların doğaya ihtiyaç duydukları ve sağlıklı çocuk gelişiminin doğal çevreye olan sağlıca bir

Türkiye gibi genç nüfusun (yaş ortalaması 19) toplumun çoğunun oluşturduğu ülkelerde çevre korumaya yönelik önlemlerin uygulanabilmesi ancak genç nüfusun çevre konularındaki bilincin yüksek olması ile mümkündür (İleri, 1998). Ne yazık ki Türkiye’dede okul öncesi eğitimde çevre eğitimiyle ilgili yerleşik bir program bulunmaktadır. Ancak belirli gün veya haftalarda çevre konusu işlemektedir. MEB Okul Öncesi Eğitim Programı genel olarak incelemiştir, çevre eğitimine yönelik amaç, kazanım, kavram ve belirli günhaftaların düşük düzeylerde yer aldığı görülmektedir (Gülay ve Ekici, 2010).

Okul öncesi eğitim programındaki uygulamalar açısından ülkeler arasında karşılaştırının yapıldığı bir araştırımda, Kanada, Amerika, İsviçre, Almanya ve Japonya da uygulanan okul öncesi eğitim programları ile MEB (2002) “Okul Öncesi Eğitim Programı” incelenmiştir. Çalışmada yer alan ülkelerin okul öncesi eğitim programına göre etkinliklerinin yüzdesi değerlendirildiğinde, Almanya’nın okul öncesi eğitim programındaki çevre eğitimi etkinlik yüzdesinin %100.0; İsviçre’nin okul öncesi eğitim programındaki çevre eğitimi etkinlik yüzdesinin %37.0; Japonya’nın programındaki etkinlik yüzdesinin %22.0; Kanada’nın programındaki etkinlik yüzdesinin %19.0; Amerika’nın etkinlik yüzdesinin %14.0 ve Türkiye’nin etkinlik yüzdesinin %23.0 olduğu belirtilmiştir (Akçay, 2006).

Okul öncesi dönemde çevre eğitimi teşvik etmek için bazı yollar aşağıda sunulmuştur. Erken çocuklukta, enerji ve su tüketimi, kirlilik sorunları, hayvan ve bitkilerin korunması ve geri dönüşümü sağlanmak gibi çevre sorunlarının erken çocukluk eğitimi programlarıyla bütünleştirilmesi uygun olacaktır (Schultz, 2002).


Doğal sesler, doğada var olan seslerdir (su şırıltısı, gök gürültüsü, hayvan sesleri vb.). Toplumsal sesler, insanların olaylar karşısında verdiği tepkilerden doğan seslerdir (konuşmalar, ağlama, gülmeler vb.). Çocuklarda çevre bilincinin yerleşmesinde müzik, çok etkili bir araç konumundadır. Öğrenciler çevrelerinde duyguluklara doğa olaylarının seslerini, çevremizin bir parçası olan hayvan seslerini taklit etme olanağı tanınmalıdır. Bir başka yöntem atık malzemelerden ritim çalşısı yapmaktadır. Öğrenciler değişik atık malzemeler