

## Environmental Education in the Context of Child's Interaction with Nature According to Maria Montessori

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**ABSTRACT** This paper addresses the ideas of Maria Montessori (1870-1952), Italian educator who established the most widespread educational method of the world, in relation to environmental education in the context of child-nature interaction as well as the practices applied within the framework of these ideas. The paper is composed of two parts. The first part includes the ideas of Montessori about child-nature interaction and information on how such interaction takes place in Montessori schools. The second part of the paper comprises of the ideas of Montessori about environmental education and information on the practices applied within the framework of environmental education. Therefore, the paper includes information on both theory and practice. In the consequence of the paper, it was observed that Montessori attributed great importance to human contact with nature and that her method laid emphasis on this idea.

### 1. INTRODUCTION

Maria Montessori was born in Italy in 1870. Despite the reaction of her parents and disapproval of the university community, she insisted and enrolled in the Medical Faculty of Roma University and obtained her diploma in 1906. In this way, she became the first female doctor of medicine in Italy (Pignatari 1967). Starting her career as an assistant doctor, Montessori also carried out special research and studies in the meanwhile. In time, Montessori decided to focus on method of education and abandoned her position in the university. Hereby she dealt with the education of children throughout her life. Montessori decided to put into practice the naturalist conception introduced into pedagogy by the French thinker Jean Jacques Rousseau (1712-1778), and she opened the first "Children's House" (Casa dei Bambini) for children aged between 3 and 6 in San Lorenzo, which was located on the outskirts of Roma, in 1907 (Pollard 1996).

In this school, Montessori helped the neglected children, which resulted in their learning in a

short time. The children in this school were observed to do every task joyfully. As the time went by some important personalities started to visit this "Children's House". The admiration of the visitors paved the way for the opening of other nursery schools in a short time (Schafer 2006). With the courage she gained through her successes, Montessori opened the second "Children's House" in San Lorenzo. The third house was opened in Milano in 1908 and the fourth one was opened in Roma in 1909. Thus the works of Montessori went beyond special works of a doctor of medicine in the field of education, and they became a stream in their own right (Pollard 1996).

In the education done with the Montessori Method, the children are quite active. As the children feel free in the environment shaped with democracy, they are in contact with the materials directly (Lillard, 2013b). However, with the Fascist leader Mussolini's coming to the government, some freedoms were restricted. By closing down all democratic institutions in Italy in this period, Mussolini aimed to represent the state through the Fascist Party (Armaoglu 1983). Mussolini also closed down Montessori schools for the same reason. Montessori decided to go abroad at this time; so she had the chance to present her method in many countries. In a short time, Montessori Method became the most widespread educational method of the world as a result of Montessori's long-term visits to various countries including the Netherlands, Spain, and India (Wilbrant 2014).

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## 2. CHILD-NATURE INTERACTION IN MONTESSORI APPROACH

After a child comes into the world, he/she grows up and becomes one part of the environment. In this way, the child develops a specific personality by also being affected by the environment. However, the important thing is the development of child's personality in compliance with his/her nature. Otherwise, the child may have some personality disorders. Considering personality disorders as deviations from normality, Montessori puts forward a philosophy that attracts attention to such threats. According to her view, a child develops in the best way by coming into contact with the nature. Therefore child-nature interaction must be ensured.

### 2.1. Child-Nature Interaction in Montessori Philosophy

Emphasizing the importance of human contact with the nature, Montessori alleges that the child is born in such a way to meet this basic need. According to her, child loves the nature. Therefore, children get pleasure from moving and grasping objects (De Santis 1953). Motivated by this idea, Montessori (1953) describes education as assisting the child's natural development. Montessori thinks that the nature first creates the things and then develops them thanks to its own functions; within the framework of this principle, she considers the nature as a director. As everything is dependent on the nature, we must obey the commands of the nature.

According to Montessori (1953), the first instinct given by the nature to the child is to act on his/her own without anyone's assistance. Born with this instinct, the child attempts to protect himself/herself from those people who want to help him/her. However, failing to protect himself/herself due to such interventions, the child may give up trying to act on his/her own after a certain period. So the child's tendency to be independent may be eliminated. Children who become distant to the nature in this way may face a different educational problem.

The roots of Montessori's educational perception, which takes the child's instincts as the basis, rely on the ideas of French thinker Jean Jacques Rousseau (1712- 1778). Considering the child as the center, Rousseau aims to bring up his natural person, i.e. the person that lives in

compliance with the nature (Bal 1991). Like her predecessor, Montessori (1953) also emphasizes the importance of nature for humans. According to her, the nature does not abandon the child who becomes independent once born. The nature provides the newborn child with an instinct to adopt the environment he/she has confronted. So the child starts to act with the psychology of seizing the world. In this context, it is the nature that gives the child the instinct to work.

It can be seen that Rousseau and Montessori follow the same line in terms of the values they attribute to the human interaction with the nature. Both thinkers suggest that the education must serve to this purpose. For the people that have managed to do this, Montessori uses the term "nature's people", and she provides information about the qualities of the nature's person.

According to Montessori (1932), the "nature's person" is the one that interacts with the nature, and in other words, that acts in accordance with the laws of the nature. The most basic instinct of such person is to work. We notice this instinct especially while observing the children because children work without being tired. And this shows us that human-beings are born to work. Motivated by this idea, Montessori emphasizes that it is a very dangerous initiative to prevent children from working. For her, such an attempt is similar to taking a plant out of the soil (Lillard 2013a). The contact of the plant with the nature is cut down when it is taken out of soil. Similarly, the child's contact with the nature is eliminated when the child is prevented from working. Montessori alleges that children in such situations cannot develop a personality that is specific to their being.

In addition to being hardworking, the "nature's person" is also quite disciplined, patient, consistent and coherent. Montessori (1950) thinks that these characteristics are acquired as a result of being hardworking. For him, children who have activated their instinct to work and make continuous efforts are well-disciplined. Such children are purified from all bad habits such as instability, laziness, being rebellious and falsehood. The child complies with the nature by moving. However, these movements must not be irregular, but they must be oriented towards a target. Movements that are performed for working are oriented towards a certain target. Within this framework, Montessori suggests that a person's performance of regular movements indi-

cates his/her coming into contact with the nature. According to her, there is always a tendency towards perfection in the nature. Everything in the nature changes by moving. Also the humans can reach perfection only by moving. Human's being free means his/her being perfect. A person that works protects his/her freedom by becoming compliant with the nature at the same time. In this context, laziness is a sign of person's in-compliance with the nature according to Montessori philosophy. Montessori put forward her method within the framework of this perception by taking the "instinct to work" as the basis.

## **2.2. Child-Nature Interaction in Montessori Schools**

Rousseau is the pioneer of "self education", one of the educational principles of Montessori. Attributing importance to contact with the nature, Rousseau emphasizes that adults have a preventive influence that may deform the natural tendencies of the children, and he thinks that the best behavior towards children is to leave them by themselves (Pignatari 1967). Rousseau (2008) emphasizes that children get alienated from naturalness due to wrong behaviors of their parents, and he alleges that those children who are not alienated from naturalness do not want something without a reason. Therefore children must be able to move freely and whenever they want.

The educational environment of Montessori School, which was shaped by the idea of Rousseau, was designed in such a way to allow children to move independently. Children can move the furnishings, which are located in the environment in compliance with their nature, in the way they want. In this environment, children are allowed and able to take any materials from the cupboards, which are designed in accordance with their height, and they can perform works with them wherever they want. If the children find it necessary, they can also work on a carpet, which they can lay on wherever they want (Topbas 2004). All the materials in the environment are compliant with the height of the children, and they are genuine. Even the materials such as oven, knife and iron are not different from the ones used in real life. Such materials show that Montessori Method put an emphasis on reality and on the nature in relation with the reality (Lillard 2013a). Therefore, children in Montessori School have the opportunity to face the realities at early

ages even though it can be risky for them. For this purpose, no fake material is accepted in the educational environment of Montessori.

Another element of Montessori Method that is closely connected with the emphasis on the nature is the beauty of the environment that encourages positive reaction. Montessori considers beauty not as an external contribution to the developing child, but as a positive necessity. Her educational environment which is shaped by this idea should be elaborate and attractive (Lillard 2013a).

The colors, brightness and shapes of the materials in Montessori School should be compliant with each other. Everything in the environment has the features to attract the attention of the child. For example, bright and light-colored tables give the children a feeling that they should use them attentively. The attractiveness of the materials in the environment causes the children to have interest in the environment and to use them attentively and carefully (Montessori 1950).

The importance attributed to the nature is clearly observed in Montessori environment, and it is one of the first qualities to be noticed. The emphasis on the nature in Montessori Method is not limited to the educational environment. The best emphasis on the nature is made in the practices of environmental education.

## **3. ENVIRONMENTAL EDUCATION ON MONTESSORI SYSTEM**

Montessori Method awakens children's love for environment and this awakening also includes the protection of the environment; so environmental protection by itself is one of the basic elements of Montessori education. Therefore, this fact eliminates the necessity for another lesson (Wilbrant 2014). However, Montessori system has various lessons aiming to raise awareness about the environment.

Botany, geography and zoology are the lessons that lead children to establish a conscious relation with the nature. On the other hand, these lessons constitute an inseparable part of Montessori Method. Most of the six-year-old children that have got education through this method have more knowledge about the classification of plants and care for living creatures than an average adult does. Considering this fact, it can be suggested that the children in Montessori

schools are sufficiently prepared to be ecologically responsible adults (Lillard 2013a).

Furthermore, Montessori system includes practical trainings aiming to create awareness about environmental protection and to provide environmental consciousness. Significant part of such trainings is carried out in the schoolyard. This means that Montessori system also includes outdoor education.

Education for environmental care includes such works as cleaning the surroundings, collecting fruits from trees, feeding animals, etc. Especially 5 and 6-year-old children deal with gardening (Montessori 1970). Montessori mentions the acquisitions of the children that have been engaged in such works. Some of these acquisitions are related to environmental education.

According to Montessori, as the child has growing interest in observing the development of the plants and animals he/she has been dealing with, his/her consciousness about such plants and animals also increase. In this way, child's love for the nature and living creatures also increases (Akyuz 1979).

### CONCLUSION

According to the research of Montessori, who took the needs of the children as the basis, the best way for the development of children is their getting into contact with the nature. And Montessori Method which is based upon the findings of her research was designed in such a way to enable the child to establish a relation with the nature. The aim is to educate children and to increase their environmental consciousness.

It is known that today's people are alienated from the nature. Especially the ties of the children with the nature are getting increasingly weaker, and they are becoming dependent on technological elements such as television and the Internet. It is known that technology-addicted children do not have a personality that is suitable for their nature. Considering this fact, it is clear that the need for Montessori Method has increased even more today. The ideas of Montessori support this suggestion. The basic reason for her to develop an original method in the field of education was her idea that despite the miraculous development of the environment along with the developing technology, the human existence cannot accommodate to this development.

### RECOMMENDATIONS

It is possible to give some recommendations at the end of this paper which discusses natural education in the frame of the Montessori Method. These recommendations for researchers and practitioners can be listed as below.

Some quantitative researches can be done about the effectiveness of Montessori's natural education.

Natural education done in the frame of Montessori Method can be adapted to other educational institutions apart from Montessori Schools.

Some researches can be done dealing with the problems appearing during the natural education process of Montessori Method.

Before and after natural education of Montessori Method, some studies can be conducted about children's and teacher's understandings of nature.

### LIMITATIONS

This paper is not about the effectiveness of natural education done in the frame of Montessori Method. Montessori's original works are used as references in this paper. As this paper is basically in the form of literature review based on historical research, it is limited to them rather than recent works.

### REFERENCES

- Akyuz Y 1979. Egitimde Cocuk- Doga ve Cevre Korunmasi Iliskileri. *Ankara Universitesi Egitim Bilimleri Fakultesi*, 12: 85- 96.
- Armaoglu F 1983. 20. *Yuzuil Siyasi Tarihi 1914- 1980*. Ankara:Turkiye Is Bankasi Bal H 1991. *J Dewey'in Egitim Felsefesi*. Istanbul: Aydinlar Matbaa.
- De Santis T 1953. *L'Autoeducazione Nella Concezione Montessori E Nella Pratica* Lillard PP 2013a. *Montessori Modern Bir Yaklasim*. (Cev: Okhan Gunduz).Istanbul: Kaknus Yayinlari.
- Lillard PP 2013b. Playful learning and montessori education. *American Journal of Play*, 5: 157- 186.
- Montessori M 1932. *Educazione e Pace*. Ginevre: Bureau International D'Education.
- Montessori M 1950. *La Scoperta Del Bambino*. Roma: Garzanti.
- Montessori M 1953. *La Mente Del Bambino*. Roma: Officine Grafiche Aldo Garzanti.
- Montessori M 1970. *Manuale Di Pedagogia Scientifica*. Firenze: Giunti.
- Pignatari M 1967. *Maria Montessori*. Roma: Comitato Italiano Dell'Omep.
- Pollard M 1996. *Maria Montessori*. (Cev: Leyla Onat). Ankara: Ilkkaynak Kultur ve Sanat Urunleri.

- Rousseau JJ 2008. *Emile/ Bir Cocuk Buyuyor*. (Cev: Ulku Akagunduz). Istanbul: Selis Kitaplari.
- Schafer C 2006. *Omur Torpusu mu Bal Kupu mu?* (Cev: Ceyda Aydin). Istanbul: Sistem Yayincilik.
- Topbas E 2004. *Montessori Yontemi ile Cocuk Egitimi*. Ankara: Tekagac Eylul Yayincilik.
- Wilbrant EC 2014. *Okul Oncesi Egitimde Montessori Yaklasimi*. Ankara: Kok Yayincilik.